A Preliminary Bibliography of Publications of Norman H. March

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254
FAX: +1 801 581 4148

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org, beebe@ieee.org (Internet)
WWW URL: http://www.math.utah.edu/~beebe/

13 October 2017
Version 0.27

Abstract

This bibliography records publications of Norman H. March.

Title word cross-reference

$(1 < n \leq 6)$ [1458, 1462]. $(1s)^2(2s)^2$ [1164]. $(e, 2e)$ [357]. $(n = 6, 8, 12)$ [1481]. $-\partial V_{XC}(r)/\partial r$ [1263]. $-\partial V_{XC}/\partial r$ [1253, 1130, 1102, 1367]. $-Ze^2/r$ [1322]. 1 [573]. 1/5 [1127, 1309]. 1/7 [1127, 1309]. $1/Z$ [863, 935, 966, 967, 1336, 480, 1390, 494, 470]. 10 [588]. **$120.00** [1521]. **$15** [117]. 2 [179, 568, 599, 412, 577]. $2\pi^*$ [589]. 3 [476, 686, 412, 572, 1388, 497, 1447, 1451]. 4 [1120, 1488, 568, 1138, 579]. 5 [585]. **$55** [369, 408]. **$59.00** [1506]. **$59.50** [368]. 6 [574]. 7 [580]. 8 [581]. **$89.50** [1509]. 9 [583]. **$90** [1508]. [111] [179]. $^{(4)}$ [1232]. $^{+}$ [382, 601]. $^{2+}_{3}$ [1205]. ^{3} [96]. $^{3+}_{4}$ [1205]. ^{4} [367, 422, 1061]. $_{12}$ [986]. $_{2}$ [1038, 1187, 1188, 1295, 1458, 1189, 39, 227, 162, 1462, 684, 795, 1196, 735, 166, 307, 338, 348, 349, 367, 381, 601, 705, 738, 805, 1284, 1154, 1413]. $_{2-x}$

[642, 1359]. $^{+}_{20}$ [735]. $^{+}_{2}$ [594, 1030]. $_{3}$ [1189, 39, 307, 367, 1283, 1284, 1211]. $^{-}_{3}$ [1170]. $_{4}$
[1295, 1459, 657, 1317, 597, 307, 641, 642, 1274, 1359, 1211, 1253, 1512]. $^{2+}_{40}$ [735]. $^{+}_{4}$ [1253, 1512]. $_{6}$ [1081, 1284]. $_{60}$ [1159, 1293, 1294, 1065]. $_{c}$
[930, 932, 1121, 886, 715, 755, 642, 739, 782, 807, 1272, 1359, 1114, 1422]. $_{n}$
[1458, 1481, 1462, 1486, 1138, 921]. $_{x}$ [642, 1359]. $c(r, r')$ [923]. : [1284]. D
[728, 762, 1229, 841, 1142, 1143, 1171, 1178, 1233, 1372, 1396, 1476, 997, 998, 1049, 1091, 407, 415, 462, 487, 512, 260, 329, 880, 1448]. $D = 3$ [1229, 1233]. δ [104]. $dT(m)/dp$ [1216]. E [1050]. η [1448]. f [1189]. γ [1448]. H_2 [594, 1317]. H_2^+ [876]. He^4 [911]. κ [1284]. N
[738, 929, 1054, 598, 973, 1120, 129, 1307, 108, 570, 422, 872, 921]. $N(r, E)$ [1050]. $n = 1, 2$ [1120, 1138]. $n = 45$ [921]. $n = 6, 8, 12$ [1486]. $\nabla^2 n/n$ [872]. $\nabla n/n$ [872]. $\nu = 1$ [1388]. O [738]. P
[653, 1216, 966, 967, 1055, 1352, 904, 647]. $\partial Vxc(r)/\partial r$ [1240]. π
[990, 1289, 1081, 7, 8, 256, 380, 452]. R [1188, 930, 886, 966, 967, 1106, 1231]. $R =$ [1188]. r_{12} [1038]. $\rho^{1/2}$ [508]. S [568, 653, 884, 1515, 932, 994, 1079, 966, 967, 1004, 1134, 1137, 1055, 1352, 904, 446, 484, 507, 578, 647, 922, 1153, 527]. $S(q)$ [1406]. S^2 [829]. S_z [829]. sech2x [1408]. sech^2 [1092]. σ [7, 8]. sp
[883, 913, 914, 1379]. T [782]. $T - m(B)$ [1465]. $T - m(p)$ [1216]. $T = 0$
[919, 976, 926]. T_c [744]. $\rightarrow$ [735]. $V(r)$ [1457, 1090, 1333, 1334]. V_{XC} [1253]. $V_{xc}(r)$ [1017, 1130]. Z [1322, 1227, 1237]. Z_e [1463].

-band [260]. **-Body** [497]. **-Dimensional**
[179, 415, 1171, 998, 1142, 1143, 1372]. **-Dimensions** [599, 462, 728].
-Electron [1189, 883, 990, 1289, 568, 380, 452]. **-electron-metal** [329].
-Electrons [7, 1081, 8]. **-Fermions** [598]. **-Function** [104]. **-level** [570].
-mers [422]. **-O-2** [1211]. **-orbital** [568]. **-Particle** [686]. **-Phase** [412].
-Point [585]. **-Shell** [653]. **-space** [966, 967]. **-state** [884, 507, 578, 1004].
-states [484, 446]. **-Surfaces** [588]. **-type** [129, 108]. **-Wave**
[1137, 1153, 1515, 932, 994, 1079, 1134, 922].

0 [1521, 1506]. **0-12-470520** [1506]. **0-306-44170-5** [1521].

1/6 [675]. **10-Electron** [361, 1266]. **110** [369]. **111** [195]. **1962** [77]. **1968** [117].

2 [1211]. **2-Dimensional** [721, 656]. **2-Dimensions** [765]. **2-Level** [662].
25$ [1503]. **298** [861]. **2E** [739].

3 [1165]. **3-Dimensional** [721]. **3-Dimensions** [765]. **30** [1216]. **346** [1171].
3d [411]. **3He** [1375].

470520 [1506]. **492pp** [1520]. **4He** [1375]. **4He-3He** [1375].

5 [1521]. **5-and** [1197].

60 [989, 1258]. **60th** [1544].

7-membered [1197].

A&M [117]. **A.** [1530]. **absolute** [273, 1395]. **Absorption** [41, 200, 860, 190]. **AC** [858, 519]. **Academic** [1506]. **according** [1259]. **accounted** [384]. **Accurate** [1514]. **acids** [1355]. **Acoustic** [183, 185]. **Acoustic-Mode** [183, 185]. **across** [1100]. **Acting** [670]. **adatoms** [385, 295]. **adiabatic** [803, 1350, 916]. **adsorbates** [280]. **adsorbed** [381, 416]. **affected** [888]. **Ag** [515]. **Aharonov** [858, 855, 858, 1198]. **Al** [201, 242]. **Albert** [1530]. **Alignment** [1189]. **Alkali** [127, 473, 500, 682, 402, 299, 732, 22, 283, 284, 289, 324, 455, 696, 533, 1308, 937, 1009, 735, 21, 322, 419, 697, 767, 784, 836, 850, 944, 1278, 1490, 1156, 1036]. **alkali-doped** [1156]. **Alkali-Halides** [283, 284, 324, 455]. **Alkali-Metal** [682, 735]. **Alkali-Metals** [473, 500, 402, 299, 732, 289, 696]. **Alkalis** [279, 717, 1319, 575, 1365, 287, 879]. **alkanes** [1007]. **alkyl** [1124]. **all-electron** [921]. **Alloy** [572, 988]. **Alloys** [297, 333, 436, 560, 178, 84, 137, 156, 215, 272, 324, 412, 426, 520, 1013, 353, 495, 160, 1427, 332, 146, 245, 82, 181, 87, 155, 194, 340, 350, 411, 453, 491, 522, 523, 574, 978, 1242, 172, 242]. **Almost** [742, 617, 879, 990, 991, 1289, 657, 1088, 489, 641, 907, 1206, 1444, 1253]. **almost-spherical** [1088]. **alone** [966, 967, 446, 922]. **along** [1185, 1122, 1296, 1095, 1205]. **also** [1262, 1020]. **alternant** [378]. **Alternants** [789]. **aluminium** [1304]. **Aluminum** [277]. **amino** [1355]. **amino-acids** [1355]. **ammonium** [62]. **Amorphous** [1527, 605, 786, 1376, 225, 243, 222, 510, 612, 1508]. **Amplitude** [518, 857, 800, 508]. **analog** [1159, 1293, 1294]. **Analogues** [1443, 1217]. **analogy** [1279]. **Analysis** [687, 1253]. **Analytic** [1212, 1463, 468, 1213, 1195, 1, 4, 1098, 1239]. **Analytical** [970]. **analytically** [1464, 1470]. **analyticity** [122, 519]. **Anderson** [1442, 1446, 1450]. **Andrade** [545]. **Angilella** [1517]. **Angle** [424, 542, 351, 1412, 160, 1427]. **anharmonicities** [822]. **anharmonicity** [1220]. **Anion** [406]. **Anisotropy** [412, 411]. **Annihilation** [47, 52, 718, 887, 477, 900, 55]. **anomalous** [1068]. **anomaly** [541]. **ansatz** [1038]. **anti** [1342]. **anti-cancer** [1342]. **anticancer** [1355]. **antiferro** [840]. **antiferro-magnets** [840]. **Antiferromagnetic** [1189, 476, 695, 1190, 487, 807, 1207]. **antiferromagnetically** [1284]. **Antiferromagnets** [1483]. **antiparallel** [1037, 953, 980]. **Anwendung** [1518]. **Anyon** [663, 707, 1160, 1345, 702, 831, 1381, 1251]. **Application** [35, 689, 690, 104, 1017, 495, 1159, 1293, 1294, 1518, 1048, 1164, 1332, 782, 1245, 1355, 1445]. **Applications** [396, 60, 337, 413, 1398, 59, 1270, 1273, 1182]. **Applied** [529, 959, 1291, 1119, 1121, 1088, 515, 977, 1107, 1113]. **Approach**

[39, 792, 793, 68, 835, 917, 61, 1429]. **Approaches** [1539, 857, 799]. **Approaching** [1515, 233, 307]. **appropriate** [814]. **Approximate** [1038, 263, 761, 569, 282, 53, 305, 526, 1356, 391, 1040, 1257, 1327, 964, 1048, 1332, 1, 4, 543, 972, 1386]. **Approximation** [44, 478, 28, 891, 1266, 1008, 235, 916, 1173, 1370]. **Approximations** [37, 137, 435, 1116, 933, 1144, 1400, 498]. **Aqueous** [1191, 475, 364, 632, 1438, 239, 171, 230, 373, 482]. **Aqueous-Solution** [632, 239]. **Aqueous-Solutions** [475, 364]. **Ar-like** [1439]. **Arbitrarily** [624, 625, 578]. **Arbitrary** [623, 188, 711, 1455, 962, 997, 998, 1338, 616, 947, 710]. **Argon** [351, 1412, 1256, 1277, 1357, 115]. **aromatic** [1494]. **arrow** [755]. **artificial** [1077, 1125, 1265, 1045, 1071, 1181]. **Aspects** [1210, 847]. **Assemblies** [1001, 695, 1099, 999, 703, 807, 847, 871, 920, 949, 1016, 1142, 1143, 1171, 1177, 1232, 1357, 1372, 1375, 1440]. **assembly** [1078, 1222, 1046, 1049, 219, 372, 452, 1059, 1111, 1246]. **Associated** [353, 889, 1130, 1017, 1169]. **Asymptotic** [438, 278, 89, 266, 792, 48, 102, 109, 760, 268, 303, 304, 407, 505, 506, 664, 1231, 1354, 617, 296, 359, 1158, 1214, 930, 437, 1227, 316, 343, 771, 1237]. **Asymptotic-Behavior** [617]. **Atom** [102, 109, 690, 760, 765, 841, 1374, 790, 821, 885, 1038, 1040, 1077, 1432, 1303, 1487, 48, 1488, 689, 1045, 964, 1002, 1130, 1137, 1437, 259, 382, 511, 771, 805, 845, 864, 953, 972, 1028, 1063, 1071, 1102, 1105, 1108, 1153, 1231, 1244, 1367, 1471, 590, 591, 817, 469, 1254]. **Atomic** [629, 300, 102, 109, 442, 534, 212, 213, 285, 368, 369, 418, 551, 639, 673, 839, 619, 653, 174, 750, 332, 790, 1038, 1115, 1158, 1212, 1214, 1516, 1515, 1484, 1084, 1193, 1485, 1518, 890, 1266, 1435, 1463, 404, 440, 935, 966, 967, 1048, 1053, 1136, 1164, 1195, 1227, 1332, 1336, 1337, 141, 320, 321, 323, 342, 379, 460, 490, 540, 604, 643, 647, 698, 906, 1146, 1169, 1176, 1236, 1237, 1245, 1361, 1384, 1390, 1404, 1439, 1441, 328, 173, 354, 355, 390, 468, 469, 470, 296, 1505]. **Atomic-Number** [300, 673]. **Atomistic** [1539]. **Atoms** [25, 623, 624, 854, 1298, 26, 713, 1534, 1538, 2, 1518, 684, 863, 103, 691, 282, 537, 193, 308, 506, 539, 615, 640, 664, 667, 668, 673, 839, 849, 865, 876, 1030, 1380, 618, 654, 1183, 1255, 1480, 357, 360, 1037, 625, 928, 990, 991, 1039, 1076, 1257, 1258, 1289, 1455, 1263, 1125, 1193, 1194, 3, 437, 438, 857, 1265, 405, 801, 1088, 568, 829, 1, 4, 15, 233, 237, 252, 292, 303, 304, 316, 341, 344, 485, 505, 548, 603, 641, 650, 665, 705, 706, 738, 868, 916, 978, 1017, 1062, 1064, 1103, 1146, 1200, 1240, 1276, 1354, 1399, 1489, 652]. **atoms** [853, 1250, 354, 527, 144, 1503, 408, 1504]. **attachment** [795]. **Attenuation** [521]. **Average** [251, 1356, 53]. **averaged** [1038, 463]. **averages** [379]. **axis** [1185, 1205].

B [1188, 1097, 832, 848, 1105, 1280, 1374, 1444, 986]. **b.c.c** [314]. **Back** [894, 1011]. **Background** [895, 573]. **Balance** [827, 928, 1088]. **Band** [882, 547, 260, 558]. **Band-Gap** [882]. **Bardeen** [948]. **Bare**

[854, 653, 745, 929, 1322, 1002, 1004, 1089, 1228, 379, 407, 446, 490, 540, 546, 578, 647, 804, 1028, 1202, 1404, 1473, 1419]. **Barrier** [735, 981]. **Based** [114, 823, 1230, 50, 1241, 985]. **Basic** [1270]. **basis** [28]. **BCC** [1216]. **BCS** [1234, 1247, 1248, 1210]. **BCS-BEC** [1234]. **Be** [1466, 1437, 972, 1236, 888, 1129, 1331, 1469, 1140, 1263, 1303, 689, 690, 964, 1048, 1088, 1164, 1195, 1227, 1332, 511, 1017, 1102, 1237, 1367, 294, 591]. **Be-atom** [1102, 1367]. **Be-like** [1236, 1048, 1164, 1227, 1332, 1237]. **BeB** [1154, 1413]. **BEC** [1234, 1248, 1210]. **Becke** [1266]. **BEDT** [1284]. **BEDT-TTF** [1284]. **Behavior** [988, 207, 503, 269, 617, 391, 433, 250]. **Behaviour** [73, 929, 1158, 1469, 1242, 1274, 1279, 1282, 1375, 879]. **Benjamin** [117]. **Benzene** [1409, 1167, 9, 10, 432]. **Berlin** [369]. **Bernoulli** [741]. **Beryllium** [751, 713, 175, 1466, 738, 781]. **Bestimmung** [1518]. **Between** [530, 565, 395, 473, 684, 756, 1320, 892, 1340, 534, 662, 537, 418, 454, 521, 586, 611, 649, 671, 777, 839, 1398, 1410, 654, 678, 497, 750, 1428, 883, 1037, 1116, 1184, 1256, 1457, 1079, 392, 564, 1301, 1303, 147, 63, 1310, 822, 861, 74, 102, 109, 75, 504, 764, 1267, 1009, 37, 59, 60, 76, 78, 79, 80, 233, 237, 259, 292, 320, 346, 385, 407, 417, 457, 514, 546, 547, 548, 551, 648, 650, 705, 744, 775, 776, 780, 782, 815, 869, 913, 914, 948, 950, 952, 970, 1064, 1107, 1144, 1284, 1357, 1379, 1386, 1399, 1400, 1442, 1476, 1113]. **between** [432, 527, 958, 818, 144, 819, 81, 1448, 1450, 1478]. **Beyond** [723, 1135, 936, 941, 942]. **Binary** [178, 324, 426, 611, 747, 244, 245, 194, 420, 522, 1242, 173]. **Binary-Alloys** [178, 324]. **Binary-Liquid** [426]. **Binding** [608, 739, 743, 620, 1417, 114, 1084, 755, 502, 141, 217, 259, 613, 1146, 1384, 327, 555]. **Binding-Energy** [739]. **bioinorganic** [1440]. **biological** [1199]. **biopolymers** [306, 1445]. **birthday** [1544]. **blende** [1074]. **Bloch** [103, 444, 1269, 114]. **block** [1460]. **Blocks** [736]. **Bn** [789, 1167]. **Body** [165, 1001, 91, 121, 104, 1498, 1499, 105, 113, 234, 778, 1545, 1495, 619, 1502, 497, 175, 1431, 1457, 148, 1517, 933, 1341, 1469, 937, 170, 369, 372, 484, 541, 584, 604, 616, 814, 944, 1067, 1103, 1232, 1385, 1389, 1393, 1405, 1247, 591, 1415, 199, 124]. **body-centered** [937, 944]. **Body-Centred** [91]. **body-centred-cubic** [814, 1247]. **Bohm** [858, 855]. **Boiling** [283, 290]. **Bond** [531, 19, 162, 756, 1468, 317, 743, 939, 709, 556, 657, 798, 1085, 336, 735, 166, 346, 489, 554, 613, 641, 701, 775, 808, 868, 918, 466, 957, 390, 432, 493]. **bond-breaking** [918]. **Bond-Length** [756]. **Bond-Lengths** [19]. **Bonded** [763, 796, 773, 833, 1177, 851, 1286, 328]. **Bonding** [753, 717, 1319, 534, 253, 338, 447, 451, 456, 575, 1365, 243, 551, 766]. **Bonds** [902, 479, 1012, 1081, 797, 1086, 968, 210]. **bones** [1520]. **Book** [1510, 1503, 1517, 1507, 1505, 1497, 1508, 1498, 1501, 1499, 1509, 117, 368, 369, 408, 445, 1511, 1504, 1502, 1521, 1500, 1520, 1506]. **Born** [335]. **borocarbides** [1188]. **Boron** [986, 789, 959, 1291, 977, 1273]. **Boron-Nitride** [789]. **Bose** [422, 1118, 1467, 367, 976, 1149, 1072, 1112]. **Bose-condensed** [1118]. **Boson** [739, 1232, 886, 755, 1268, 1281, 1288]. **bosonic** [1126, 1305, 1152]. **bosons** [930, 1080, 1192, 940, 1201, 954]. **Both**

[521, 960, 1261, 1096, 815, 976, 1278]. **Bound**
[631, 252, 367, 446, 804, 431, 745, 1419, 884, 1260, 1434, 796, 370, 371, 421, 241].
Bound-State [745, 446, 804, 1419, 1434, 370, 371]. **Bound-States** [431].
boundaries [1095]. **Boundary** [26, 325, 881]. **bounds**
[1116, 398, 184, 414, 1144]. **Braunschweig** [1497]. **Breakdown** [1083].
breaking [918, 957]. **Breit** [502]. **Bridge** [478]. **Brief** [1249, 1414].
Brillouin [37, 1400, 469]. **brittle** [1220, 1094, 1197]. **brittle-ductile**
[1094, 1197]. **brittle-to-ductile** [1220]. **Brosens** [408]. **brought**
[1141, 1172]. **Brown** [1502]. **Brueckner** [872]. **Bubbles** [670].
Buchbesprechung [1503, 1497, 1499, 1506]. **buckyballs** [989]. **Building**
[736, 1460]. **built** [1215, 1224, 1318, 838]. **bulk** [246, 147, 861, 1267, 461, 911].
Butcher [1521, 925].

C [1188, 695, 931, 1041, 1119, 989, 990, 991, 1076, 1116, 1159, 1258, 1289,
1293, 1294, 1005, 1167, 1097, 307, 832, 846, 1065, 1105, 1144, 1172, 1374, 1443,
1444, 590]. **C-60** [989, 1258]. **C-doped** [1167]. **C-Nanoassemblies** [1443].
Ca [684, 705]. **Cadmium** [475, 482]. **cage** [1133, 1036]. **Caged** [805]. **Cages**
[1097, 789, 959, 990, 991, 1116, 1289, 1291, 1005, 977, 1144, 1444]. **calculated**
[1075]. **Calculating** [282]. **Calculation**
[630, 442, 45, 464, 656, 1421, 1514, 382, 417, 465, 836]. **Calculational** [823].
Calculations [1436, 908, 27, 921]. **Cambridge** [1499, 1520]. **Can**
[632, 1129, 1331, 1469, 642, 1061, 1140, 1199, 1359]. **cancer**
[1230, 1342, 1241]. **Cancerous** [632, 1438]. **candidate** [1283]. **candidates**
[1167]. **canine** [226]. **Canonical** [724, 725, 60, 1398, 855, 59, 236, 1269].
Capacitance [393, 374, 467]. **Carbon**
[753, 265, 696, 243, 1161, 1057, 1139, 697, 766, 1070, 1151, 432, 881]. **Carlo**
[1257, 805, 908]. **Carriers** [41, 1167]. **Case**
[102, 31, 1215, 1224, 1318, 1049, 109]. **Casher** [858, 1198]. **cationic**
[1458, 1462, 1047]. **CBN** [882]. **Celebration** [1543]. **Cell**
[632, 464, 1469, 1008, 465, 1445]. **Cell-Membrane** [632]. **cells** [1438].
Center [760, 1215, 1224, 1318]. **centered** [937, 944]. **Central**
[39, 1487, 596, 727, 1003, 1050, 597, 484, 507, 922, 1204]. **Central-Field** [39].
centre [771]. **Centred** [91, 65, 814, 1247, 199]. **centres** [346]. **certain** [1242].
Cesium [66]. **CH** [597, 1211, 1253]. **CH4** [1206]. **Chain**
[478, 1076, 1185, 1124, 1205]. **Chainlike** [1123]. **Chains** [1012, 1122, 1296].
Change [1087, 317, 1098, 1264, 346, 1198]. **Changes** [1100, 1141, 1094, 370].
Changing [1182]. **Chaos** [1510, 1533, 1511]. **chaotic** [822]. **chaotic/fractal**
[822]. **characterised** [1276]. **Characteristic** [903, 1079]. **Characteristics**
[595, 1297]. **Characterization** [594, 507, 539, 601]. **Characterize** [632, 853].
Characterized [709, 701, 922]. **characterizing** [787]. **Charge**
[358, 361, 531, 532, 565, 181, 266, 716, 91, 92, 138, 139, 284, 372, 617, 199, 93,
1194, 1463, 1057, 154, 268, 309, 377, 407, 554, 835, 1070, 1271, 1439, 1287, 390].
Charge-Charge [284]. **Charge-Transfer** [358, 361, 716]. **Charged**
[658, 794, 521, 739, 1396, 391, 755, 205, 346, 949, 1178, 819]. **Charges**

[70, 370]. **Chemical**
[358, 751, 753, 717, 1319, 366, 763, 1468, 902, 210, 136, 270, 285, 341, 342, 369, 373, 375, 447, 451, 456, 479, 575, 602, 694, 766, 831, 1013, 1361, 1365, 1496, 243, 360, 1081, 1122, 1296, 278, 1264, 888, 1086, 404, 405, 1342, 336, 288, 292, 320, 376, 377, 407, 572, 773, 781, 812, 836, 869, 1234, 1444, 1476, 1248, 1452]. **Chemical-Potentials** [358]. **Chemically**
[1123, 763, 773, 833, 1177, 851, 1286]. **Chemisorbed** [751, 514, 589, 781, 555]. **Chemisorption** [300, 323]. **Chemistry** [794, 364, 1531, 1543, 384, 1355]. **Chloride** [239, 1191, 230, 373]. **chlorides** [171]. **Chromium** [91]. **chrystals** [253]. **Cl** [1284, 1284]. **class** [1045, 1071]. **Classic** [1060]. **Classical**
[100, 279, 688, 827, 287, 427, 459, 1256, 89, 205, 596, 1046, 597, 122, 510, 612, 871, 873, 1059, 1100, 1277, 1406, 1491, 173, 144, 433]. **classify** [1259]. **Clausius** [816]. **Cleavage** [833, 851, 957, 1074]. **Close**
[561, 472, 127, 557, 593, 125, 94, 98, 945]. **Close-Packed**
[561, 472, 127, 593, 125, 94, 945]. **Closed**
[854, 662, 282, 821, 929, 1434, 1322, 1225, 963, 966, 967, 997, 998, 1002, 1004, 1228, 1338, 379, 490, 505, 540, 546, 578, 804, 1028, 1354, 1404, 354, 527]. **Closed-Shell** [854, 1434, 1225, 966, 967, 1338, 505, 1354, 354, 527]. **closure** [1173, 1370]. **cloud** [320]. **Cluster**
[1189, 832, 848, 986, 1039, 1295, 1317, 370, 1062]. **Clusters**
[682, 794, 696, 1374, 1545, 1159, 1293, 1294, 1120, 1215, 1458, 1481, 1161, 1484, 1224, 1318, 1462, 1486, 796, 1085, 1005, 1047, 1093, 1138, 735, 697, 808, 921, 978, 1105, 1276]. **CN** [1284]. **CO** [1459, 504, 589, 781, 751]. **cobalt** [1454]. **coefficient** [298, 319, 782]. **Coefficients** [530, 562, 892, 442, 1490, 172]. **Coexistence** [595, 1297, 550, 1357, 1122, 1296, 969]. **coherence**
[931, 932, 994, 1492, 1493]. **coherent** [1492, 1493]. **Cohesion** [21]. **cohesive** [836]. **coincide** [953]. **coincidence** [980]. **Cold** [539, 608, 615, 768]. **Coleman** [1530]. **collapse** [1512]. **Collective**
[1118, 339, 600, 676, 769, 940, 351, 1412, 954, 1469, 510, 612]. **College** [117]. **collision** [831]. **Colloidal** [521]. **combination** [1431]. **combinations** [1032]. **Comment** [1083, 961, 996, 1226, 538, 612]. **Common** [595, 1297, 683]. **Compared** [1422, 1221, 1191, 1266, 1466, 1137, 1153, 1274, 1472, 1114, 1035]. **Comparison** [371, 1492, 1493, 1256]. **Comparisons** [1257]. **compensated** [1255, 1039, 1117, 1212, 1062, 1176]. **compensation** [536]. **competing** [1288]. **Complete** [997]. **Completely** [693, 1256]. **complex** [1342, 1288]. **complexes** [968, 1230, 1342, 1241]. **Compliance** [183, 185]. **Component** [1397, 1465, 1137, 158, 922, 1153]. **components** [572, 946, 979, 1382]. **compounds** [1258, 1461]. **Compressibility**
[1101, 1262, 245, 147, 887, 911, 432]. **Compression** [641, 1218]. **Compton** [357, 379]. **Computational** [1519]. **Computer** [301]. **Computer-Simulation** [301]. **Concentrated** [475, 482]. **Concentration** [332, 333, 146, 340, 172, 495, 362, 177, 187, 315, 1242]. **Concept** [1360]. **Concepts** [895, 607, 1520]. **Concerning** [762, 1110, 1270]. **condensate** [1475, 1072, 1112]. **condensates** [1149]. **condensation** [1467, 535, 367, 422].

Condensed
[753, 311, 736, 772, 806, 839, 848, 1545, 1537, 1080, 1118, 394, 1300, 796, 111, 641, 766, 769, 816, 832, 836, 837, 842, 873, 943, 1101, 1355, 1389, 1445, 819]. **Condensed-Phase** [848]. **condition** [1002, 370, 1028]. **conditions** [1214, 1261, 946, 979, 1278, 1382, 331]. **Conductance** [1468]. **Conducting** [779, 769, 842]. **Conduction** [84, 291, 306, 524, 129, 1307, 850]. **conductivities** [819]. **Conductivity** [34, 799, 519, 784, 787]. **Conference** [77, 117]. **configuration** [65, 1164]. **configurations** [1185, 1205]. **Confined** [623, 660, 1046, 1059, 1099, 1255, 1078, 1455, 1118, 659, 1464, 963, 1054, 1091, 1338, 970, 975, 1111, 1147, 1470, 984]. **Confinement** [685, 1000, 1183, 992, 1212, 1125, 1126, 1305, 1265, 1487, 1488, 997, 1049, 1134, 971, 974, 976, 980, 1020, 1150, 1152, 1180, 1200, 1275, 983, 1155]. **confining** [1453, 1051]. **Conformal** [174, 1447, 146, 172]. **Conformation** [307, 326, 416, 1445]. **conformer** [1238]. **Confronted** [1436]. **conjugated** [968]. **Connected** [561, 1102, 1367]. **connection** [803, 1350, 1478]. **Connectivity** [1097]. **Consequences** [756, 775, 1405]. **consideration** [1234, 1248]. **considerations** [921]. **Consistency** [688, 1010, 1353]. **Consistent** [72, 193, 427, 496, 656, 749, 930, 1057, 1058, 64, 370, 371, 845, 872, 875, 1070, 1402, 1421, 1503, 1504]. **Constant** [660, 756, 84, 656, 1421, 659, 596, 385, 775, 805]. **Constants** [1123, 19, 473, 732, 1082, 27, 822, 727, 937, 944, 1032]. **constraint** [828, 1329, 1240]. **constraints** [1261]. **Constructing** [1401, 1069]. **Construction** [633]. **Containing** [426, 255]. **Content** [605, 1376, 536]. **Continuum** [1539, 745, 1050, 1419]. **contrast** [1357]. **Contrasted** [1422, 1221, 1191, 1466, 1472, 1114, 1035]. **contrasts** [1009]. **Contribution** [175, 1254]. **Contributions** [183, 534, 1543, 185, 551]. **control** [1230, 1241]. **controlled** [1188, 1220]. **Convergent** [712]. **Convolution** [527]. **Cooper** [1494]. **Cooperate** [1433]. **Cooperative** [403, 1324, 410, 411, 412, 1177]. **Coordinate** [759]. **Coordination** [364, 767, 768, 842, 868, 913, 914, 1278, 1379]. **Coordination-Dependent** [768, 767]. **Copper** [715, 137, 787]. **corrected** [1266]. **Correction** [824, 1325, 252, 489, 528]. **Corrections** [1048, 1332, 72, 1085, 502, 1179, 1403]. **Correlated** [1455, 1321, 1195, 406, 609, 744, 1358, 1415, 557, 593, 1183, 1480, 1213, 1257, 931, 932, 994, 1194, 614, 1103, 1200, 1232, 1239, 1471]. **Correlation** [1037, 1079, 100, 471, 164, 1315, 658, 686, 687, 722, 758, 798, 863, 503, 761, 826, 902, 138, 156, 254, 286, 318, 337, 516, 544, 575, 576, 673, 772, 785, 806, 1540, 1365, 1366, 496, 748, 750, 175, 1541, 160, 1427, 790, 1454, 1186, 1256, 1290, 1456, 394, 1300, 1263, 203, 1311, 42, 89, 887, 1435, 1323, 1085, 1225, 801, 823, 1128, 1326, 1327, 1129, 1130, 1132, 1331, 1335, 830, 1351, 68, 155, 251, 341, 450, 552, 812, 870, 872, 909, 918, 923, 939, 1017, 1060, 1098, 1102, 1140, 1146, 1168, 1206, 1240, 1244, 1277, 1367, 1385, 1392, 556, 433, 1420, 133]. **correlation** [1253, 1254, 115, 61, 1429]. **Correlation-Energy** [722]. **Correlation-Function** [471, 686, 687, 318, 337, 516, 544].

Correlation-Functions [658, 496, 160]. **Correlations** [408, 497, 1055, 1352, 871, 913, 914, 1142, 1143, 1171, 1372, 1379, 1209, 1251, 1182]. **Corresponding** [1097]. **Coulomb** [1506, 854, 884, 929, 1212, 1322, 687, 1002, 1004, 1047, 1050, 1089, 1228, 597, 1095, 311, 379, 409, 446, 452, 456, 490, 540, 546, 549, 578, 647, 804, 1028, 1202, 1275, 1404, 1473, 653, 745, 1419, 1506]. **Coulomb-Flüssigkeiten** [1506]. **Coulombic** [1186, 569, 1390]. **Coulombically** [1078, 864, 1111]. **counterpart** [1386]. **Coupled** [1532, 529, 1039, 784, 844, 846, 850, 1062, 1490]. **Coupling** [684, 705, 787]. **Covalent** [162, 756, 166, 317, 797, 346, 775, 1032]. **covered** [211]. **Cr** [426, 1284]. **crack** [938, 924, 951]. **CrBr** [1283]. **Criteria** [459, 525]. **Critical** [1123, 473, 732, 1229, 335, 1007, 708, 1233, 391, 1513, 1122, 1188, 1220, 1296, 937, 1009, 767, 847, 873, 907, 944, 1101, 1279, 1442, 433, 1288, 1430, 1446, 1448, 1449, 1450, 1451, 1478]. **Critical-Behavior** [391]. **Critical-Point** [335, 708]. **Criticality** [609, 1283]. **Critically** [1271, 1287]. **Critique** [1226]. **CrO** [1187]. **Cross** [742, 795, 251]. **Cross-Sections** [742, 795]. **crossover** [1234, 1279, 1248, 1210]. **crowdions** [814]. **Crystal** [247, 263, 403, 1324, 636, 77, 137, 458, 656, 1421, 88, 1330, 1006, 638, 1348, 86, 410, 538, 547, 651, 1026, 331]. **Crystalline** [531, 1529, 1219, 1094, 554, 1274, 1278, 241, 1074, 558, 574]. **Crystallization** [180, 279, 1346, 642, 1359, 1396, 1306, 571, 287, 1178, 224, 1416]. **Crystals** [1507, 630, 266, 66, 637, 663, 1509, 138, 191, 234, 291, 1526, 459, 1528, 509, 768, 557, 593, 1458, 56, 1462, 1345, 1347, 268, 286, 315, 945, 1060, 1391, 1247, 124]. **Cs** [1122, 1296, 595, 1297, 177, 717, 1319, 969, 1007, 609, 1235]. **Cu** [1284, 869]. **Cubic** [91, 65, 937, 814, 944, 1247, 199]. **CuO** [642, 1359]. **Cuprate** [1423, 960, 1288]. **Cuprates** [739, 1422, 930, 1041, 886, 755, 1114]. **Curie** [1221, 474, 488]. **Curie-Temperature** [474]. **Current** [624, 659, 660, 719, 720, 625, 1110, 555]. **Current-Density** [624, 660, 719]. **currents** [1081, 1086, 1494]. **Curve** [595, 1297, 247, 263, 501, 704, 1216, 1100]. **Curves** [594, 134, 161, 756, 550, 553, 1122, 1296, 177, 969, 140, 168, 601, 775, 1357]. **cusp** [1214, 1002, 946, 979, 1028, 1382, 1476]. **cylindrically** [885].

d [1041, 918, 476, 412, 871, 1447, 1451]. **d-electron** [918]. **d-wave** [1041]. **D2O** [1093]. **Darwin** [502]. **Data** [204, 164, 1315, 1222, 216, 1246]. **Debye** [98, 348, 349]. **Debye-Screening** [348]. **Decomposition** [496]. **Decoupling** [544]. **decrease** [1172]. **Defect** [128, 1000, 902, 139, 258, 291, 455, 257, 843, 878, 924]. **Defect-Solute** [258, 257]. **Defects** [1310, 477, 899, 77, 610, 119, 81, 1428, 63, 1197, 78, 79, 154, 315, 585, 945]. **deficit** [936]. **Definition** [376]. **definitions** [1244, 1439]. **Deformation** [629, 643]. **deformations** [1161]. **Degeneracy** [1083, 31]. **Degenerate** [617]. **degree** [995, 1015]. **Della** [1227, 1237]. **delocalized** [631, 1235]. **delta** [1449]. **Dense** [395, 1301, 658, 501, 718, 686, 503, 509, 539, 608, 615, 670, 617, 1260, 298, 1323, 867, 877, 1270, 1364, 1477, 144]. **Dense-Plasma** [539, 617].

Dense-Plasmas [615]. **Densities** [661, 45, 138, 215, 318, 649, 813, 745, 622, 93, 1257, 499, 1434, 1321, 966, 967, 1195, 92, 543, 578, 606, 648, 804, 948, 970, 1064, 1169, 1176, 1199, 1204, 1236, 1278, 1358, 1419, 124, 296]. **Density** [1255, 358, 359, 594, 624, 854, 1115, 562, 595, 1297, 393, 566, 126, 1459, 396, 5, 397, 398, 629, 1530, 501, 660, 719, 720, 1265, 182, 103, 634, 690, 691, 724, 726, 728, 730, 760, 761, 762, 800, 825, 963, 1000, 1088, 1164, 731, 67, 763, 662, 282, 692, 43, 50, 54, 60, 68, 70, 130, 191, 214, 308, 337, 377, 413, 414, 451, 506, 518, 1531, 541, 642, 644, 666, 667, 668, 669, 693, 704, 736, 737, 741, 743, 770, 777, 785, 808, 835, 836, 837, 865, 866, 908, 915, 1276, 1356, 1359, 1363, 1380, 1383, 1387, 1398, 1401, 223, 619, 653]. **Density** [678, 622, 114, 132, 1424, 498, 1546, 1183, 1479, 1480, 435, 625, 821, 855, 856, 928, 929, 1040, 1117, 1158, 1185, 1212, 1214, 1259, 1290, 1431, 1455, 1456, 1122, 1260, 1296, 1299, 1434, 1125, 1192, 1194, 6, 181, 399, 437, 438, 1312, 857, 659, 888, 890, 891, 995, 1487, 1266, 1225, 502, 633, 635, 689, 725, 729, 801, 802, 823, 824, 826, 828, 961, 996, 1045, 1128, 1226, 1325, 1326, 1327, 1329, 935, 964, 965, 997, 998, 1002, 1004, 1048, 1050, 1054, 1090, 1092, 1129, 1131, 1136, 1137, 1163, 1166, 1228, 1331, 1332, 1333, 1334, 1336, 568, 1339, 764]. **density** [829, 569, 570, 1437, 267, 1343, 735, 53, 59, 69, 189, 197, 235, 236, 270, 271, 303, 304, 305, 309, 310, 316, 325, 343, 344, 347, 415, 417, 444, 448, 481, 485, 505, 507, 508, 511, 512, 546, 547, 577, 582, 587, 601, 604, 606, 613, 643, 647, 665, 699, 706, 771, 773, 776, 780, 834, 864, 869, 872, 875, 906, 917, 941, 942, 946, 953, 972, 979, 981, 1015, 1017, 1020, 1028, 1061, 1063, 1066, 1069, 1071, 1098, 1102, 1103, 1104, 1106, 1108, 1140, 1145, 1148, 1150, 1153, 1168, 1173, 1174, 1180, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1231, 1236, 1238, 1240, 1244]. **density** [1269, 1270, 1271, 1354, 1360, 1362, 1367, 1368, 1370, 1382, 1390, 1407, 1439, 1440, 1471, 984, 1154, 1413, 388, 853, 955, 956, 1155, 1287, 1249, 1414, 1415, 199, 330, 354, 527, 528, 133, 1211, 61, 1429, 917]. **Density-Direct** [337]. **Density-Fluctuations** [562]. **Density-Functional** [690, 726, 730, 731, 693, 785, 132, 1424, 130, 541, 737, 835, 836, 1266, 689, 729, 961, 1128, 1226, 1326, 546, 946, 979, 1174, 1180, 1236, 1382]. **Density-Gradient** [728, 528]. **density-independent** [582]. **Density-Matrices** [761]. **Density-Matrix** [397, 724, 1255, 546]. **Density-potential** [1164, 235, 511]. **Departure** [1235]. **Departures** [509, 969, 973]. **Dependence** [627, 990, 991, 1289, 393, 474, 755, 792, 634, 570, 673, 1146, 626, 1217, 1223, 83, 1465, 635, 893, 1328, 319, 480, 488, 519, 540, 1477, 1208, 172, 818]. **Dependent** [563, 84, 116, 1436, 768, 261, 108, 249, 1226, 187, 118, 460, 490, 767, 1174, 1404, 1249, 1414, 159]. **derivation** [1479]. **Derivative** [841, 845]. **Derived** [655, 1257, 1090, 1333, 1334, 829, 446, 1106, 498]. **describing** [855, 1288]. **Description** [308, 451, 1024, 969, 295]. **desorption** [504, 515, 589]. **Determinantal** [712]. **Determination** [5, 1409, 6, 1518, 995, 998, 9, 10, 1015]. **determined** [1199]. **Determining** [518, 1380, 1487, 828, 1329, 1267, 485, 513]. **deuterium** [1047]. **Deviation** [679, 1426, 275]. **Devices** [1529]. **Devreese** [408]. **DFT**

[1290, 1456, 1457, 1516, 1303, 1103, 1168, 1206, 1253]. **diagonal** [884, 929, 963, 1089, 1228, 189, 1203, 1269, 1415]. **Diagram** [637, 209, 464, 1127, 1309, 1347, 220, 465, 1388, 1156, 1288]. **Diagrams** [178, 202, 194, 218, 847]. **diamagnetic** [355]. **Diamagnetism** [84, 116, 22, 42, 1464, 118, 463, 1470, 159]. **diameters** [969, 1235]. **diamond** [1217, 430, 1109, 1074]. **diamond-lattice** [430]. **diamond-structure** [1109]. **diamond-type** [1217]. **Diatomic** [629, 722, 733, 692, 434, 435, 359, 343, 613, 643, 699, 847, 466, 592]. **Diatomic-Molecules** [722, 733]. **diatomics** [328]. **Diatoms** [758, 388, 390]. **Dichalcogenides** [476, 487]. **Dielectric** [84, 120, 517, 261, 249, 281]. **Dieterici** [907]. **difference** [1108, 1148]. **different** [1051]. **Differential** [884, 1125, 890, 995, 1128, 1326, 999, 282, 734, 1349, 692, 448, 481, 834, 864, 865, 906, 1015, 1016, 1236, 1362, 1363, 852, 1479, 885, 928, 1080, 1263, 1162, 1136, 699, 875, 1231, 1245, 1051]. **Differential-Equation** [734, 692]. **Differentiation** [749, 973, 1104, 1368]. **Diffraction** [731, 289, 524, 605, 867, 1364, 1376, 243, 1454, 828, 1329, 1339, 253, 1203, 1243]. **Diffusion** [32, 128, 475, 230, 482, 521, 611, 1014, 239, 362, 65, 373, 423, 1075]. **dilettanti** [196]. **Dilute** [747, 1118, 82, 87, 1035]. **Dimension** [598, 1192, 398, 401, 1267, 271, 325, 376, 414, 425, 1201, 1408]. **Dimensional** [627, 179, 1535, 1507, 721, 636, 1000, 104, 662, 637, 1509, 1526, 1528, 1443, 656, 1536, 626, 855, 992, 1076, 1078, 1159, 1293, 1294, 1127, 1309, 1465, 1162, 1330, 998, 1054, 1092, 1163, 1164, 1338, 570, 638, 1347, 1348, 195, 235, 415, 483, 513, 651, 703, 769, 947, 970, 973, 981, 1100, 1111, 1142, 1143, 1171, 1271, 1283, 1372, 1388, 1406, 984, 1073, 1287, 1521, 556, 558, 1421, 1447, 1451]. **Dimensionality** [634, 460, 480, 540, 635, 1141, 1430, 1448]. **Dimensions** [728, 762, 599, 1344, 765, 841, 1396, 1322, 1162, 963, 997, 1049, 1091, 1229, 371, 407, 462, 512, 1178, 1180, 1202, 1233, 1279, 1475, 1476, 880, 1478]. **dimer** [1295, 1317, 1460, 1466]. **dimerization** [556]. **dipolar** [860]. **Dipole** [343]. **Dirac** [821, 1290, 499, 102, 109, 1266, 691, 963, 998, 1048, 1163, 1332, 67, 17, 21, 59, 60, 69, 706, 811, 872, 1104, 1168, 1199, 1203, 1204, 1362, 1368, 1398, 1415]. **Dirac-Equation** [691]. **Direct** [100, 471, 658, 687, 318, 337, 543, 544, 496, 497, 115, 1479, 1454, 1115, 394, 1300, 923, 1102, 1367]. **disclinations** [1094]. **Discussion** [110]. **Disorder** [150, 1501, 1268, 1281, 927, 1446]. **Disordered** [228, 1537, 1454, 149, 219, 519, 580, 1273, 1280]. **Dispersion** [629, 142, 510, 542, 612, 643]. **Displaced** [565, 266, 139, 154, 532, 268, 372]. **Dissimilar** [454, 392, 457]. **dissipative** [938, 951]. **Dissociation** [682, 733, 449, 646, 675, 785, 388, 466, 709, 321, 645, 674, 701, 805, 1377, 328]. **Dissociation-Energies** [733, 646, 675, 709]. **Dissociation-Energy** [682]. **dissociatively** [381]. **Distance** [783, 321]. **Distances** [760, 771]. **Distended** [567]. **distortions** [1512]. **Distribution** [40, 35, 74, 1320, 91, 24, 707, 774, 1409, 62, 802, 1228, 9, 10, 23, 76, 831, 975, 976]. **distributions** [435]. **Divalent** [364]. **diversity** [1544]. **DM** [369]. **DNA** [1445]. **dominated** [1049]. **doped** [1167, 1284, 1156, 1182]. **Drift** [792, 793].

Driven [1483, 1465, 1394, 1474, 1112]. **droplets** [1009]. **drug** [1342, 1355]. **drugs** [1230, 1241]. **duality** [1452]. **ductile** [1220, 1094, 1197]. **Due** [629, 1087, 1258, 1264, 229, 346, 643, 1098, 1446]. **dynamic** [1258, 1430]. **Dynamical** [418, 1250, 176, 385]. **Dynamics** [1505, 121, 212, 213, 464, 639, 295, 174, 148, 1341, 465, 1110].

earth [240]. **easy** [1272]. **Edge** [1000]. **Edinburgh** [1497]. **Edited** [368, 408, 1521]. **Eds** [1508, 1509, 117]. **Effect** [26, 42, 452, 576, 198, 747, 467, 987, 855, 885, 536, 703, 226]. **Effective** [103, 208, 513, 603, 1103, 618, 144, 931, 932, 633, 844]. **Effects** [436, 127, 128, 657, 858, 439, 567, 138, 157, 339, 456, 517, 671, 676, 243, 176, 177, 148, 1091, 373, 453, 522, 584, 769, 881]. **Efimov** [367]. **Ehrenberg** [858]. **Eigenfunction** [99, 97]. **eigenfunctions** [829, 917]. **Eigenschaften** [1518]. **eigenvalue** [990, 991, 1289, 278, 237, 288, 407, 1399]. **Eigenvalues** [45, 469]. **einiger** [1518]. **Einstein** [422, 1467, 367, 844, 912, 1149, 1179, 1403, 1112]. **Elastic** [436, 897, 255, 1082, 453, 1032, 1445]. **Electric** [623, 640, 1099, 746, 1046, 1059, 1198]. **Electric-Fields** [623, 746]. **Electrical** [628, 129, 1307, 264, 302, 428, 581, 609, 198, 240, 83, 429, 784, 787, 815, 871, 172, 145, 819]. **Electrical-Resistivity** [628, 264, 302, 428, 609, 198]. **Electrode** [393, 467]. **Electron** [361, 594, 854, 1292, 960, 1041, 1189, 499, 565, 566, 126, 277, 1304, 180, 1306, 46, 682, 63, 1310, 5, 203, 1311, 83, 400, 29, 164, 1315, 715, 94, 101, 247, 263, 683, 719, 720, 795, 182, 84, 403, 1324, 503, 636, 661, 691, 730, 1000, 67, 763, 662, 282, 599, 637, 663, 1344, 1346, 734, 1349, 1055, 1352, 692, 1525, 902, 16, 18, 22, 49, 54, 68, 70, 71, 138, 139, 157, 169, 215, 231, 308, 309, 344, 450, 451, 483, 506, 512, 518, 575, 576, 577, 578, 586, 644, 646, 665, 666, 667, 668, 669, 677, 695, 704, 736, 742]. **Electron** [743, 744, 772, 773, 774, 777, 806, 807, 813, 865, 1540, 943, 971, 1099, 1169, 1272, 1363, 1365, 1378, 1380, 1387, 1409, 1410, 653, 678, 621, 745, 746, 592, 123, 622, 748, 656, 1421, 712, 1183, 1255, 1480, 435, 359, 883, 752, 821, 855, 856, 884, 885, 928, 990, 991, 1039, 1040, 1077, 1117, 1158, 1185, 1186, 1212, 1214, 1256, 1257, 1258, 1289, 1431, 1455, 1456, 1457, 930, 1187, 532, 62, 1299, 1303, 1434, 1125, 148, 1127, 1309, 1084, 1194, 6, 437, 438, 857, 42, 1460, 890, 891, 1265, 1487, 1266, 1435, 1463, 1225, 1466, 633, 729, 759]. **electron** [800, 934, 962, 1045, 1162, 1330, 935, 966, 967, 999, 1003, 1005, 1046, 1134, 1136, 1137, 1195, 1228, 1336, 568, 1167, 570, 1437, 571, 638, 1345, 1347, 1348, 229, 803, 1350, 1009, 1058, 1096, 735, 9, 10, 14, 69, 197, 270, 310, 320, 325, 341, 343, 347, 380, 410, 417, 448, 452, 481, 485, 543, 547, 601, 606, 613, 645, 647, 651, 699, 702, 703, 706, 776, 811, 834, 843, 846, 864, 875, 906, 917, 918, 921, 952, 953, 981, 1016, 1017, 1020, 1059, 1060, 1062, 1063, 1064, 1071, 1098, 1103, 1141, 1147, 1153, 1175, 1176, 1199, 1200, 1202, 1203, 1204, 1205, 1206, 1231, 1232]. **electron** [1234, 1236, 1238, 1240, 1244, 1271, 1275, 1276, 1284, 1362, 1377, 1381, 1385, 1386, 1388, 1390, 1391, 1407, 1440, 1472, 1473, 1476, 1248, 388, 817, 853, 955, 956, 1287, 1250, 329, 241, 1418, 1419, 354, 527, 556, 1420, 124, 133, 880, 1211, 1254, 61, 1429, 1452, 408]. **electron-** [1204].

Electron-Densities [215, 745, 622]. **Electron-Density** [594, 182, 763, 662, 692, 668, 669, 704, 653, 577]. **electron-doped** [1284]. **Electron-electron** [203, 1311, 1055, 1352, 1350]. **Electron-Energy** [157]. **Electron-Gas** [682, 646]. **electron-hole** [1009]. **electron-ion** [229]. **Electron-phonon** [83]. **Electron-Scattering** [277, 742]. **Electron/hole** [1272]. **electronegativity** [270]. **Electronic** [436, 1076, 1120, 126, 74, 1320, 1087, 1097, 1138, 477, 896, 58, 76, 86, 155, 156, 191, 311, 378, 416, 453, 579, 580, 671, 696, 697, 744, 909, 1172, 1273, 1366, 1369, 1374, 1443, 352, 431, 620, 558, 119, 160, 176, 1427, 88, 790, 1299, 149, 797, 1230, 421, 614, 842, 870, 913, 914, 939, 1105, 1241, 1379, 1392, 1417, 881]. **Electronic-Structure** [477, 696]. **Electrons** [560, 40, 7, 35, 107, 1313, 248, 501, 660, 685, 792, 722, 116, 120, 724, 524, 709, 1523, 200, 1453, 1479, 1037, 1078, 1432, 1081, 8, 631, 659, 757, 793, 796, 860, 1464, 1488, 1086, 725, 443, 1167, 23, 111, 118, 190, 256, 407, 552, 698, 701, 837, 864, 953, 1020, 1111, 1150, 1235, 1275, 1470, 1471, 389, 1155, 159]. **Electrostatic** [790, 1516, 404, 808, 838, 1017, 1102, 1367, 1159, 1293, 1294, 320]. **Electrostrictive** [1161]. **element** [884, 1269]. **elemental** [559]. **Elementary** [202, 218]. **Elemente** [1518]. **Elements** [896, 31, 848, 1082, 30, 832, 1518]. **Embedded** [617, 986]. **embracing** [1045, 982, 1071]. **Emden** [982, 1099]. **emergent** [1489, 1492, 1493]. **Emission** [200, 99, 938, 97, 190, 951, 201, 242]. **emphasis** [1223]. **Empirical** [530, 473, 756, 775, 1449]. **encapsulated** [1258]. **encapsulation** [1438]. **Energetics** [128, 338]. **Energies** [300, 758, 1436, 733, 49, 285, 291, 586, 646, 673, 675, 785, 1378, 654, 709, 557, 593, 750, 81, 1428, 790, 1037, 1116, 1079, 1084, 1463, 798, 966, 967, 78, 79, 136, 141, 154, 217, 252, 259, 323, 341, 449, 491, 522, 645, 650, 674, 701, 843, 945, 950, 1144, 1146, 1361, 1377, 1384, 327, 328, 388, 466, 390, 958]. **Energy** [561, 594, 854, 1292, 1482, 126, 472, 682, 630, 756, 722, 863, 634, 661, 726, 760, 762, 534, 598, 662, 733, 157, 191, 254, 288, 317, 348, 415, 454, 455, 458, 525, 649, 675, 704, 739, 742, 809, 810, 841, 1033, 1383, 1401, 619, 653, 654, 678, 620, 622, 434, 752, 1076, 1184, 1259, 1431, 1455, 1515, 1217, 1222, 499, 1299, 394, 1300, 1303, 147, 401, 755, 797, 859, 860, 862, 995, 1265, 1487, 1266, 1322, 1225, 206, 365, 366, 405, 502, 633, 635, 893, 961, 996, 1328, 935, 964, 1002, 1004, 1050, 1051, 1092, 1163, 1164, 1336, 1338, 67, 570]. **energy** [1437, 336, 69, 98, 237, 286, 305, 310, 321, 325, 342, 346, 349, 375, 379, 380, 425, 449, 457, 460, 461, 462, 480, 484, 492, 505, 507, 540, 547, 551, 578, 582, 601, 604, 606, 647, 648, 650, 674, 698, 737, 771, 775, 812, 836, 845, 911, 916, 921, 946, 947, 948, 970, 971, 972, 973, 974, 979, 980, 1015, 1028, 1063, 1064, 1066, 1069, 1102, 1103, 1107, 1109, 1145, 1146, 1172, 1175, 1176, 1180, 1200, 1204, 1238, 1244, 1246, 1276, 1284, 1354, 1367, 1382, 1390, 1399, 1439, 1476, 1208, 983, 984, 1073, 1113, 274, 275, 389, 817, 955, 956, 985, 1181, 1415, 1417, 592]. **energy** [330, 355, 528, 468, 1211, 27]. **energy-densities** [1204]. **Energy-Range** [742]. **Enhancement** [70]. **Enskog** [545]. **entangled** [1077]. **entanglement** [1176]. **Enthalpies** [1123]. **entire** [1434]. **entropies** [1077].

Entropy [863, 1260, 1100, 1270]. **environmental** [1261]. **Environments** [1298, 666, 669]. **epidemic** [1430]. **Equation** [103, 691, 282, 734, 1349, 1008, 692, 17, 549, 550, 741, 1099, 1356, 1363, 1380, 1471, 1479, 791, 820, 884, 885, 928, 1080, 1160, 499, 1125, 857, 890, 995, 48, 440, 800, 823, 1162, 1088, 1132, 1136, 1227, 1335, 1, 4, 53, 448, 481, 485, 699, 706, 767, 834, 864, 875, 878, 906, 907, 924, 982, 1015, 1064, 1108, 1173, 1231, 1237, 1269, 1283, 1362, 1370, 295, 468, 115]. **Equations** [500, 827, 30, 31, 337, 553, 768, 865, 1514, 934, 1051, 1131, 1010, 1056, 1353, 812, 1148]. **Equilibrium** [1085, 567, 150, 151, 1436, 937, 868, 944, 1410, 709, 390, 493, 657, 1225, 336, 489, 641, 701, 952, 274, 466, 528, 1501]. **Equilibrium-bond-length** [493]. **Equipartition** [1033]. **Equivalence** [360]. **Erratum** [1171]. **ESAB** [858]. **Especially** [1453, 713, 717, 1319, 696, 787, 850, 867, 1364, 1374, 985, 365, 1050, 231, 584, 697, 738, 832, 877, 1105, 1279, 1405]. **estimate** [1263]. **Estimates** [358, 1253, 184, 377]. **Estimation** [1074]. **estrogen** [1342]. **estrogen-Ru-NAMI-A** [1342]. **etc** [597]. **ethene** [416]. **Ettingshausen** [703]. **Eutectic** [134, 161, 988, 140, 168]. **evaporation** [535]. **eventually** [1512]. **Evidence** [1041]. **Evolution** [1484]. **Exact** [1040, 1213, 1256, 564, 760, 761, 762, 826, 1327, 1227, 570, 267, 1343, 188, 271, 379, 511, 546, 771, 1200, 1237, 1239, 1240, 1383, 590, 106, 1425, 1039, 1212, 823, 824, 1325, 1437, 547, 1062, 1066, 1173, 1370, 652]. **Exactly** [1196, 1495, 1049, 1244, 1517]. **example** [1054, 1098, 1236]. **examples** [1232]. **Excess** [796, 757]. **Exchange** [1290, 126, 1299, 1266, 1322, 661, 761, 801, 964, 1165, 310, 412, 518, 586, 649, 941, 942, 972, 1104, 1168, 1170, 1238, 1368, 1439, 749, 175, 1456, 1263, 1303, 657, 823, 824, 826, 1128, 1325, 1326, 1327, 935, 966, 967, 1048, 1053, 1129, 1130, 1132, 1135, 1227, 1331, 1332, 1335, 1336, 1337, 830, 1351, 14, 15, 214, 411, 452, 505, 648, 812, 948, 971, 1017, 1102, 1140, 1173, 1174, 1175, 1206, 1237, 1240, 1276, 1354, 1367, 1370, 1386, 223, 1211, 1253, 1254]. **Exchange-Correlation** [761, 1290, 1168, 1456, 1263, 1128, 1326, 1327, 1129, 1130, 1132, 1331, 1335, 812, 1017, 1102, 1140, 1240, 1367, 1253, 1254]. **exchange-energy** [935, 1336]. **exchange-force** [1439]. **exchange-only** [1227, 1173, 1174, 1237, 1370, 1386]. **Excitation** [157, 200, 190, 916, 940, 954]. **Excitations** [202, 537, 173, 1118, 218, 221, 548, 1149, 1232]. **excited** [1150, 1155]. **Excitons** [765]. **Excluded** [1018]. **exclusion** [1209]. **exemplified** [1439, 1452]. **exist** [727]. **existing** [1259]. **Expanded** [628, 402, 717, 1319, 575, 609, 1365, 533, 1308, 419, 767, 784]. **Expansion** [863, 783, 712, 1038, 244, 1435, 935, 966, 967, 1336, 236, 480, 835, 1390, 494, 470]. **Expansions** [634, 728, 762, 434, 635, 936]. **expansivity** [1477]. **Experiment** [900, 828, 1329]. **Experimental** [658, 1222, 1246, 1253]. **experimentally** [1199]. **Experiments** [901, 215, 605, 866, 1376, 1454, 504, 1203, 1245, 987]. **Explicit** [1479, 568, 425, 401]. **explosion** [1047]. **explosive** [1261]. **exponent** [1449]. **exponents** [1229, 1233, 1442, 1430, 1446, 1448, 1450, 1478, 1513]. **expressed**

[1129, 1331, 1140]. **Extended** [20, 899, 902, 1363, 934, 448, 872, 878, 924]. **External** [666, 669, 865, 876, 1030, 564, 569, 837]. **extract** [1415]. **Extracting** [427]. **Extraction** [544, 1206]. **Extreme** [666, 669, 1218, 1278]. **extremely** [366, 440, 1008, 269].

F [408, 338]. **face** [65]. **face-centred** [65]. **Factor** [100, 395, 1301, 400, 279, 95, 284, 478, 783, 621, 146, 802, 1228, 96, 287, 1406, 1477, 1418, 1254]. **Factors** [531, 227, 174, 225, 1461, 222, 554, 616, 1285, 1388, 354, 296]. **facts** [1218, 1145]. **false** [384]. **family** [1480, 1236, 1250]. **far** [505, 1354]. **Fargo** [714]. **Fast** [157, 291]. **FBeCN** [1215, 1224, 1318]. **Fe** [1222, 1298, 1246, 1284, 201, 242]. **Features** [683, 903, 1222, 1246]. **FeB** [988]. **Feinberg** [1257, 726, 737]. **Fermi** [102, 109, 21, 811, 872, 1514, 626, 627, 856, 992, 993, 1482, 20, 26, 163, 2, 3, 397, 399, 1312, 95, 48, 102, 109, 186, 84, 440, 636, 802, 1330, 803, 1350, 1056, 1057, 1, 4, 9, 10, 11, 12, 13, 15, 18, 23, 30, 31, 37, 44, 96, 167, 193, 370, 371, 379, 383, 464, 465, 541, 615, 651, 739, 815, 841, 845, 970, 974, 982, 1070, 1400, 1409, 1411, 983, 984, 1181, 710, 711, 468, 469, 529, 106, 1425, 1513]. **Fermi-** [815]. **Fermi-like** [982]. **Fermi-Liquid** [739]. **Fermi-Surface** [636, 464]. **Fermiology** [474, 488]. **Fermion** [1482, 1001, 1131, 104, 372, 1288, 960, 1119, 1121, 886, 997, 1049, 1051, 1164, 1232, 1415]. **fermionic** [1321, 1358]. **Fermions** [598, 947, 1408, 1192, 963, 1054, 1091, 1338, 235, 271, 973, 975, 980, 1201, 1245]. **ferro** [840]. **ferro-** [840]. **ferromagnet** [1283]. **ferromagnetic** [1467]. **ferromagnets** [1221, 206, 1284, 1073]. **Festschrift** [1544]. **few** [1218]. **Feynman** [1083, 1157, 1089, 1202]. **Field** [854, 39, 107, 1313, 660, 685, 719, 720, 792, 567, 84, 893, 1328, 599, 1344, 549, 783, 1030, 1356, 653, 745, 748, 749, 929, 1157, 1185, 1190, 129, 1307, 857, 108, 659, 1464, 1465, 440, 934, 962, 1002, 1003, 1004, 1046, 1089, 597, 1057, 53, 379, 444, 446, 484, 490, 540, 546, 578, 647, 804, 833, 875, 922, 1028, 1059, 1070, 1100, 1107, 1198, 1204, 1205, 1207, 1388, 1404, 1470, 1473, 851, 1113, 1419, 1420, 880, 1449]. **Fields** [25, 623, 624, 1503, 1538, 794, 1346, 765, 193, 640, 644, 666, 669, 849, 865, 876, 1099, 1411, 1504, 711, 746, 656, 1421, 625, 631, 366, 825, 1050, 571, 11, 269, 507, 837, 869, 945, 260, 710]. **Fig** [1497, 1499]. **filling** [1388]. **fillings** [1127, 1309]. **films** [1467]. **fine** [1456, 1485]. **fine-tuned** [1456]. **fine-tuning** [1485]. **Fingerprints** [1142, 1143, 1372, 1396, 1222, 1176, 1178, 1232, 1246, 1171]. **Finite** [362, 302, 188, 1363, 618, 1523, 370, 448, 538, 603, 833, 851, 881]. **Finite-Range** [188]. **Firing** [714]. **First** [1192, 802, 1020, 1201, 1112, 1480, 929, 995, 965, 764, 829, 189, 273, 303, 316, 347, 780, 1015, 1098, 1150, 1362, 1395, 1471, 1155, 1415]. **first-** [829, 273, 780, 1395]. **first-and** [764]. **first-degree** [995, 1015]. **First-order** [1192, 802, 1020, 1201, 1112, 1480, 929, 965, 189, 303, 316, 347, 1098, 1362, 1471, 1415]. **five** [1247]. **Flesh** [1520]. **Florida** [1506]. **Flowing** [695, 960, 807]. **fluctuation** [994]. **Fluctuations**

[333, 562, 495, 332, 146, 177, 888, 187, 340]. **Fluid** [628, 100, 473, 719, 720, 732, 575, 611, 1365, 496, 992, 1256, 1118, 533, 1308, 1007, 976, 1149, 1278, 144, 115, 1451]. **fluid-fluid** [1451]. **fluid-solid** [1149]. **fluidity** [879]. **Fluids** [658, 892, 337, 553, 1023, 1025, 298, 89, 1461, 757, 795, 877, 949, 1235, 1270, 1357, 1477, 1072, 173, 433]. **Fluorescence** [684, 362, 705]. **fluorinated** [1461]. **fluorite** [286, 315]. **Flüssigkeiten** [1506]. **Fock** [435, 360, 1214, 1456, 126, 1299, 1194, 1485, 397, 398, 399, 1312, 933, 1435, 1085, 661, 689, 690, 800, 824, 1325, 964, 414, 505, 648, 649, 677, 921, 972, 1175, 1238, 1244, 1354, 1211]. **folding** [1355]. **Following** [684, 705]. **forbidden** [430]. **Force** [928, 19, 756, 827, 1130, 454, 516, 544, 644, 869, 918, 945, 260, 656, 1421, 679, 1426, 1263, 148, 1128, 1326, 1088, 1132, 1165, 1335, 938, 251, 417, 457, 775, 833, 843, 951, 1102, 1170, 1240, 1367, 1439, 851, 957, 1074, 818, 1253]. **Force-balance** [928, 1088]. **Force-Constant** [756, 656]. **Forces** [363, 1314, 90, 1316, 165, 905, 139, 542, 670, 839, 870, 1027, 351, 1412, 1116, 1321, 170, 314, 523, 1144, 1358, 1392, 131]. **Form** [726, 760, 829, 189, 817, 1183, 1479, 359, 1431, 1215, 278, 89, 1224, 1318, 860, 759, 303, 304, 316, 343, 737, 771, 875, 1231, 652]. **Formally** [547, 1173, 1370]. **Formation** [561, 472, 317, 406, 458, 525, 557, 593, 1432, 394, 1300, 98, 154, 346, 370, 491, 492, 522, 572, 582, 1208]. **formed** [1078, 1111]. **forming** [1282]. **Forms** [632, 1056, 296]. **Formula** [188, 545, 505, 1354, 1449]. **formulas** [830, 1351, 251]. **Foundations** [43, 313, 1373, 1226, 1249, 1414]. **Four** [1453, 1479, 1259, 1432, 1215, 1224, 1318]. **four-center** [1215, 1224, 1318]. **Fourier** [965]. **Fractal** [1267, 1539, 822, 1478]. **Fractals** [903]. **Fractional** [1410, 952, 1209]. **fractions** [1127, 1309]. **Fragment** [692, 699]. **Fragmentation** [859, 862]. **Fragments** [986]. **Free** [29, 41, 264, 724, 302, 16, 18, 22, 348, 517, 608, 694, 736, 809, 810, 911, 1018, 352, 1546, 855, 1458, 1481, 203, 1311, 42, 1460, 1462, 1486, 1466, 725, 1006, 1437, 349, 417, 816, 1026, 1061, 1407, 159]. **free-electron** [855]. **Free-Electrons** [724]. **Free-Energy** [348]. **Free-Path** [264, 517]. **free-space** [1458, 1481, 1460, 1462, 1486, 1466]. **Freezing** [471, 279, 731, 284, 312, 318, 324, 337, 509, 521, 526, 676, 621, 356, 679, 1426, 883, 1339, 287, 912, 1179, 1403, 1406, 1418]. **Frenkel** [286, 315]. **frequencies** [1093, 940, 954]. **Frequency** [34, 261, 249, 122, 486]. **Frequency-Dependent** [261]. **friction** [938, 385, 951]. **Front** [898, 910, 1019, 1371, 788]. **fullerene** [1184]. **Fulleride** [1114, 1252, 1422, 1210]. **fullerides** [1156, 1182]. **fully** [875, 1276]. **Function** [100, 471, 400, 686, 687, 503, 104, 318, 337, 478, 516, 517, 520, 544, 707, 783, 622, 655, 1454, 884, 1038, 1158, 1186, 1213, 1256, 1257, 1042, 1043, 1221, 394, 1300, 203, 1311, 933, 249, 1435, 1323, 759, 802, 1089, 219, 293, 606, 831, 833, 868, 923, 980, 1174, 1239, 1277, 851, 433, 115]. **Functional** [358, 566, 126, 396, 690, 691, 726, 730, 762, 731, 413, 693, 770, 785, 841, 866, 908, 973, 1276, 619, 749, 132, 1424, 1546, 359, 1455, 1299, 1459, 398, 401, 995, 1265, 1487, 1266, 689, 729, 801, 961, 996, 1128, 1226, 1326, 997, 1054, 1129,

1131, 1331, 1339, 570, 130, 305, 377, 414, 415, 425, 484, 541, 546, 587, 604, 706, 737, 835, 836, 845, 869, 916, 917, 946, 947, 974, 979, 981, 1015, 1020, 1098, 1104, 1108, 1140, 1148, 1173, 1174, 1180, 1199, 1203, 1236, 1360, 1368, 1370, 1382, 1407, 1440, 1473, 983, 984, 1154, 1413, 955, 956, 1249, 1414, 330, 133]. **Functional-Differentiation** [749]. **Functionals** [1530, 915, 1383, 1401, 1259, 825, 1051, 971, 1066, 1069, 1145]. **Functions** [164, 1315, 658, 156, 521, 1366, 496, 712, 160, 1427, 564, 89, 1463, 1045, 58, 155, 382, 870, 909, 1071, 1202, 1232, 1369, 1392, 1405, 294, 591, 199]. **further** [1512]. **Fusion** [1123]. **future** [1407].

G [1517, 368, 1502, 1543]. **Gadolinium** [474, 488]. **Galactic** [794]. **Gamma** [787]. **Gap** [1160, 882, 1109]. **gaps** [1217]. **Gas** [126, 682, 29, 794, 84, 1000, 67, 104, 1525, 537, 16, 49, 54, 71, 539, 646, 708, 1378, 1387, 499, 532, 1299, 1127, 1309, 1058, 14, 69, 310, 512, 548, 645, 811, 873, 1271, 1377, 1388, 1287, 1209, 144, 61, 1429]. **gaseous** [1112]. **Gases** [501, 683, 716, 718, 169, 1363, 394, 1300, 448, 873, 907, 1101, 1110, 1141, 1245]. **Gd** [1189, 1221]. **Ge** [1443, 1286]. **geb** [1497, 1499]. **Gell** [872]. **Gell-Mann** [872]. **General** [35, 598, 897, 1383, 1255, 1054, 570, 1066, 1250]. **generalisation** [596, 1476]. **Generalization** [627, 1162, 597, 664, 741, 1099, 626, 1002, 490, 1028, 1404, 1250]. **Generalizations** [529]. **Generalized** [891, 18, 912, 494, 856, 917, 982]. **Generalizing** [1214, 1080]. **generated** [1457, 1322, 1163, 1228, 1202, 1275, 1408, 1473]. **generates** [508]. **generating** [824, 1325]. **generation** [543, 1145]. **Genes** [1433]. **GeO** [1459]. **Geometric** [881, 1447]. **geometries** [1085]. **Geometry** [1189, 1230, 232, 1241, 1374, 1225, 1105]. **German** [1503, 1518, 1497, 1499, 1506]. **Germane** [19, 27]. **Germanium** [531, 554]. **Germany** [1519]. **Gillespie** [117]. **given** [564, 1162, 295]. **glass** [1267, 1282]. **glass-forming** [1282]. **glasses** [250, 281, 1267, 1268, 1281]. **Glassy** [1029, 1469, 1286]. **glassy-like** [1469]. **Glue** [905]. **glycine** [1238]. **Görling** [1227, 1237]. **Gossamer** [1288]. **GPa** [1216]. **Gradient** [244, 634, 728, 762, 936, 434, 1266, 635, 1338, 570, 236, 252, 853, 528]. **gradient-corrected** [1266]. **Gradients** [741, 856, 872, 388]. **graphene** [1273]. **Graphite** [1000, 1197]. **Graphitic** [1087, 986, 882]. **Gravitational** [567]. **Gravitational-Field** [567]. **Green** [564, 335, 655, 1191, 884, 1089, 1202]. **Green-Function** [655]. **Gross** [1080]. **Ground** [1436, 604, 668, 704, 865, 1105, 1363, 1374, 1380, 619, 1255, 928, 1039, 1117, 1158, 1213, 1214, 1256, 1257, 1431, 1455, 1515, 1263, 1125, 1194, 890, 1265, 1435, 1463, 964, 1136, 1137, 1195, 1230, 382, 448, 485, 511, 614, 665, 698, 834, 864, 875, 906, 953, 972, 980, 1020, 1062, 1063, 1153, 1176, 1199, 1203, 1231, 1232, 1238, 1239, 1240, 1241, 1362, 1471, 590, 591, 652, 853, 1254]. **Ground-State** [1436, 704, 865, 1363, 1374, 1380, 619, 604, 1105, 928, 1158, 1213, 1214, 1257, 1431, 1125, 1194, 890, 1265, 1435, 1463, 1136, 1137, 1195, 1230, 382, 448, 485, 698, 834, 864, 875, 906, 953, 980, 1020, 1063, 1153, 1176,

1199, 1203, 1231, 1232, 1238, 1239, 1240, 1241, 1362, 1471]. **Ground-States** [668]. **group** [56]. **growth** [1430]. **GW** [630].

H [1510, 1185, 1081, 1503, 1517, 1505, 1497, 1508, 1498, 1501, 1499, 307, 704, 1511, 1504, 1502, 1521, 1500, 1520, 927, 1506, 594, 821, 1038, 1157, 1295, 39, 162, 795, 1002, 1165, 1196, 166, 293, 338, 381, 601, 641, 805, 871, 874, 1028, 1030, 1105, 1108, 1170, 1205, 1374]. **H-2** [704, 927]. **H-3** [1185, 1165]. **H-4** [1185]. **H.** [110]. **H2O** [1093, 1133]. **Haeffner** [198, 747]. **half** [417]. **half-planes** [417]. **Halide** [364]. **Halides** [358, 127, 283, 284, 324, 455, 321, 343, 377, 1068]. **Hall** [576, 703, 782, 952, 1410]. **Hall-Effect** [576]. **halogens** [919, 926, 927]. **Hamiltonian** [1157, 1212, 1213, 1515, 1239]. **Hard** [100, 545, 1018, 205, 1282]. **Hard-Sphere** [545]. **hard-sphere-like** [1282]. **hardcover** [1521]. **Harmonic** [1180, 1183, 1479, 992, 1125, 1126, 1192, 1305, 1265, 1487, 1488, 997, 998, 1049, 1134, 267, 1343, 940, 947, 974, 976, 980, 1020, 1150, 1152, 1200, 1201, 954, 983, 1155]. **Harmonically** [660, 1255, 1455, 659, 1321, 963, 1054, 1338, 970, 975, 1020, 1150, 1358, 984, 1155]. **Hartree** [435, 360, 1214, 1456, 126, 1299, 1194, 1485, 397, 398, 399, 1312, 933, 1085, 661, 689, 690, 800, 824, 1325, 964, 193, 414, 505, 648, 649, 677, 921, 972, 1175, 1238, 1244, 1354, 1211]. **having** [1053, 1337]. **hb** [1520]. **He-like** [1115, 1158, 1213, 1515, 890, 1435, 1463, 1136, 906, 1169, 1239]. **Heat** [228, 1021]. **heats** [82, 87, 1101]. **Heavier** [683, 1101, 879]. **Heavy** [717, 1319, 863, 732, 664, 960, 1119, 1121, 657, 365, 366, 405, 502, 336, 1007, 217, 288, 342, 415, 460, 462, 480, 489, 641, 836, 907, 1146, 327, 493, 470]. **Heavy-Atoms** [664]. **Height** [395, 1301, 279, 287]. **Heilmann** [1434]. **Heisenberg** [840]. **Held** [1519]. **Helium** [73, 89, 1137, 1153]. **Hellmann** [1083]. **Heterogeneous** [666, 669, 779]. **heteronuclear** [359, 343, 493, 494]. **Heuristic** [1375]. **HF** [338]. **High** [34, 715, 1056, 417, 642, 695, 739, 744, 1274, 1359, 73, 656, 1421, 1422, 930, 1041, 1187, 1219, 135, 886, 440, 1008, 143, 315, 782, 807, 1272, 1278, 432, 558, 1114]. **High-density** [417]. **High-pressure** [1274, 1219]. **High-T** [715, 642, 1359, 930, 886]. **high-T-c** [1041]. **higher** [1216, 1162]. **highest** [1049, 372]. **Highly** [717, 1319, 1001]. **Hilbert** [1447]. **Hiller** [1257, 726, 737]. **Hiller-Sucher-Feinberg** [726]. **Hole** [163, 397, 715, 95, 642, 695, 1359, 930, 960, 1041, 399, 1312, 1167, 1009, 96, 167, 214, 807, 1272, 223, 241]. **hole-electron** [241]. **HOMO** [1090, 1129, 1132, 1331, 1333, 1334, 1335, 1106, 1140]. **HOMO-LUMO** [1132, 1335]. **Homogeneity** [955, 956, 973]. **Homogeneous** [666, 669, 779, 783, 1181, 1186, 1256, 995, 934, 962, 1096, 136, 1015, 1231, 1232]. **Homonuclear** [629, 758, 692, 699, 743, 613, 643, 847, 592, 390]. **honor** [1544]. **Hookean** [1038, 1039, 1432, 1045, 1137, 864, 953, 1062, 1063, 1071, 1153, 1471]. **Hot** [458, 509, 676]. **HTSC** [1156, 1288]. **Hubbard** [840]. **Hückel** [380, 330]. **human** [1469]. **hydrocarbon** [1161]. **hydrocarbons** [330, 331].

Hydrodynamic [562]. **Hydrogen** [358, 179, 46, 402, 765, 209, 885, 135, 278, 796, 1133, 229, 211, 36, 143, 195, 220, 232, 233, 321, 343, 377, 419, 486, 787]. **Hydrogen-Atom** [765]. **hydrogen-bonded** [796]. **hydrogen-like** [278]. **hydrogenic** [1434]. **Hypernetted** [478].

Ice [329, 1093]. **Ice-** [329]. **ideal** [1209]. **Idempotent** [1090, 1333, 1334, 1106, 1204, 1290, 828, 1329, 1048, 1332, 941, 942, 1104, 1168, 1203, 1368, 1415]. **identical** [1415]. **Identified** [1433]. **Identity** [726, 1257, 737]. **ihre** [1518]. **II** [35, 422, 27, 29, 31, 72, 1474]. **III** [1217, 28]. **illus** [117]. **illustrated** [1210]. **Illustrative** [1236]. **Image** [515]. **immersed** [1184]. **impenetrable** [1192, 1201]. **Imperfections** [60, 72, 1398, 59, 64, 1402]. **Implications** [762, 1280]. **importance** [1276, 1277]. **improved** [1, 4]. **Impure** [107, 1313]. **Impurities** [436, 266, 57, 72, 610, 119, 64, 268, 453, 1402, 201]. **Impurity** [25, 38, 1042, 1043, 65, 108]. **Impurity-Vacancy** [38]. **incident** [795]. **Include** [741]. **Including** [744, 1220, 1435, 502, 769, 847, 871, 1156, 124]. **Incomplete** [31]. **incorporate** [856]. **Independent** [660, 564, 1192, 659, 997, 1091, 1338, 235, 513, 582, 1201]. **independent-particle** [513]. **independently** [947]. **index** [1262]. **Indicator** [797]. **indices** [1451]. **Indirect** [504, 514, 589]. **Induced** [311, 1252, 1258, 1094, 702, 1271, 1381, 1287]. **inelastic** [1093, 211]. **Inequality** [582]. **Inequivalent** [1257]. **Infinite** [1523, 821, 1190, 499, 512, 1207]. **infinite-range** [1190, 1207]. **infinitesimal** [1453]. **infinity** [1172]. **Influence** [1174, 123, 1061, 1253]. **Information** [605, 1376, 1077, 1117, 1004, 536, 1489]. **Information-Content** [605]. **Inhomogeneity** [733, 675, 674]. **Inhomogeneous** [821, 884, 1258, 1292, 566, 126, 682, 1460, 719, 720, 661, 827, 962, 1001, 734, 1349, 1525, 169, 518, 586, 645, 646, 677, 811, 1275, 1363, 1377, 678, 746, 752, 856, 885, 992, 1212, 1431, 1456, 1457, 1080, 499, 1299, 1303, 1084, 891, 1463, 1225, 800, 1162, 999, 1003, 1005, 1134, 1437, 310, 448, 834, 875, 976, 981, 1016, 1110, 1175, 1202, 1204, 1206, 1234, 1276, 1386, 1407, 1408, 1440, 1472, 1473, 1476, 1248, 817, 955, 1211, 1254]. **initio** [1259, 1295, 1466, 1145, 1317]. **Injected** [501, 1167]. **input** [1240]. **InSb** [1217, 129, 1307, 108]. **insensitive** [370]. **Instabilities** [132, 1424, 130]. **Insulating** [501, 403, 1324, 757, 410, 547, 840, 949, 1283, 1357, 1182, 1036]. **Insulator** [402, 476, 456, 575, 1365, 1122, 1296, 273, 419, 487, 614, 1395, 559]. **integer** [1127, 1309]. **Integral** [1080, 1132, 1335, 1256, 1485, 1227, 830, 1351, 1010, 1353, 321, 1173, 1237, 1240, 1370]. **integration** [973]. **Intense** [1538, 794, 765, 640, 666, 669, 849, 876, 1030, 1099, 746, 1157, 1185, 888, 1205]. **Intensities** [225, 243, 1219, 222]. **intensity** [430]. **Inter** [353, 1098]. **Inter-Ionic** [353]. **inter-particle** [1098]. **interact** [1020]. **Interacting** [400, 636, 1134, 315, 700, 783, 1453, 1118, 1321, 759, 1330, 376, 651, 875, 980, 1150, 1358, 295, 1072, 1155]. **Interaction** [38, 436, 1184, 680, 713, 754, 1534, 1310, 629, 1087, 1133, 75, 208, 1340, 537, 78, 79, 233, 456, 548, 610, 672, 81, 1428, 1116, 1455, 994, 1222, 681, 1302, 63, 83, 755,

1264, 280, 569, 229, 80, 346, 385, 453, 522, 643, 738, 1144, 1246, 1247, 592, 144]. **Interactions** [1483, 74, 1320, 104, 258, 311, 418, 779, 1479, 1126, 1305, 1465, 504, 803, 1350, 76, 232, 257, 452, 514, 515, 589, 940, 976, 1152, 1394, 1405, 1474, 954, 124]. **Interatomic** [90, 1316, 905, 314, 345, 131, 843]. **interelectronic** [1038, 1032]. **interest** [1199]. **Interface** [393, 567, 1022, 467, 392, 936, 387, 923, 329]. **interfaces** [374, 588]. **Interfacial** [454, 457]. **interlayer** [755]. **intermediate** [1116, 1144]. **Internal** [206, 1073, 1222, 938, 951, 1107, 1246, 1284, 1113]. **International** [1497, 1519, 77]. **internuclear** [321]. **interparticle** [1255, 1479, 1455, 1487, 940, 1275, 954, 1181, 1250]. **interpret** [1469]. **Interpretation** [289, 1465, 504, 1017, 1102, 1367]. **interstitials** [334]. **Introduction** [899, 15, 1542]. **invariance** [1447]. **Inverse** [756, 1468, 427, 776, 777, 879, 1487, 775, 1181]. **Inversion** [595, 1297, 644, 621, 1418]. **invoked** [1469]. **involving** [1262]. **Iodide** [66]. **iodine** [558, 559]. **Ion** [85, 291, 549, 876, 1030, 655, 261, 62, 278, 1266, 1006, 229, 846, 1026]. **Ion-Pair** [549]. **Ionic** [227, 66, 364, 283, 290, 291, 311, 312, 671, 353, 1124, 1191, 1223, 56, 1006, 141, 259, 871, 1026, 1060, 1384]. **Ionic-Crystals** [291]. **ionisation** [366, 1512]. **Ionization** [1193, 443, 316, 360, 1485, 365, 292, 321, 341, 342, 343, 380, 382, 328, 1496, 355]. **Ions** [475, 794, 74, 1320, 75, 1340, 418, 640, 618, 619, 790, 1038, 1115, 1158, 1212, 1213, 1214, 1516, 1515, 1193, 1485, 890, 205, 1435, 1463, 365, 366, 404, 405, 440, 502, 935, 966, 967, 1048, 1053, 1136, 1164, 1195, 1227, 1332, 1336, 1337, 336, 76, 80, 217, 269, 288, 309, 320, 342, 375, 415, 460, 462, 480, 482, 603, 604, 698, 906, 1169, 1236, 1237, 1239, 1390, 1439, 327, 652, 355, 468, 470, 1512]. **Iron** [91, 93, 92]. **irradiated** [1112]. **ISBN** [1521, 1506]. **Ising** [1190, 1229, 840, 1207, 1233, 1283, 1447, 1449, 1451, 1452, 1478]. **isoelectronic** [1516, 375]. **isomers** [1481, 1459, 1486, 1085]. **Isotope** [127, 128, 439]. **Isotopes** [1374, 1105]. **Isotopic** [198, 747, 173]. **isotropic** [963, 980, 1150, 1155]. **issues** [1110]. **itinerant** [837]. **IX** [1499].

J [117, 369, 408, 807]. **Jahn** [1512]. **Jaynes** [1077]. **Jellium** [403, 1324, 783, 749, 759, 934, 189, 410, 417, 818, 880]. **jellium-model** [417]. **Jellium-Type** [749]. **John** [1530]. **Jones** [1501, 892]. **Joule** [509].

Kanzaki [139]. **Kato** [490, 664, 1404, 1476]. **kernel** [1174]. **key** [1083]. **Kinetic** [854, 1292, 1482, 634, 635, 661, 726, 760, 762, 961, 996, 598, 662, 733, 49, 190, 317, 346, 484, 586, 606, 647, 649, 675, 841, 974, 1063, 1175, 1176, 1378, 983, 653, 817, 620, 330, 200, 622, 434, 752, 1431, 1455, 499, 1303, 401, 797, 995, 1487, 966, 967, 1002, 1004, 1051, 1092, 1163, 1164, 1338, 570, 1437, 252, 305, 325, 379, 425, 507, 578, 648, 674, 737, 771, 845, 916, 947, 948, 970, 971, 973, 1015, 1028, 1064, 1102, 1103, 1172, 1180, 1200, 1204, 1234, 1367, 1390, 984, 1248, 955, 985, 1417, 528]. **Kinetic-Energy**

[634, 726, 760, 598, 662, 733, 675, 653, 620, 622, 995, 325, 737, 771, 970, 1015]. **kinetics** [1075]. **Kohn** [1457, 824, 1325, 541]. **Kramers** [37, 1400, 469, 295]. **Kyoto** [77].

L [546]. **Landau** [1464, 1388, 1470]. **Large** [760, 1193, 890, 48, 1322, 1048, 1053, 1196, 1227, 1228, 1332, 1337, 141, 309, 384, 481, 540, 771, 906, 921, 1231, 1237, 1384, 1439, 469]. **large-atomic-number** [469]. **laser** [1112]. **lateral** [515, 589]. **Lattice** [121, 1341, 77, 157, 129, 1307, 148, 430, 1272]. **Lattices** [151, 1501, 139, 142, 836, 838, 868]. **Law** [509, 675, 656, 1421, 249, 969, 519, 674, 1235, 1181]. **Laws** [544, 843, 918]. **layered** [1284]. **Layers** [882, 1221, 838]. **leading** [966, 967, 1390]. **Leduc** [703]. **Legendre** [1163, 924, 985]. **Length** [756, 348, 709, 931, 932, 994, 1124, 349, 641, 701, 775, 1441, 432, 493]. **Lengths** [19, 657, 336, 489, 868, 466, 390]. **Lennard** [892]. **Lennard-Jones** [892]. **Lenz** [596, 597]. **Lett** [1171]. **Level** [662, 995, 281, 1005, 1049, 1054, 1164, 1165, 570, 1015, 1170, 1388, 652]. **Li** [1122, 1296, 1085, 874, 1105, 1374]. **Li2C2** [1460]. **LiBC** [1120, 1138]. **LiBeBCNOF** [1215, 1224, 1318]. **Liboff** [526]. **Lieb** [1434]. **Lifetimes** [70]. **ligand** [1472]. **Light** [451, 700, 848, 1374, 618, 434, 1037, 1516, 1194, 603, 832, 1105, 1489, 389, 528]. **Light-Atoms** [618]. **LiH** [1165, 1068, 1170]. **like** [1115, 1158, 1213, 1515, 1216, 33, 278, 890, 1435, 1463, 1048, 1053, 1088, 1136, 1164, 1227, 1332, 1337, 1469, 370, 906, 982, 1142, 1143, 1169, 1171, 1236, 1237, 1239, 1277, 1282, 1372, 1439, 1182, 1512]. **Limit** [863, 739, 1453, 821, 1432, 1193, 398, 1322, 365, 366, 1196, 1228, 803, 1350, 309, 342, 414, 543, 1285, 1439, 1477, 469]. **Limitations** [656, 1421]. **limiting** [1056]. **Lindemann** [1285, 656, 1421]. **Lindgren** [369]. **Line** [830, 1351, 973]. **Line-integral** [830, 1351]. **Linear** [1042, 1043, 565, 228, 186, 319, 386, 673, 783, 1185, 1215, 1224, 1318, 267, 1343, 1058, 378, 380, 1147, 1205, 1231]. **Linear-Dependence** [673]. **Linear-Response** [783, 1058]. **Lines** [185]. **link** [547]. **linked** [1119, 1121]. **linking** [582]. **LiOB** [1215, 1224, 1318]. **Liquid** [297, 333, 561, 530, 562, 563, 595, 1297, 565, 566, 471, 472, 161, 262, 276, 227, 680, 754, 500, 400, 204, 363, 1314, 1507, 101, 264, 265, 279, 792, 74, 1320, 439, 688, 721, 182, 567, 1508, 892, 503, 661, 75, 85, 208, 731, 1340, 442, 599, 1344, 302, 734, 1349, 1509, 112, 156, 168, 216, 272, 284, 289, 318, 386, 418, 1526, 426, 427, 455, 458, 1528, 478, 516, 517, 518, 521, 524, 525, 526, 542, 544, 550, 576, 586, 600, 607, 609, 642, 644, 670, 671, 672, 676, 677, 707, 708, 739, 786, 1542, 1022, 1024, 1279, 1359, 1366, 1410]. **Liquid** [352, 678, 353, 198, 620, 621, 746, 331, 495, 557, 593, 655, 160, 176, 1427, 332, 883, 988, 989, 1454, 821, 856, 884, 1186, 1212, 1256, 1258, 1431, 1044, 1122, 1187, 1220, 1296, 1191, 244, 245, 246, 394, 1300, 681, 1302, 1303, 135, 147, 1084, 89, 1460, 793, 887, 891, 205, 1463, 1225, 1466, 759, 800, 802, 962, 1162, 1003, 187, 1339, 1469, 1437, 936, 969, 1009, 1010, 1055, 1352, 1353, 76, 80,

143, 155, 158, 197, 221, 231, 287, 340, 350, 420, 1527, 461, 492, 523, 582, 740, 767, 784, 815, 831, 834, 850, 867, 869, 870, 873, 875, 877]. **liquid** [909, 911, 912, 913, 914, 923, 952, 981, 1061, 1101, 1175, 1179, 1202, 1232, 1234, 1238, 1242, 1243, 1280, 1285, 1364, 1379, 1392, 1397, 1403, 1408, 1440, 1472, 1476, 1477, 1490, 1248, 817, 955, 956, 1181, 172, 240, 1251, 1417, 1418, 432, 145, 1520, 1254, 1036, 1448, 1449, 1513, 1497, 1500, 1520]. **Liquid-Gas** [708, 873]. **Liquid-Metal** [297, 204, 182, 272, 386, 517, 495]. **Liquid-Metals** [530, 562, 563, 471, 680, 754, 363, 264, 439, 442, 418, 478, 521, 576, 671, 676, 352, 198, 655, 160, 176]. **Liquid-Mixtures** [276]. **Liquid-Phase** [265, 524]. **Liquid-Sodium** [621]. **Liquid-Solid** [599, 1344]. **Liquid-Vapor** [567, 923, 1101]. **Liquid-Vapour** [1297, 1022, 1279, 1122, 1220, 1296, 936, 969, 1448, 1449]. **Liquids** [1292, 395, 1301, 164, 1315, 715, 90, 1316, 718, 686, 687, 723, 827, 335, 212, 213, 339, 406, 409, 424, 509, 521, 602, 605, 639, 695, 744, 1376, 351, 1412, 1511, 391, 88, 752, 885, 1456, 1457, 930, 960, 993, 1041, 1218, 1260, 1124, 1223, 1262, 861, 887, 1323, 799, 1005, 1134, 1167, 1095, 1096, 86, 122, 510, 612, 807, 1147, 1204, 1206, 1272, 1275, 1276, 1277, 1282, 1386, 1406, 1407, 1441, 1473, 1286, 1211, 1036, 1506, 1505]. **Liquidus** [134, 140, 177]. **Lithium** [35, 464, 99, 1191, 97, 465, 1068, 199]. **Local** [435, 594, 393, 1050, 693, 783, 812, 842, 913, 914, 1064, 1356, 1379, 1380, 133, 1261, 532, 891, 1266, 1162, 1090, 1333, 1334, 267, 1343, 53, 235, 485, 601, 648, 947, 1106, 1276, 984, 852, 853, 199]. **local-density-approximation** [1266]. **Local-Field** [783]. **localised** [444]. **locality** [828, 1329, 1211]. **Localizability** [191]. **Localization** [107, 1313, 111, 915, 1541, 1442, 1446, 1450]. **Localized** [215, 1042, 1043, 1081, 1086, 1052, 463, 837]. **locally** [1175]. **logarithmic** [1465]. **London** [1497, 1508, 1506]. **Long** [1116, 1158, 1298, 680, 681, 1302, 74, 1320, 687, 503, 75, 1340, 80, 418, 454, 456, 457, 672, 1144, 1222, 42, 76, 155, 1246, 1285, 1477]. **Long-Range** [1298, 680, 74, 1320, 503, 75, 1340, 418, 454, 456, 672, 1116, 1158, 681, 1302, 80, 457, 1144, 1222, 42, 76, 1246]. **Long-Wavelength** [687, 1285]. **Longitudinal** [671]. **Loss** [520, 261, 1075, 281]. **Losses** [157]. **Low** [1122, 1296, 595, 1297, 1535, 1507, 228, 102, 109, 207, 250, 1509, 1526, 428, 1528, 642, 741, 1278, 1359, 1443, 1536, 1481, 1124, 1459, 1486, 859, 862, 1085, 826, 1045, 319, 429, 483, 769, 917, 1071, 1251, 1521, 355, 556]. **Low-coordination** [1278]. **Low-Density** [595, 642]. **Low-Dimensional** [1535, 1507, 1509, 1526, 1528, 1443, 1536, 483, 769, 1521, 556]. **low-lying** [1481, 1459, 1486, 1085]. **Low-Order** [741, 826, 1045, 917, 1071, 355]. **Low-Temperature** [207, 428, 250, 429]. **Löwdin** [1457, 1225]. **lower** [1216, 1260]. **Lowest** [916, 935, 1336, 252, 528]. **lowest-order** [252, 528]. **LUMO** [1090, 1129, 1132, 1331, 1333, 1334, 1335, 1106, 1140]. **Lundqvist** [1510, 1511]. **Luttinger** [993]. **lying** [1481, 1459, 1486, 1085].

M [185, 1505, 1508, 1521, 1506, 1497, 1499]. **macroscopic** [1075]. **Madelung**

[455]. **magnet** [1198]. **Magnetic**
[624, 1189, 1298, 533, 1308, 107, 108, 1313, 660, 685, 719, 720, 794, 84, 599, 1344, 1346, 765, 272, 412, 609, 640, 1099, 711, 656, 1421, 132, 1424, 625, 1157, 1185, 1190, 129, 1307, 631, 659, 1464, 1465, 366, 440, 825, 893, 934, 962, 1328, 571, 130, 231, 269, 411, 444, 1100, 1205, 1207, 1279, 1283, 1388, 1470, 1073, 710]. **Magnetic-Field** [660, 685, 719, 599]. **Magnetic-Field-Dependent** [84]. **Magnetic-Fields** [624, 765, 711, 656]. **Magnetic-Properties** [272, 412]. **Magnetic-Susceptibility** [609]. **Magnetically** [1107, 1113, 702, 1381]. **Magnetism** [120, 403, 1324, 663, 583, 744, 978, 1484, 968, 1345, 410]. **magnetization** [1222, 1100, 1107, 1246, 1284, 1113]. **magnetizations** [1190, 1207]. **Magnetocrystalline** [412, 411]. **Magnets** [809, 810, 840, 1451, 1452]. **magnitude** [360]. **magnons** [1467]. **Mainly** [786]. **make** [1199]. **Mann** [872]. **Many** [1482, 148, 933, 165, 691, 1001, 1051, 1498, 1499, 105, 113, 369, 584, 778, 813, 917, 1545, 1495, 1502, 712, 857, 1517, 1321, 727, 1091, 443, 170, 380, 706, 1232, 1358, 1405, 1452, 1502]. **Many-Body** [165, 1001, 1498, 1499, 105, 113, 778, 1545, 1495, 933, 369, 584, 148, 1517, 170, 1232, 1405]. **Many-Electron** [691, 813, 712, 148, 917, 857, 706]. **Many-Fermion** [1482, 1051]. **March** [1510, 1503, 1517, 1507, 1505, 1497, 1508, 1498, 1501, 1499, 1509, 1511, 1502, 1521, 1520, 1506, 959, 1159, 1291, 1293, 1294, 110, 977, 985, 1504, 1500]. **Marco** [1507]. **marginal** [1513]. **Mario** [1510, 1509, 1511]. **Mass** [814, 931, 932]. **masses** [1196]. **material** [1284]. **Materials** [1529, 763, 695, 744, 960, 994, 773, 807, 1107, 1113]. **Matrices** [1530, 103, 761, 60, 506, 770, 908, 1398, 1480, 1115, 1192, 437, 438, 825, 826, 1045, 1327, 764, 829, 59, 214, 780, 837, 917, 941, 942, 1071, 1201, 1202, 223, 1415, 498]. **Matrix** [397, 103, 724, 67, 43, 50, 1356, 114, 1183, 1255, 821, 855, 929, 1040, 1290, 399, 1312, 1266, 725, 800, 802, 823, 828, 1329, 963, 965, 998, 1048, 1088, 1090, 1163, 1332, 1333, 1334, 53, 68, 69, 189, 236, 303, 304, 316, 347, 444, 546, 1020, 1098, 1104, 1106, 1168, 1199, 1203, 1204, 1269, 1362, 1368, 1471, 61, 1429, 1075]. **Matter**
[894, 898, 311, 736, 910, 1011, 1019, 1371, 1537, 788, 111, 837, 1355, 1389, 1445]. **Maximum** [757, 486, 860]. **Mean**
[264, 302, 380, 517, 352, 679, 1426, 434, 1032]. **Mean-Free** [352]. **Mean-Free-Paths** [302]. **Measured** [544, 621, 1418]. **Measurements** [475, 353, 482, 1206]. **Mechanical**
[262, 723, 1346, 899, 1539, 843, 918, 1006, 571, 939, 943, 945, 1026, 1405, 1035]. **Mechanical-Properties** [723]. **Mechanics**
[44, 45, 105, 113, 117, 778, 51, 1295, 1317, 999, 384, 1016, 1499, 1502, 1498]. **mechanism** [306, 1065]. **mediated** [994]. **Melting**
[561, 1216, 1223, 472, 247, 263, 1094, 663, 1345, 290, 291, 455, 458, 459, 538, 545, 702, 1177, 1381, 557, 593, 1421, 1220, 1124, 394, 1300, 94, 1465, 1197, 638, 1348, 423, 461, 582, 847, 1068, 1100, 1285, 1208, 879, 927, 656]. **Melting-Point** [472, 545]. **Melts** [312, 945]. **membered** [1197]. **Membrane** [567, 632]. **membranes** [1445]. **mers** [422]. **Metal** [38, 297, 751, 393, 713,

162, 163, 682, 204, 265, 402, 476, 266, 280, 364, 182, 537, 272, 386, 419, 426, 456, 479, 517, 575, 768, 1013, 1365, 495, 467, 559, 749, 1122, 1296, 135, 504, 968, 1167, 1230, 735, 210, 58, 143, 155, 166, 167, 171, 197, 214, 216, 233, 268, 273, 307, 310, 326, 350, 374, 381, 385, 387, 417, 430, 487, 514, 548, 614, 738, 781, 868, 869, 948, 978, 1241, 1280, 1369, 1395, 295, 223, 329, 172, 199, 818]. **metal-based** [1230, 1241]. **metal-benzene** [1167]. **Metal-Electrode** [467]. **Metal-Insulator** [456, 1365, 419, 559, 1122, 1296, 273, 487, 614, 1395]. **Metal-Insulator-Transition** [402, 476, 575]. **Metal-Molten** [393, 467]. **metal-molten-salt** [374]. **metal-semiconductor** [387]. **Metal-Surface** [751, 162, 163, 749]. **Metal-Surfaces** [537]. **Metallic** [333, 436, 1298, 162, 179, 35, 56, 66, 686, 403, 1324, 215, 412, 600, 839, 175, 99, 791, 820, 1221, 334, 1323, 1466, 1267, 36, 97, 166, 195, 340, 410, 411, 453, 491, 522, 815, 840, 846, 871, 1172, 1282, 1357, 1489]. **Metals** [25, 32, 560, 561, 530, 562, 563, 471, 472, 680, 754, 127, 473, 500, 1310, 47, 52, 363, 1314, 101, 264, 402, 299, 74, 1320, 439, 116, 120, 892, 75, 85, 1340, 91, 442, 732, 302, 57, 477, 1539, 904, 22, 60, 70, 72, 112, 156, 157, 258, 289, 418, 454, 478, 520, 521, 524, 526, 542, 576, 607, 610, 671, 672, 676, 696, 786, 1366, 1397, 1398, 352, 198, 620, 123, 655, 119, 132, 1424, 125, 160, 176, 1427, 88, 81, 1428, 883, 681, 1302, 147, 533, 1308, 148, 63, 65, 181, 203, 1311, 94, 1052, 937, 1007, 1009, 1055]. **metals** [1352, 21, 23, 55, 59, 64, 68, 76, 78, 79, 80, 86, 98, 118, 130, 154, 158, 231, 257, 314, 322, 346, 416, 419, 423, 457, 461, 523, 552, 579, 589, 614, 697, 767, 784, 836, 843, 850, 867, 870, 877, 909, 912, 913, 914, 918, 944, 950, 978, 1179, 1278, 1285, 1364, 1379, 1392, 1402, 1403, 1490, 260, 1208, 295, 957, 240, 1417, 958, 145, 1520, 1036, 1497, 1500]. **Methane** [19, 683, 1219, 27, 1088]. **methane-like** [1088]. **Method** [1482, 2, 690, 45, 106, 114, 1516, 3, 1518, 689, 267, 1343, 803, 1350, 23, 379, 811, 1425]. **Methode** [1518]. **Methods** [20, 396, 50, 413, 1409, 1259, 9, 10, 1440, 1445]. **microdroplet** [1438]. **Microscopic** [741, 1065, 467, 1423, 184]. **Microstructure** [215]. **Midpoint** [743, 735, 613]. **Miedema** [297, 350]. **might** [888]. **Migration** [261]. **mimicking** [1196]. **Minimum** [501]. **Mirror** [692, 704, 699]. **Mirror-Plane** [704]. **mismatch** [332]. **Mixed** [358, 377]. **Mixture** [198, 886]. **Mixtures** [276, 611, 244, 187, 420, 491, 522, 1375]. **Mn** [426]. **Mobility** [501, 757]. **Mobility-Density** [501]. **Mode** [183, 351, 1412, 185]. **Model** [361, 623, 531, 26, 227, 500, 886, 658, 248, 301, 763, 598, 1436, 692, 256, 550, 553, 783, 1423, 225, 987, 1183, 1255, 1480, 989, 959, 1039, 1040, 1076, 1115, 1157, 1159, 1212, 1291, 1293, 1294, 1515, 1190, 499, 1487, 1464, 281, 186, 759, 934, 1049, 1134, 1137, 1163, 1196, 1006, 1229, 570, 597, 336, 1057, 15, 222, 350, 417, 547, 554, 589, 699, 773, 807, 814, 831, 833, 836, 948, 977, 981, 1026, 1062, 1070, 1098, 1103, 1153, 1200, 1207, 1233, 1244, 1283, 1470, 1476, 1489, 851, 1250, 329, 331, 1288, 880, 1036, 1430, 1447, 1449, 1478]. **Model-Dependent** [1436]. **Model-Equations** [500, 553]. **Modeling** [751, 1185, 615, 1205]. **modelled** [798, 976]. **Modelling** [1261, 1461, 1219, 1264, 781, 907, 923, 927]. **Models** [102, 109, 1435, 661, 905, 18, 971, 1383, 1495, 1218, 1517, 1045, 1007, 420, 840, 1071, 1145, 1176, 1405, 498, 1066]. **Modern** [1543]. **Modes**

[562, 600, 510, 612]. **Modification** [545, 855]. **Modified** [478, 1385, 1288]. **Modulation** [684, 705]. **Moduli** [897]. **Modulus** [637, 246, 1347]. **Molecular** [46, 716, 794, 968, 1468, 283, 285, 290, 368, 406, 464, 608, 646, 675, 701, 743, 779, 785, 876, 1030, 1409, 1441, 328, 709, 750, 1218, 27, 757, 280, 186, 443, 1268, 336, 9, 10, 313, 343, 378, 381, 465, 645, 674, 698, 805, 920, 946, 949, 979, 1281, 1361, 1373, 1377, 1382, 1286, 388, 1512]. **Molecular-Dynamics** [464]. **Molecular-Interactions** [779]. **Molecular-Orbital** [1409, 9, 10]. **Molecular-Phase** [283]. **Molecular-Phases** [290]. **Molecule** [40, 713, 162, 629, 760, 1038, 1432, 1261, 278, 893, 1328, 1133, 1196, 166, 293, 326, 486, 643, 738, 771, 805]. **Molecules** [361, 1215, 27, 28, 1534, 1538, 5, 1224, 1318, 718, 722, 691, 534, 1436, 733, 282, 1522, 191, 308, 408, 451, 506, 667, 668, 694, 700, 736, 742, 772, 806, 849, 865, 1380, 1545, 1411, 357, 434, 435, 359, 928, 1078, 1184, 1295, 33, 1161, 1126, 1305, 6, 437, 438, 857, 657, 1317, 1461, 859, 862, 798, 1225, 801, 1088, 504, 829, 597, 11, 237, 303, 304, 307, 316, 343, 344, 381, 449, 481, 483, 485, 489, 514, 551, 641, 665, 706, 808, 816, 1111, 1152, 1199, 1276, 1385, 1389, 1399, 1444, 274, 275, 389, 466, 592, 493, 494, 528, 1494, 1253]. **Møller** [1436]. **Molten** [393, 277, 1013, 467, 679, 1426, 1304, 203, 1311, 374]. **Moment** [1189, 206, 1073]. **Momenta** [2, 3, 450, 483]. **Moments** [1298, 435, 343, 354, 133]. **Momentum** [1183, 35, 74, 1320, 965, 1228, 23, 24, 138, 813, 975, 976, 99, 93, 434, 435, 1115, 181, 1166, 76, 92, 97, 251, 804, 296]. **Monatomic** [395, 1301, 553, 391, 510, 612, 1277, 1357, 1477, 1036]. **monoatomic** [868]. **Monographs** [1497, 1499]. **Monolayer** [381]. **monotonic** [1242]. **monovacancy** [1208]. **Monte** [1257, 805, 908]. **Morrison** [369]. **Moshinsky** [1039, 1488, 1045, 1062, 1071, 1244]. **motion** [596, 727, 823, 924, 1471]. **motivated** [1157]. **Moving** [724, 670, 725, 727, 407, 947, 1198]. **MP2** [1085, 1238]. **Multicomponent** [337]. **Multielectron** [876, 1030]. **Multiply** [794]. **Murray** [985]. **muscle** [226]. **Mutant** [1433].

N [1503, 1517, 1505, 1497, 110, 1498, 1499, 1284, 1504, 1502, 1521, 1500, 1520, 1506, 1124, 1093, 1007, 437, 438, 347, 832, 1286]. **n-alkanes** [1007]. **n-alkyl** [1124]. **N-electron** [437, 438]. **N.** [1508]. **N2O** [713]. **n=2** [1093]. **Na-Cs** [177]. **Na-K** [168]. **NaCl** [128]. **NAMI** [1342]. **Nanoassemblies** [1443]. **nanographene** [1264]. **nanostrips** [1139, 1151]. **nanostructures** [1154, 1413]. **nanotube** [1167, 1057, 846, 1070]. **Nanotubes** [1097, 1116, 1161, 1139, 1144, 1151, 1172, 1273, 881]. **narrow** [1139, 1151]. **Naseem** [1544]. **Natural** [1497, 1489, 1457, 764, 780]. **Nature** [717, 1319, 797, 1280]. **Ne-** [1439]. **Ne-like** [1053, 1337]. **Near** [929, 393, 471, 1000, 731, 509, 521, 526, 609, 676, 621, 679, 1426, 883, 1216, 163, 1127, 1309, 861, 365, 366, 963, 1339, 167, 189, 310, 614, 912, 1101, 1179, 1283, 1403, 1406, 1418]. **Near-diagonal** [929, 963]. **Nearly** [506, 203, 1311, 417, 159]. **nearly-free** [203, 1311]. **nearly-free-electron** [417]. **Neel** [1483]. **Negative** [794, 1216, 1006, 1026]. **negative-ion**

[1006, 1026]. **neon** [33]. **neon-like** [33]. **Nernst** [703, 844]. **net** [1497, 1499]. **Network** [763, 1076, 149, 1267, 773]. **networks** [1273]. **Neutral** [1458, 1462, 673, 654, 790, 1193, 1130, 1230, 237, 259, 371, 650, 1146, 1241, 1399, 469]. **neutral-atom** [469]. **Neutralization** [549]. **Neutron** [211, 386, 418, 542, 866, 1243, 353, 1093]. **Neutron-Scattering** [386, 418, 542, 353]. **Newtonian** [723, 1023]. **Next** [1145]. **NH** [39, 307, 1211, 1253]. **NH4** [1206]. **Ni** [1188, 1221, 1222, 1246, 1284]. **Nickel** [208, 239, 230]. **Nitride** [789]. **Noble** [47, 683, 542, 381, 416, 950, 958]. **Noble-Gases** [683]. **Noble-Metals** [542]. **NOF** [1496]. **Non** [265, 67, 150, 71, 122, 141, 217, 648, 947, 1023, 1146, 1147, 1242, 1384, 1211, 931, 932, 994, 1079, 1190, 564, 1485, 1463, 69, 255, 259, 376, 519, 815, 1175, 1207, 1276, 1439, 984]. **non-** [932, 994, 1079]. **Non-analyticity** [122, 519]. **Non-Equilibrium** [150]. **non-Fermi-liquid** [815]. **non-integral** [1485]. **non-interacting** [376]. **Non-local** [648, 947, 1276, 984]. **Non-locality** [1211]. **non-locally** [1175]. **Non-monotonic** [1242]. **Non-Newtonian** [1023]. **Non-relativistic** [141, 217, 1146, 1147, 1384, 564, 1463, 259, 1439]. **non-rigid** [255]. **non-s-wave** [931]. **Non-Uniform** [67, 69]. **Non-zero** [71, 1190, 1207]. **nonanalyticity** [249]. **Nondegenerate** [623, 547]. **nondipolar** [1184]. **Nonequilibrium** [535, 1501]. **nonintegral** [1194]. **Noninteracting** [762, 995, 1015, 1174, 985]. **Nonlinear** [1510, 857, 1052, 1533, 1511, 492, 1141, 880]. **Nonlinearities** [1510]. **Nonlocal** [649, 845, 948, 1066, 1383, 1401, 1135, 1058, 1069]. **Nonlocality** [634, 620, 635, 1417]. **Nonrelativistic** [624, 625, 565, 863, 935, 1053, 1336, 1337, 664, 469, 1212, 1214, 1266, 966, 967, 1136, 1228, 543, 1390]. **nonzero** [14]. **Normal** [715, 632, 960, 782, 1438]. **Normal-State** [715]. **Norman** [1510, 1507, 1501, 1509, 1511]. **Note** [862, 16]. **Novel** [1433]. **NRBP1** [1433]. **Nuclear** [946, 979, 1382, 389, 1216, 1481, 1194, 1486, 1463, 1002, 1196, 309, 449, 815, 1028, 1439, 1476, 274, 390, 131]. **nuclear-nuclear** [449]. **Nuclei** [24]. **Nucleus** [777, 790, 1516, 404, 320, 505, 776, 1354]. **Number** [563, 300, 102, 109, 722, 116, 386, 673, 709, 821, 990, 991, 1158, 1289, 1221, 1193, 1485, 890, 997, 998, 1048, 1053, 1228, 1332, 1337, 118, 141, 323, 540, 698, 701, 868, 906, 947, 1146, 1384, 389, 469]. **Nuttall** [117]. **nylon** [1035, 1075]. **nylons** [987].

O [1189, 1284, 1211, 1481, 39, 1486, 293, 381]. **obeying** [1209]. **Observable** [418]. **observation** [930]. **observations** [1122, 1296]. **observed** [846, 1375]. **obtained** [1456, 1434, 964, 972, 1203]. **occupancy** [1338]. **occupied** [1049, 372]. **occurring** [346]. **octahederal** [11]. **Octahedral** [1436, 1411, 27, 28, 336, 449, 1444]. **October** [1519]. **oestradiol** [1472]. **oestrone** [1472]. **Off** [1089, 1228]. **Off-diagonal** [1089, 1228]. **OH** [1284]. **One** [627, 636, 691, 121, 104, 598, 662, 234, 235, 674, 1385, 1389, 591, 619, 124, 175, 626, 992, 1117, 1431, 1457, 1192, 398, 401, 1465, 1162, 1330, 1054, 1092, 1163, 1164, 1341, 570, 271, 325, 372, 376, 414, 425, 484, 513, 541, 604, 616, 651, 706, 947, 970, 973, 981, 1067, 1103, 1201, 1393, 1408, 1415].

One-Body [121, 234, 619, 175, 1385, 1389, 591, 124, 1431, 1457, 1341, 372, 484, 541, 604, 616, 1067, 1103, 1393, 1415]. **one-component** [1465]. **One-Dimension** [598]. **One-Dimensional** [627, 636, 104, 662, 235, 626, 992, 1162, 1330, 1054, 1092, 1163, 1164, 570, 513, 651, 947, 970, 973, 981]. **One-Electron** [691, 1117, 706]. **One-sixth** [674]. **only** [1227, 570, 1173, 1174, 1237, 1240, 1370, 1386]. **optical** [860, 231, 581]. **Optimally** [712]. **Optimized** [1189, 1053, 1337, 1439]. **Orbital** [116, 120, 534, 1522, 1409, 654, 1546, 568, 1437, 9, 10, 118, 378, 463, 551, 650, 1407, 159]. **Orbital-Free** [1546, 1437, 1407]. **Orbitals** [104, 1457, 764, 780, 1489]. **Order** [178, 1468, 1436, 1533, 72, 741, 774, 809, 810, 1013, 123, 1480, 929, 1041, 1192, 437, 798, 1085, 802, 826, 1045, 935, 965, 1336, 764, 829, 189, 194, 252, 273, 303, 316, 347, 430, 780, 808, 917, 1020, 1071, 1098, 1201, 1231, 1362, 1395, 1471, 1112, 1415, 355, 528, 1510, 1511]. **ordered** [1107, 1273, 1284, 1113]. **Ordering** [1298, 311, 524]. **orders** [1288]. **Organic** [5, 718, 861, 700, 1262, 6, 859, 862, 887]. **Organic-Molecules** [718]. **Orientational** [1268, 1281, 927]. **Origin** [536, 673, 1271, 1287]. **Origins** [383]. **Ornstein** [1454, 1186]. **ortho** [887]. **ortho-positronium** [887]. **oscillator** [998, 267, 1343, 444, 463, 947]. **Oscillatory** [74, 1320, 75, 85, 1340, 76, 80, 514]. **Osmotic** [420, 495]. **Osmotic-Pressure** [495]. **Other** [661, 1119, 1121, 1223, 343, 379, 498]. **outer** [1258]. **outline** [573]. **over-right-arrow** [755]. **Overlap** [382, 750, 321]. **Oxford** [1497]. **Oxford/London/Edinburgh/New** [1497]. **Oxides** [715]. **oxygen** [1458, 1484, 1462]. **oxygen-silicon** [1458, 1462].

P [1510, 1505, 1511, 1521, 1506, 843, 817, 848, 1286]. **Packed** [561, 472, 127, 557, 593, 125, 94, 98, 945]. **Packing** [1018]. **Pair** [1117, 595, 1297, 400, 204, 1466, 503, 208, 731, 904, 905, 427, 549, 768, 871, 980, 620, 621, 1418, 1252, 679, 1426, 1479, 1256, 203, 1311, 802, 1339, 216, 582, 1417]. **Pair-Correlation** [503]. **pair-distribution** [802]. **pairing** [1037, 931, 932, 994, 1079, 764, 780]. **pairs** [1494]. **pairwise** [1453]. **papillary** [226]. **parabolic** [940, 954]. **parallel** [1172, 818]. **Paramagnetism** [29, 16]. **Parameter** [809, 810, 1041, 1194, 430, 787, 1247]. **parameters** [380]. **Paris** [1497]. **Parr** [1543]. **Part** [1389, 1391, 1392, 384]. **Partial** [227, 236, 174, 225, 146, 222]. **partially** [1194]. **Particle** [1482, 686, 726, 598, 662, 45, 1531, 676, 984, 1479, 1431, 1303, 438, 1323, 727, 1131, 1164, 570, 1437, 136, 304, 513, 737, 916, 970, 973, 976, 1098, 1102, 1180, 1277, 1362, 1367, 117]. **Particles** [700, 1396, 564, 1321, 997, 376, 949, 1178, 1358, 1209]. **Particular** [52, 66, 138, 55]. **Partition** [219, 933, 1405]. **parts** [1234, 1248]. **Path** [264, 517, 352]. **Paths** [302, 1272]. **Pathway** [1433]. **patterns** [859, 862]. **Paul** [925]. **Pauli** [1479, 1434, 633, 634, 635, 1054, 569, 518, 1236, 1245, 1360, 1390, 1473, 617, 652, 678, 956, 1496]. **PbF** [348, 349]. **Peak** [395, 1301, 279, 1268, 287, 1281]. **peaks** [177]. **Perfect** [151, 764, 1501, 780]. **Perfectly** [617]. **Pergamon** [1503, 1497]. **Periodic** [142, 1518, 934]. **periodischen** [1518]. **perpendicular** [1388]. **persistent** [1494].

Perturbation [728, 72, 106, 51, 823, 64, 1402, 985, 1425]. **Perturbations** [71]. **pg** [820, 1043]. **Phase** [1044, 1483, 1123, 178, 202, 265, 794, 636, 599, 637, 1344, 209, 218, 283, 311, 312, 412, 464, 524, 525, 783, 848, 949, 1388, 1394, 1474, 1252, 1220, 1127, 1309, 1330, 1094, 1347, 1095, 194, 220, 411, 430, 465, 616, 651, 832, 836, 847, 920, 1198, 1280, 1491, 1112, 590, 591, 1156, 1288, 1447, 1451]. **Phase-Diagram** [209, 464]. **Phase-Diagrams** [178, 202]. **Phase-Transition** [1123, 599]. **Phase-Transitions** [311]. **Phases** [753, 290, 736, 772, 779, 806, 839, 1545, 1219, 394, 1300, 1459, 796, 641, 766, 769, 815, 816, 842, 943, 1278, 1286, 819]. **Phenomena** [238, 889, 703, 1177]. **Phenomenological** [273, 1395]. **Phenomenology** [476, 663, 901, 487, 742, 846, 919, 926, 927, 1345, 1491, 987]. **Philosophy** [1497]. **Phonon** [897, 774, 83, 938, 951]. **phonons** [392]. **Photodissociation** [684, 705]. **Photoelectron** [241]. **Phys** [1171]. **Physical** [1510, 1533, 1511, 1119, 1121, 874, 1169]. **Physics** [1535, 1519, 152, 153, 441, 1501, 1499, 369, 1531, 602, 694, 1542, 1511, 1532, 1536, 384, 837, 1501, 368, 1521]. **Physisorbed** [751, 781]. **Pi** [248, 991, 1086, 1167, 846]. **pi-electron** [991, 846]. **Pi-Electrons** [248, 1086, 1167]. **Pitaevskii** [1080]. **planar** [1159, 1293, 1294, 1215, 392, 1224, 1318, 936, 948, 330, 818]. **Plane** [692, 704, 699, 985]. **Planes** [839, 417]. **Plasma** [537, 539, 617, 747, 1532, 1465, 229, 548, 844, 846, 874, 1100]. **Plasmas** [623, 721, 311, 608, 615, 529, 791, 820, 784, 787, 850, 867, 871, 1364]. **Plasmon** [157, 520]. **Plasmons** [142, 169, 838]. **plasticizer** [987, 1035, 1075]. **Platinum** [179, 211, 195, 232]. **Plenum** [1508, 1509, 368, 408, 1521]. **Plesset** [1436]. **Plus** [1383, 745, 1482, 1460, 1085, 823, 1046, 546, 1059, 1066, 1103, 1238, 1444, 817, 1419, 1035]. **plutonium** [1008]. **Point** [472, 1310, 52, 335, 70, 257, 258, 545, 585, 610, 708, 119, 1122, 1188, 1220, 1296, 1124, 63, 65, 205, 1009, 55, 154, 407, 582, 767, 847, 873, 907, 1101, 1244, 1279, 433, 1288, 879, 1448, 1449]. **point-charge** [407]. **Point-Defects** [610]. **pointers** [1407]. **points** [1223, 1068]. **polarisability** [1258]. **polarised** [1256]. **polarizabilities** [1006, 1026]. **Polarizability** [777, 1116, 757, 776, 1144]. **Polarization** [680, 754, 672, 681, 1302, 887]. **polarized** [1480, 1187, 1167]. **Polyacenes** [1087, 378, 380]. **polyacetylene** [450, 452, 584]. **Polyatomic** [1218, 716, 798]. **Polyenes** [248, 1087, 256]. **Polymer** [1430, 1007, 1035]. **polymeric** [1375]. **Polymers** [1524, 1526, 1528, 789, 584, 1507, 1509]. **polynomial** [498]. **Polyvalent** [125]. **Population** [750]. **Posed** [690, 689, 1148]. **Position** [395, 1301, 813, 860, 804]. **Positive** [70, 1512, 1193, 365, 366, 405, 502, 1048, 1332, 336, 269, 288, 342, 375, 415, 462, 480, 327, 470]. **positrolysis** [859, 862]. **Positron** [47, 52, 718, 477, 900, 55]. **Positron-Annihilation** [718, 477]. **positronium** [887]. **Positrons** [70, 795, 859, 862]. **Possible** [179, 1093, 1443, 1259, 1458, 1462, 1342, 195, 1280, 1288]. **possible/proposed** [1342]. **Potassium** [731, 428, 334, 1339, 429]. **Potential** [594, 719, 720, 756, 103, 634, 761, 828, 1329, 121, 49, 188, 285, 427, 704, 1378,

1380, 617, 678, 655, 749, 175, 679, 1426, 1479, 360, 790, 1290, 1431, 1456, 1457, 532, 564, 1434, 278, 1322, 366, 404, 405, 1466, 596, 633, 635, 727, 824, 826, 1162, 1325, 1327, 935, 1046, 1048, 1050, 1054, 1090, 1092, 1129, 1130, 1132, 1135, 1164, 1227, 1228, 1331, 1332, 1333, 1334, 1335, 1336, 568, 1341, 1230, 1342, 569, 336, 14, 136, 235, 270, 271, 288, 316, 320, 341, 342, 372, 375, 376, 380, 382, 407, 449, 485, 492, 508, 511, 513, 541, 547, 582, 601]. **potential** [613, 616, 775, 808, 812, 940, 947, 1017, 1059, 1067, 1102, 1103, 1104, 1106, 1140, 1141, 1147, 1168, 1173, 1202, 1206, 1234, 1236, 1237, 1238, 1241, 1245, 1271, 1360, 1361, 1367, 1368, 1370, 1385, 1386, 1389, 1390, 1393, 1408, 1473, 1476, 954, 1248, 274, 328, 389, 590, 591, 652, 1181, 1287, 1415, 1496, 469, 1253, 1254]. **Potential-Energy** [594, 756, 704]. **Potential-locality** [828, 1329]. **potential-phase** [590]. **Potentials** [358, 595, 1297, 204, 85, 731, 904, 905, 234, 518, 768, 618, 353, 620, 621, 1453, 1516, 1193, 1485, 823, 964, 1051, 1052, 1053, 1163, 1337, 1339, 443, 830, 1351, 216, 292, 321, 343, 345, 371, 377, 407, 603, 838, 972, 328, 1417, 1418, 1496, 355, 124]. **Power** [249, 675, 519, 674, 782]. **power-law** [519]. **Pp** [368, 369, 408, 1509, 117, 1521]. **preceding** [1197]. **precursor** [930, 1177]. **Predicted** [1246, 1222]. **predictions** [1122, 1218, 1296, 1285, 493]. **Preformed** [1252]. **Preis** [1497, 1508, 1499]. **presence** [362]. **Press** [1503, 1497, 1508, 1499, 368, 408, 1521, 1520, 1506]. **Pressure** [1217, 161, 474, 488, 495, 73, 1119, 1121, 1187, 1188, 1216, 1219, 1220, 1458, 1223, 1462, 1094, 936, 1056, 168, 420, 486, 919, 1274, 1208, 432, 556, 558, 559, 926]. **Pressure-Dependence** [474]. **pressures** [1216, 135, 1008, 143]. **Price** [1509, 368, 369, 408]. **Primitive** [209, 220]. **Principal** [395, 1301]. **Principle** [566]. **Probability** [54, 1387]. **Problem** [691, 730, 1498, 1499, 105, 113, 427, 778, 729, 1003, 706]. **Problems** [1502, 837, 922, 1502]. **Proceedings** [1519, 117, 1530]. **Profile** [182, 357, 197, 379, 1061]. **Profiles** [393]. **Progress** [1401, 748, 1546, 1069, 1420]. **Propagating** [142]. **Propagation** [902, 938, 878, 951]. **Propagator** [1067, 1393, 1157, 1089, 1202]. **Properties** [471, 394, 1300, 753, 715, 758, 301, 723, 1436, 335, 733, 897, 1539, 272, 412, 426, 509, 744, 786, 848, 1024, 1033, 1282, 1443, 883, 989, 1119, 1121, 1481, 1124, 1223, 135, 437, 438, 1518, 1486, 797, 861, 249, 965, 1046, 1049, 1089, 1090, 1129, 1132, 1331, 1333, 1334, 1335, 1007, 1009, 143, 231, 371, 411, 462, 572, 581, 702, 766, 767, 832, 843, 847, 873, 874, 877, 907, 913, 914, 918, 939, 943, 945, 950, 1059, 1106, 1140, 1169, 1379, 1381, 1406, 1444, 1489, 1445, 955, 956, 958, 468, 879, 987, 1035, 1036, 881]. **proportional** [938, 951]. **Proposal** [1206, 1156, 1266]. **proposals** [1040, 1229, 1233]. **Proposed** [1219, 1260, 1189, 860, 1465, 807, 923, 1244, 1283, 1386, 1448, 1478, 1480, 1435, 1342, 987, 1513]. **protein** [1355]. **protons** [795]. **Pseudoatoms** [114, 255]. **Pu** [1056]. **Pure** [1397, 158]. **Pyroelectric** [183, 301, 185, 250, 319]. **Pyroelectricity** [165, 184, 207, 170]. **Pyroelectrics** [809, 810, 206].

QMC [1516]. **Qualitative** [1024]. **quality** [435]. **Quanta** [200, 190].

Quantal [827, 459, 1391, 1060, 1142, 1143, 1171, 1372]. **Quantitative** [969, 907, 1276]. **Quantum** [751, 1077, 1524, 1264, 1166, 1006, 1342, 1498, 571, 1346, 1499, 44, 105, 113, 117, 158, 192, 384, 778, 781, 908, 1025, 1026, 1178, 1396, 1397, 1410, 1502, 1543, 1156, 1252, 1076, 1257, 1122, 1188, 1295, 1296, 1317, 999, 703, 836, 869, 952, 1016, 1273, 1355, 1489, 1491, 1112, 1288, 1452, 837]. **Quantum-Chemical** [751, 1264, 1342, 781, 1122, 1296, 836, 1452]. **Quantum-Mechanical** [1346, 1006, 571, 1026]. **quartic** [1046, 1059]. **quasiparticle** [1394, 1474]. **quaternionic** [1447]. **quenching** [362]. **quintet** [1453, 1479, 1488].

R [1508, 755]. **radial** [354]. **radicals** [968]. **radius** [48]. **Rahman** [1544]. **random** [1449]. **Range** [530, 1298, 178, 680, 74, 1320, 503, 75, 1340, 188, 418, 454, 456, 672, 742, 774, 1013, 1116, 1158, 1190, 1222, 681, 1302, 42, 76, 80, 194, 385, 457, 1144, 1207, 1246, 1442, 131, 1450]. **Rare** [537, 539, 394, 1300, 548, 873, 907, 1101, 240, 144]. **rare-earth** [240]. **Rare-Gas** [537, 539]. **RAS** [1433]. **rate** [515, 815, 1075]. **Rates** [718, 887, 888]. **Ratio** [853, 1260, 887, 1270]. **Ray** [361, 531, 716, 182, 121, 289, 386, 866, 99, 1219, 33, 46, 1461, 1228, 91, 255, 554, 1206, 1243, 294, 201, 242, 1253, 1254, 1341, 97, 197, 430]. **Rb** [1319, 1122, 1296, 717, 969, 1007, 600, 1235, 1243]. **RbCl** [356]. **reaction** [888, 735, 1075]. **realistic** [1040]. **Really** [664, 1494]. **rectilinear** [969, 1235]. **reduced** [872]. **reducing** [1141]. **Reduction** [691, 706]. **Reference** [52, 66, 138, 759, 55, 784]. **Refined** [1173, 1370, 1449]. **Reflection** [392, 182, 197, 430]. **Regime** [264, 739, 822]. **region** [988]. **Regular** [297]. **Regularities** [1123, 920, 1068, 274, 919, 926]. **Regulates** [1433]. **Related** [472, 682, 661, 137, 426, 455, 458, 478, 509, 516, 520, 545, 609, 704, 198, 495, 790, 1037, 1117, 1082, 1481, 1222, 1124, 394, 1300, 1461, 1486, 757, 796, 966, 967, 1166, 1197, 937, 735, 288, 375, 423, 449, 461, 492, 580, 911, 916, 943, 944, 1175, 1177, 1200, 1246, 328, 388, 389, 466, 1249, 1414, 355, 390]. **relating** [1006, 1026]. **Relation** [297, 883, 1457, 1262, 565, 395, 1301, 754, 1303, 147, 475, 756, 726, 965, 534, 1468, 662, 733, 477, 37, 59, 60, 237, 259, 292, 320, 321, 521, 551, 586, 611, 644, 649, 650, 671, 744, 777, 782, 809, 810, 815, 866, 869, 950, 1398, 1399, 654, 678, 1496, 432, 958, 497, 750, 819, 1256, 1516, 1122, 1296, 564, 246, 1459, 1084, 822, 1435, 1464, 404, 1128, 1326, 1092, 1131, 1164, 568, 764, 1267, 569, 1268, 235, 271, 338, 346, 350, 407, 482, 510, 511, 546, 612, 648, 703, 737, 775, 776, 780, 805, 840, 842, 844, 912, 913, 914, 917, 939]. **relation** [945, 948, 953, 981, 1064, 1102, 1107, 1179, 1245, 1281, 1284, 1367, 1379, 1386, 1400, 1403, 1442, 1470, 1476, 1477, 1489, 1113, 275, 590, 527, 1450]. **Relations** [473, 102, 109, 892, 732, 999, 1096, 305, 415, 970, 1016]. **relationship** [1448]. **Relationships** [530, 861]. **Relativistic** [565, 566, 1084, 405, 440, 691, 729, 730, 1091, 1096, 460, 489, 586, 587, 693, 706, 1108, 1148, 327, 532, 564, 1463, 1131, 1056, 1058, 141, 217, 259, 543, 834, 835, 981, 1146, 1147, 1384, 1439, 468]. **Relaxation** [299, 322, 520, 519, 815].

Relaxation-Time [520]. **Relaxed** [139]. **Relevance** [623, 1000, 695, 1458, 886, 1462, 1046, 1093, 1230, 1007, 1059, 1241, 927, 1449]. **Relevant** [412, 411, 946, 979, 1382]. **Remnants** [636, 1330, 651]. **repelling** [1078, 864, 1111]. **Reply** [183, 422, 612, 185]. **representability** [347]. **Representation** [528, 1109, 527]. **Represented** [719, 720]. **repulsion** [1255, 1487, 1250, 556]. **repulsions** [1275]. **Repulsive** [104, 1126, 1305, 1321, 1152, 1358, 1181]. **requiring** [1240]. **Research** [862]. **Resistivity** [628, 264, 302, 229, 188, 428, 609, 198, 83, 429, 815, 846, 240, 145]. **resonance** [589, 1288]. **Resonant** [684, 705, 200, 190]. **resonating** [968]. **respectively** [1278]. **Response** [565, 120, 783, 1042, 1043, 186, 759, 1058, 1174, 199]. **result** [1256, 244, 1266, 1054]. **Results** [35, 248, 598, 506, 1383, 1515, 56, 256, 1066, 23]. **Review** [1510, 1503, 1517, 1507, 1505, 1497, 1508, 1498, 1501, 1499, 1509, 117, 368, 369, 408, 1511, 1504, 1502, 1496, 1521, 1500, 1520, 1493, 1506, 445, 1249, 1414]. **Reviews** [1543]. **Righi** [703]. **right** [755]. **rigid** [255]. **rigidity** [582]. **Rigorous** [368]. **Ring** [685, 1159, 1293, 1294, 1081, 1086, 1197]. **Rings** [1012, 1122, 1296, 380]. **Robert** [1543]. **rods** [838]. **Role** [537, 548, 693, 743, 431, 1220, 1487, 1338, 1094, 938, 421, 613, 951, 1060]. **room** [1262]. **Root** [1380, 485]. **Roothaan** [435]. **ropes** [846]. **Roton** [1149]. **rotons** [1112]. **Round** [266, 299, 58, 268, 322, 1369]. **route** [800, 1415]. **Ru** [1342]. **Ru-NAMI-A** [1342]. **Rubidium** [628]. **Ruedenberg** [275]. **rule** [1128, 1326]. **rules** [1132, 1335, 313, 1373]. **Runge** [596, 597]. **ruthenium** [1230, 1241]. **RVB** [1114, 1422].

S [1503, 1497, 1498, 1499, 1502, 1506, 931, 368, 843, 817]. **s-p** [843]. **Saddle** [65]. **Saddle-point** [65]. **Sala** [1237, 1227]. **Sala-Görling** [1227]. **Salt** [393, 467, 374]. **Salts** [1013]. **Sampanthar** [1498, 1502]. **sandwiches** [1167]. **satisfied** [884]. **satisfying** [1214]. **Saturation** [792, 348, 349, 793]. **Scaftering** [117]. **scaled** [492, 879]. **Scaling** [797, 758, 1436, 733, 336, 285, 462, 742, 784, 1033, 1444, 880, 1116, 965, 1046, 803, 1350, 460, 919, 1059, 1144, 1361, 926]. **Scattering** [361, 531, 277, 46, 164, 1315, 683, 716, 91, 121, 57, 215, 222, 386, 418, 424, 542, 742, 866, 351, 1412, 353, 225, 160, 1427, 33, 1304, 1461, 1052, 1093, 1228, 1341, 211, 255, 554, 1141, 1206, 294, 354, 1253, 1254, 296]. **scenario** [930]. **scheme** [823]. **Schottky** [455]. **SchrÖdinger** [1380, 485]. **science** [1544]. **Screened** [418, 617, 655]. **Screening** [1433, 52, 55, 88, 86, 349, 370, 201, 348]. **Second** [1436, 437, 764, 829, 273, 780, 1395, 72]. **Second-Order** [1436, 437, 764, 829, 273, 780, 1395, 72]. **section** [251]. **Sections** [742, 795]. **Segregation** [426, 245]. **Seiten** [1508]. **selected** [968]. **Self** [630, 334, 1058, 64, 72, 193, 423, 872, 1402, 656, 1421, 749, 1057, 370, 371, 845, 875, 1070, 1503, 1504]. **Self-Consistent** [72, 193, 656, 1058, 64, 872, 1402, 1421, 1057, 370, 371, 845, 875, 1070, 1503, 1504]. **Self-Consistent-Field** [749]. **Self-diffusion** [423]. **Self-Energy** [630]. **semi** [499, 512, 1449].

semi-empirical [1449]. **semi-infinite** [499, 512]. **Semiclassical** [849, 876, 1030, 811, 1442, 1450]. **Semiconducting** [1529, 630, 839]. **Semiconductor** [1535, 1536, 387, 430, 1521]. **semiconductor-metal** [430]. **Semiconductors** [34, 41, 107, 1313, 1217, 148, 1032, 1109, 1074]. **Semiempirical** [1485]. **semiempirically** [1456, 1385]. **semiquantitative** [1159, 1293, 1294]. **separable** [1405]. **separately** [830, 1351]. **Separation** [54, 1387, 1038, 293, 417, 833, 1032, 851, 818]. **separations** [1116, 1144, 131]. **September** [77]. **sequence** [1115, 1136, 1169]. **sequences** [375]. **Series** [1497, 369, 1511, 1516]. **Sham** [1457, 824, 1325]. **Shannon** [1077, 863]. **Shape** [293, 406, 757, 313, 875, 1373]. **Shear** [637, 545, 1035, 1260, 1347, 423, 1270, 879]. **Shell** [854, 282, 653, 1258, 1434, 1225, 966, 967, 1338, 505, 578, 1354, 354, 527]. **shells** [821, 929, 1322, 963, 997, 998, 1002, 1004, 1228, 379, 490, 540, 546, 647, 804, 1028, 1404, 817]. **shielded** [1271, 1287]. **shift** [486, 1198]. **shock** [331]. **Short** [178, 264, 194, 774, 1013, 352, 1139, 1151]. **Short-Range** [178, 774, 1013]. **Si** [918, 1081, 832, 921, 1280, 1443, 1286]. **Si6H6** [1086]. **Siday** [858]. **SiH** [1295, 1317, 597, 1512]. **Silane** [19, 1219, 27, 1274]. **Silica** [225, 222]. **Silicon** [531, 753, 786, 839, 225, 243, 1454, 1458, 1462, 222, 554, 766, 833, 851]. **Similar** [1123]. **Similarity** [732, 1009]. **Simple** [333, 361, 1292, 680, 363, 1314, 302, 904, 350, 672, 620, 332, 752, 681, 1302, 340, 814, 843, 1417, 433]. **simulated** [1342]. **Simulation** [301]. **Single** [1482, 726, 730, 598, 662, 412, 1531, 676, 1180, 1431, 1303, 438, 729, 1164, 570, 1437, 411, 547, 737, 846, 916, 973, 1102, 1362, 1367, 1438]. **single-** [411]. **Single-Electron** [730, 729]. **single-nondegenerate-band** [547]. **Single-Particle** [1482, 726, 598, 662, 1531, 676, 1180, 1431, 1303, 438, 1164, 570, 1437, 737, 916, 973, 1102, 1362, 1367]. **Single-Phase** [412]. **single-wall** [846]. **Singlet** [318, 337]. **singly** [328]. **Singularities** [52, 55]. **SiO** [1458, 1459, 1462]. **sixth** [674]. **Size** [177, 522, 818, 332]. **Slater** [626, 627, 752, 855, 885, 992, 1157, 1292, 1457, 401, 824, 1162, 1325, 1048, 1092, 1135, 1332, 734, 1349, 425, 446, 507, 512, 513, 804, 865, 922, 1067, 1269, 1386, 1393, 1408, 745, 1419]. **Slow** [683]. **Slow-Electron** [683]. **Small** [386, 424, 542, 783, 351, 1412, 160, 1427, 882, 1161, 1484, 417, 818]. **Small-Angle** [424, 542, 351, 160, 1427]. **Small-Distance** [783]. **Smoluchowski** [549]. **smoothing** [28]. **SnH** [1274]. **Sodium** [621, 1216, 83, 334, 1418]. **Soft** [97, 201, 99, 242]. **solely** [1004, 1129, 1331, 1140]. **Solid** [1534, 1519, 152, 153, 441, 1501, 599, 1344, 525, 670, 1540, 1410, 73, 1459, 203, 1311, 934, 221, 486, 702, 869, 878, 919, 952, 1142, 1143, 1149, 1171, 1280, 1372, 1381, 926, 927]. **solid-like** [1142, 1143, 1171, 1372]. **Solid-Phase** [525]. **Solids** [35, 1507, 228, 1508, 103, 1522, 254, 339, 408, 1526, 1528, 605, 676, 1376, 1511, 200, 1537, 1076, 392, 1094, 1268, 23, 190, 255, 345, 1527, 483, 510, 612, 939, 1060, 1281, 1385, 556, 1156, 1509]. **Solitary** [878]. **Solute** [32, 258, 257, 522]. **Solution**

[297, 632, 549, 239, 888, 48, 1488, 440, 1227, 1, 4, 171, 230, 373, 1237, 1430]. **Solutions** [475, 364, 1356, 174, 1514, 1191, 146, 53, 482, 982, 1035]. **Solvable** [1495, 1517, 1464, 1049, 1196, 1145, 1244, 1470, 1250]. **solvated** [860]. **Solvation** [364]. **solvent** [888]. **solvents** [1184, 860]. **Some** [989, 1116, 1292, 35, 56, 1436, 733, 895, 903, 847, 848, 982, 1013, 1033, 1110, 1144, 1383, 1406, 1407, 1476, 354, 496, 752, 1260, 1481, 1194, 1518, 1461, 1486, 889, 1085, 1225, 964, 965, 999, 1268, 23, 381, 907, 918, 972, 1016, 1066, 1270, 1281, 1440, 1444, 957]. **Sound** [521, 1247]. **Sound-Wave** [521]. **Space** [608, 813, 1115, 930, 1458, 1481, 886, 755, 1460, 1462, 1486, 1466, 759, 966, 967, 1006, 1026, 1447]. **Spatial** [1002, 524, 552, 664, 1028, 1183, 1263, 1476]. **Spatially** [490, 1404, 1096]. **special** [1234, 1248]. **species** [1215, 1224, 1318, 555]. **Specific** [228, 82, 1054, 87, 982, 1101]. **spectra** [1005, 1342, 122]. **Spectral** [521]. **spectroscopic** [822]. **spectroscopy** [241]. **spectrum** [1076, 1434, 519]. **Sphere** [100, 545, 1018, 1282]. **Spheres** [670, 205]. **Spherical** [724, 188, 506, 742, 990, 991, 1289, 1263, 1194, 657, 725, 1088, 1008, 325, 489, 641, 974, 1017, 1103, 1206, 1240, 1390, 1444, 1473, 983, 853, 1253]. **spherically** [1038, 1236]. **Spin** [1187, 1483, 29, 120, 1167, 16, 93, 1255, 1453, 1480, 1037, 1039, 1117, 1212, 994, 92, 917, 953, 1062, 1176]. **spin-compensated** [1255, 1039, 1117, 1212, 1062, 1176]. **spin-fluctuation** [994]. **Spin-polarized** [1187, 1167, 1480]. **Spin-wave** [1483]. **spinless** [829, 917]. **Spinodal** [553]. **spins** [980]. **Spontaneous** [1222, 1246]. **Springer** [369, 369]. **Springer-Verlag** [369]. **Square** [981, 1380, 1487, 485, 1181]. **Sr** [642, 1359]. **Stability** [696, 1139, 697, 1151]. **stabilized** [1185, 1205]. **Stark** [885]. **starting** [1244]. **State** [500, 715, 101, 719, 1519, 152, 153, 441, 1436, 1501, 31, 550, 553, 704, 768, 865, 1540, 1542, 1029, 1363, 1374, 1380, 619, 745, 1255, 1453, 1479, 791, 820, 884, 928, 1117, 1158, 1213, 1214, 1256, 1257, 1431, 1515, 1044, 1434, 1125, 1194, 720, 890, 1265, 1435, 1463, 964, 1004, 1136, 1137, 1195, 1230, 1008, 1056, 30, 370, 371, 372, 382, 1527, 446, 448, 485, 507, 511, 578, 604, 698, 740, 767, 782, 804, 834, 864, 875, 878, 906, 907, 953, 972, 980, 1020, 1063, 1105, 1150, 1153, 1176, 1199, 1203, 1231, 1232, 1238, 1239, 1240, 1241, 1283, 1362, 1471, 590, 591]. **state** [652, 853, 1155, 241, 1419, 1182, 1254, 115, 1508]. **States** [530, 66, 668, 774, 431, 123, 855, 1039, 1455, 960, 1216, 1263, 108, 966, 967, 1050, 568, 231, 367, 421, 446, 484, 580, 614, 665, 815, 1062, 1273, 1278, 199, 527]. **Static** [623]. **statics** [1110]. **Station** [117]. **Statistical** [262, 43, 707, 1405, 1209, 1251, 1518, 999, 831, 1016]. **Statistical-mechanical** [1405]. **Statistics** [1396, 1178, 1209]. **statistische** [1518]. **Steady** [719, 720, 878]. **Steady-State** [719, 720, 878]. **step** [1234, 1248]. **Stern** [298]. **Stig** [1510, 1511]. **Stokes** [912, 1179, 1403]. **Stokes-Einstein** [1179]. **Strain** [57]. **Street** [1508]. **Strength** [165, 899, 188, 711, 962, 1267, 170, 710]. **stress** [936]. **Stretched** [1081, 1086, 902]. **stretching** [939]. **Strips** [1087]. **Strong** [624, 625, 631, 366, 825, 269]. **Strongly** [636, 609, 614, 744, 1532, 529, 1330, 651, 784, 844, 846, 850, 1276, 1490].

Structural
[686, 688, 721, 1139, 516, 708, 873, 1151, 1179, 1403, 1443, 1264, 1323]. **Structure** [791, 820, 595, 1297, 100, 472, 395, 1301, 227, 754, 400, 204, 475, 363, 1314, 90, 1316, 279, 95, 205, 1087, 208, 731, 1097, 477, 896, 171, 221, 284, 427, 455, 458, 478, 523, 525, 526, 544, 600, 644, 696, 874, 877, 1027, 1374, 1392, 239, 174, 621, 557, 593, 467, 391, 225, 119, 176, 1120, 1216, 1481, 1261, 146, 1484, 149, 1486, 1463, 802, 1339, 1230, 1469, 1010, 1353, 1138, 96, 216, 222, 230, 287, 370, 373, 378, 381, 416, 461, 482, 492, 579, 697, 842, 870, 1098, 1105, 1109, 1241, 1285, 1406, 1477, 1418, 1074, 558]. **Structure-Theory** [600]. **structureless** [229]. **Structures** [1123, 1535, 1523, 1536, 88, 86, 1521]. **studied** [1440]. **Studies** [477, 357, 432, 880]. **Study** [731, 294, 1459, 1339, 1342, 805, 1238, 1445, 1154, 1413, 201]. **studying** [1355]. **subject** [997]. **Sublattice** [1190, 1207]. **sublimation** [535]. **Subshell** [622, 606]. **Subspace** [1150, 1155]. **subsuming** [1229, 1233]. **Subtle** [785]. **such** [1217, 1127, 1309, 1165, 1170]. **Sucher** [1257, 726, 737]. **Sulfate** [475]. **Sulfate-Ions** [475]. **sulphate** [482]. **Sum** [627, 1292, 534, 734, 1349, 865, 654, 745, 626, 752, 855, 885, 990, 991, 992, 1157, 1289, 401, 278, 1128, 1162, 1326, 1092, 1132, 1335, 237, 288, 407, 425, 446, 512, 513, 551, 650, 804, 922, 1067, 1269, 1393, 1399, 1408, 1419]. **summation** [236]. **summing** [1434]. **Sums** [45, 507]. **supercarriers** [1272]. **Superconducting** [994, 1082, 960, 1188]. **Superconductivity** [1252, 1422, 1423, 993, 1065, 1114, 1156, 1210]. **superconductor** [1042, 1043, 1182]. **superconductors** [931, 932, 1079, 1119, 1121, 782, 1272]. **Supercooled** [1286, 1454, 1280]. **Supercooling** [1029, 1469]. **superfluid** [1110, 1232]. **Superfluidity** [1475, 1072]. **superfluids** [1160]. **Superionic** [312, 348, 286, 315, 349]. **superlattices** [253]. **supermolecule** [735]. **Suppressor** [1433]. **Surface** [751, 245, 262, 276, 162, 163, 179, 636, 724, 1057, 238, 337, 385, 426, 458, 461, 464, 923, 1070, 749, 988, 1262, 244, 246, 147, 861, 725, 1330, 166, 167, 195, 232, 233, 307, 310, 326, 465, 541, 651, 781, 877, 911, 945, 948, 950, 1061, 1234, 1242, 1248, 958, 921]. **Surface-Energy** [458]. **Surface-Tension** [262, 276, 337]. **Surfaces** [1534, 266, 182, 537, 479, 588, 280, 504, 210, 211, 197, 214, 221, 268, 381, 385, 514, 548, 295, 223, 818]. **Susceptibilities** [22]. **Susceptibility** [609, 533, 1308, 355]. **Sydney** [1497]. **Symmetric** [391, 885, 1236]. **Symmetry** [1411, 1216, 27, 28, 11, 325, 616]. **Symposium** [1530, 1519]. **System** [161, 636, 1518, 1330, 168, 651]. **Systems** [1482, 134, 1518, 662, 692, 1533, 813, 1397, 1040, 1117, 995, 934, 1051, 1054, 1164, 1165, 443, 569, 570, 136, 140, 158, 371, 519, 580, 699, 769, 973, 980, 1015, 1170, 1492, 1493, 880, 1510, 1511].

T [931, 1041, 1119, 408, 695, 930, 932, 1121, 886, 715, 755, 642, 739, 1272, 1359, 1114, 1422, 807]. **T-c** [931, 1119]. **t-J** [807]. **tangential** [936]. **tantalum** [1008]. **TDDFT** [1415]. **Technique** [655]. **technology** [1355]. **Teller** [285, 1361, 1512]. **Teller-like** [1512]. **Temperature** [626, 627, 1483, 474, 207, 428, 455, 458, 1477, 557, 593, 1452, 1221, 1262, 394,

1300, 83, 755, 1465, 250, 1094, 1267, 1056, 14, 98, 286, 319, 423, 429, 461, 488, 538, 911, 1061, 1208, 226]. **Temperature-Dependence** [627]. **Temperature-time** [1452]. **Temperatures** [1123, 228, 71, 618, 994, 1082, 603, 1285, 1251]. **Ten** [1003, 935, 1336, 1204]. **Ten-electron** [1003, 935, 1336, 1204]. **Tension** [262, 276, 337, 988, 1262, 244, 245, 246, 861, 923, 1242]. **Tensor** [1292, 726, 752, 936, 737]. **Term** [386, 966, 967, 1338, 1390]. **Terms** [854, 761, 675, 653, 1038, 1290, 798, 1327, 966, 967, 1004, 1048, 1090, 1129, 1331, 1332, 1333, 1334, 270, 372, 572, 647, 674, 872, 923, 1063, 1106, 1108, 1140, 1148, 1168, 1204, 1234, 1236, 1269, 1362, 1390, 1248, 591]. **Ternary** [436, 453]. **Terrestrial** [794]. **test** [807]. **Tests** [496]. **Tetrahedral** [1436, 1411, 1432, 27, 28, 1459, 657, 336, 11, 449, 1444]. **Texas** [117]. **Their** [1298, 475, 762, 142, 610, 676, 1259, 1217, 1459, 338, 482, 945, 1285, 354]. **Theorem** [17, 18, 285, 1083, 1263, 1128, 1326, 12, 13, 490, 1236, 1245, 1361, 1404, 1476, 852, 664]. **Theorems** [762]. **Theoretical** [5, 6, 799, 152, 153, 441, 1501, 9, 10, 1409, 857, 56, 28, 1501]. **Theorie** [1518]. **Theories** [595, 1297, 686, 721, 1522, 516, 391, 398, 1323, 414, 982]. **Theory** [297, 627, 1524, 565, 566, 126, 246, 262, 276, 82, 396, 682, 1310, 397, 101, 688, 661, 690, 691, 730, 1001, 731, 121, 1468, 1525, 896, 900, 904, 31, 43, 87, 139, 318, 324, 337, 413, 427, 428, 456, 491, 526, 545, 600, 607, 616, 644, 646, 649, 664, 666, 667, 669, 677, 693, 708, 770, 785, 866, 876, 908, 1030, 1276, 1545, 1397, 1491, 1495, 275, 619, 621, 711, 356, 529, 749, 1422, 106, 132, 1424, 1546, 51, 1255, 359, 360, 626, 856, 1039, 1214, 298, 1299, 1084, 1194, 63, 399, 1312, 94, 1518, 1266, 1085, 186, 1466, 689, 729]. **theory** [801, 823, 961, 1128, 1226, 1326, 964, 997, 999, 1046, 1052, 1054, 1129, 1131, 1132, 1331, 1335, 1339, 1341, 1056, 1057, 1058, 12, 13, 21, 30, 130, 141, 158, 192, 273, 305, 344, 378, 383, 415, 429, 492, 505, 513, 515, 541, 546, 577, 582, 587, 604, 645, 648, 706, 835, 843, 849, 872, 917, 943, 946, 972, 979, 981, 1016, 1059, 1062, 1067, 1070, 1108, 1140, 1141, 1148, 1173, 1174, 1175, 1180, 1199, 1236, 1270, 1277, 1354, 1355, 1360, 1370, 1377, 1382, 1384, 1385, 1389, 1393, 1395, 1407, 1489, 327, 555, 591, 955, 956, 985, 1249, 1414, 1418, 710, 1496, 330, 1114, 133]. **theory** [1425, 1211, 1452, 335, 369, 1520, 1517]. **There** [386, 1188, 1282, 1494]. **Thermal** [589, 850, 933, 799, 504, 1139, 1151, 1477, 819]. **Thermally** [463]. **Thermodynamic** [530, 688, 1010, 1353, 883, 1124, 1009, 913, 914, 1379, 1405, 987]. **Thermodynamically** [427, 496]. **Thermodynamics** [561, 638, 1348, 952, 1027, 1033, 1410, 224, 1416, 557, 593, 535, 580]. **thermoelectric** [782]. **thickness** [387, 911]. **thin** [1467]. **third** [1231]. **third-order** [1231]. **Thomas** [1514, 626, 627, 856, 1482, 20, 26, 2, 3, 48, 102, 109, 186, 440, 803, 1350, 1056, 1057, 1, 4, 9, 10, 11, 12, 13, 15, 18, 21, 23, 30, 31, 37, 44, 193, 370, 371, 379, 383, 615, 811, 841, 845, 872, 982, 1070, 1400, 1409, 1411, 710, 711, 468, 469, 529, 106, 1425]. **Thoughts** [1145]. **Three** [1078, 1297, 1323, 1111, 1451, 1480, 992, 595, 963, 371, 950, 1180, 1271, 1277,

1279, 1283, 1475, 1073, 652, 1287, 958, 558, 1447, 117]. **Three-dimensional** [1078, 1111, 1451, 992, 1271, 1283, 1073, 1287, 558]. **three-electron** [1480]. **three-level** [652]. **Three-particle** [1323, 1277, 117]. **Tight** [555, 114]. **Tight-Binding** [114, 555]. **Time** [684, 520, 1226, 705, 1174, 1249, 1414, 1452]. **time-dependent** [1226, 1174, 1249, 1414]. **times** [911]. **tissue** [1441]. **Tm** [1188]. **together** [1295, 1317, 1172]. **tomograms** [1166]. **topological** [993]. **Topology** [716, 1097, 464, 465]. **Toronto** [1497]. **Tosi** [1508, 1509, 1521, 1506, 1510, 1505, 1511, 1507]. **Total** [365, 502, 1004, 534, 1436, 654, 355, 497, 366, 405, 237, 342, 375, 460, 462, 507, 540, 551, 650, 1399, 389, 527, 468]. **Transcending** [1482, 905, 938, 677, 811, 951, 1285]. **Transfer** [358, 361, 716, 251, 377]. **transform** [965, 1163, 985]. **Transition** [1123, 265, 402, 476, 599, 1344, 283, 426, 575, 1365, 1252, 994, 1081, 1082, 1216, 1220, 755, 1086, 504, 968, 1094, 1197, 1267, 171, 286, 314, 315, 381, 416, 419, 430, 487, 589, 614, 950, 978, 1149, 1280, 1442, 1208, 1112, 957, 958, 559, 927, 1450, 1451]. **Transition-Metal** [476, 426, 504]. **Transitions** [1483, 66, 311, 456, 525, 1044, 1122, 1220, 1296, 56, 273, 920, 949, 1394, 1395, 1474, 1491, 1156]. **transmission** [392]. **Transport** [530, 562, 1124, 135, 715, 892, 442, 1468, 143, 418, 671, 744, 786, 1021, 1490, 352, 431, 1036, 883, 421, 581, 814, 867, 871, 877, 913, 914, 1364, 1379, 1445, 172, 173, 558]. **Transport-Coefficients** [530, 562, 442]. **Transport-Properties** [715]. **Transverse** [671, 1465]. **trapped** [1321, 1358]. **trapping** [1432]. **traps** [1192, 1201]. **traversing** [1198]. **treat** [917]. **Treated** [137, 1211]. **Treatment** [72, 502, 64, 924, 1402]. **treatments** [869, 1276, 1375]. **Trends** [300, 323, 1032]. **triangular** [1215, 1224, 1318]. **Triboelectricity** [889]. **tribological** [939]. **tribology** [957]. **tricritical** [1375]. **trimer** [1295, 1317, 1460]. **trimers** [1061]. **Triplet** [544, 1256, 433]. **True** [384]. **TTF** [1284]. **Tumour** [1433]. **tuned** [1456]. **tungsten** [844]. **tuning** [1485]. **tunneling** [555]. **Turbulence** [1031, 1046, 1059]. **Tutorial** [1493]. **Two** [1159, 1293, 1294, 1194, 281, 1000, 104, 637, 1344, 1397, 1421, 1183, 1255, 1479, 855, 1039, 1040, 1076, 1077, 1117, 1212, 1455, 1295, 392, 1125, 1127, 1309, 438, 1317, 995, 1265, 1487, 1322, 1465, 1045, 1005, 1054, 1164, 1165, 1195, 1338, 1094, 570, 638, 1347, 1348, 158, 195, 233, 304, 309, 371, 411, 703, 864, 872, 980, 1015, 1020, 1062, 1063, 1064, 1071, 1098, 1100, 1103, 1150, 1170, 1172, 1176, 1180, 1200, 1202, 1244, 1279, 1388, 1406, 1471, 1475, 984, 652, 1155, 1250]. **two-** [652]. **Two-Body** [104]. **Two-Component** [1397, 158]. **Two-Dimensional** [1000, 637, 1159, 1293, 1294, 1421, 855, 1076, 1127, 1309, 1465, 1338, 638, 1347, 1348, 195, 703, 1100, 1388, 1406, 984]. **two-electron** [1183, 1255, 1039, 1040, 1077, 1117, 1212, 1455, 1125, 1265, 1487, 1045, 1195, 309, 1062, 1063, 1064, 1071, 1098, 1103, 1176, 1200, 1244, 1250]. **Two-level** [281, 995, 1054, 1164, 1165, 570, 1015, 1170]. **Two-parameter** [1194]. **two-particle** [1479, 438, 304]. **two-phase** [411]. **Type** [749, 1217, 129, 1307, 108]. **types** [1492, 1493].

u [1499]. **ultracold** [1245]. **underdoped** [930]. **Undergo** [642, 1359]. **understood** [1446]. **Unfair** [714]. **Unified** [924]. **Uniform** [685, 67, 54, 1387, 69, 61, 1429]. **Universal** [822, 1222, 860, 1246, 879]. **Universality** [1544, 1156, 1451]. **University** [1499, 1520]. **UO** [227]. **upper** [398, 184, 414]. **Use** [1259, 1263, 1199]. **useful** [430]. **using** [1257, 1516, 2, 3, 23, 294, 1288, 1075]. **Utility** [787].

V [1217, 1106]. **VA** [1342]. **Vacancies** [299, 57, 125, 334, 322]. **Vacancy** [38, 561, 472, 1000, 98, 458, 492, 509, 525, 557, 593, 394, 1300, 58, 491, 522, 582, 950, 1369, 958]. **vacancy-formation** [582]. **vacancy-solute** [522]. **Valence** [777, 968, 776, 844, 241]. **Valence-Electron** [777, 776]. **Validity** [526, 1259, 1442, 295, 1450]. **Values** [594, 601]. **Vapor** [595, 567, 550, 923, 1101]. **vapors** [970, 974, 983, 984]. **Vapour** [1297, 1022, 1122, 1220, 1296, 936, 969, 1279, 1448, 1449]. **Variable** [464, 465]. **variables** [350]. **variation** [1263, 698]. **Variational** [566, 45, 50, 1259]. **variationally** [1480, 1053, 1337]. **Variety** [1298, 1220, 860, 1491]. **various** [1492, 1493]. **varying** [1096]. **VCD** [1342]. **Vector** [719, 720, 727, 597]. **Velo** [368]. **Velocity** [719, 720, 792, 1247, 793, 938, 951, 1198]. **Verlag** [369]. **Versus** [722, 456, 993, 162, 206, 166, 1441]. **very** [493]. **via** [755, 1266, 800, 1164, 968, 516, 541, 544, 770, 915, 924, 1104, 1199, 1238, 1279, 1368, 1496, 557, 593, 750, 1448]. **Vibrational** [1093, 486, 1272]. **vibrations** [186]. **VII** [1497]. **viii** [368]. **Virial** [934, 17, 18, 693, 619, 1263, 1128, 1326, 999, 1096, 12, 13, 325, 604, 816, 1016, 1236, 1245, 852]. **Virtual** [137]. **Viscosity** [563, 545, 611, 1034, 988, 1260, 1262, 423, 1270, 879, 1035]. **Vitreous** [225, 222]. **Vol** [1501, 820, 1043]. **Volmer** [298]. **Volume** [1497, 369, 1018, 1543, 805]. **volumes** [937, 944].

W [1498, 1502, 515]. **Waals** [351, 1412, 144]. **wall** [846]. **Walsh** [313, 1373]. **Wannier** [294]. **Watch** [196]. **Water** [40, 567, 326, 1261, 1264, 1133, 293]. **Wave** [563, 116, 1045, 1137, 45, 118, 386, 521, 1071, 1153, 712, 51, 1038, 1213, 1257, 1515, 931, 932, 994, 1041, 1079, 1483, 1435, 1463, 1134, 58, 382, 878, 922, 1232, 1239, 1369, 591, 331]. **Wave-Number** [563]. **wavefunction** [953, 1176]. **Wavelength** [687, 155, 1285, 1477]. **Wavenumber** [187, 159, 853]. **Wavenumber-dependent** [187]. **waves** [985]. **Weak** [1488, 1432, 532, 365, 366, 229, 342]. **Weakly** [566, 875]. **Weizsäcker** [1482, 1487, 1338]. **well** [210, 1446]. **Wentzel** [37, 1400, 469]. **wetting** [1262]. **where** [1049, 1253]. **which** [398, 414, 508, 1020]. **whole** [384]. **wholly** [1044]. **Wide** [1298, 742, 131]. **Width** [395, 1301]. **Wightman** [368]. **Wigner** [1171, 1078, 1432, 1216, 1126, 1305, 129, 1307, 247, 263, 279, 403, 1324, 636, 1330, 571, 637, 638, 663, 1345, 1346, 1347, 1348, 287, 410, 459, 463, 538, 642, 651, 702, 952, 1060, 1111, 1142, 1143, 1152, 1178, 1359, 1372, 1381, 1396, 1410, 224, 1416, 656, 1421, 1156, 1182, 880]. **Wigner-like** [1216, 1182]. **Wildbad** [1519]. **William** [1501]. **within** [1044, 1085]. **Without** [865, 266, 571, 1346, 268, 837, 1275, 1475, 1072]. **WKB** [1005]. **WNT** [1433].

words [196]. **Work** [297, 1466].

X [716, 735, 117, 361, 1219, 531, 33, 46, 1461, 182, 1228, 91, 121, 1341, 735, 97, 197, 255, 289, 386, 430, 554, 641, 866, 1206, 1243, 294, 201, 242, 99, 1253, 1254]. **X-ray** [1341, 97, 197, 430, 182, 121, 386, 866, 99, 1219, 33, 46, 1461, 1228, 91, 255, 554, 1206, 1243, 294, 201, 242, 1253, 1254]. **X-Ray-Diffraction** [289]. **X-Ray-Scattering** [716, 361, 531]. **Xe** [515]. **Xenon** [792, 793, 241]. **XH** [657, 641]. **xi** [408]. **xiii** [369]. **xvi** [1521].

yield [1214, 824, 1325]. **yielding** [1116, 1144]. **York** [1497, 1508, 1509, 117, 368, 408, 1521]. **York/Toronto/Sydney/Paris/Braunschweig** [1497]. **Young** [1498, 1502].

Zernike [1454, 1186]. **Zero** [618, 1119, 1121, 1190, 1056, 71, 273, 603, 911, 1061, 1207, 1395]. **zero-temperature** [1056]. **Zhang** [1229, 1233]. **Zinc** [137, 373, 1074]. **zinc-blende** [1074]. **ZnCu** [1284]. **zur** [1518].

References

March:1949:IAA

[1] N. H. (Norman Henry) March and C. A. (Charles Alfred) Coulson. An improved approximate analytic solution of the Thomas–Fermi equation for atoms. In *Papers on theoretical physics from Wheatstone Physics Laboratory 1950–1952*, Proceedings of the Cambridge Philosophical Society, pages 356–357. Cambridge University Press, Cambridge, UK, 1949. Reprinted from the Proceedings of the Cambridge Philosophical Society, vol. **46**, part 2. 1949.

Coulson:1950:MAUa

[2] C. A. Coulson and N. H. March. Momenta in atoms using the Thomas–Fermi method. *Proceedings of the Physical Society, London, Section A*, 63 (4):367–374, April 1, 1950. CODEN PPSAAM. ISSN 0370-1298 (print), 1747-3829 (electronic). URL `http://stacks.iop.org/0370-1298/63/i=4/a=306`.

Coulson:1950:MAUb

[3] C. A. (Charles Alfred) Coulson and N. H. (Norman Henry) March. Momenta in atoms using the Thomas–Fermi method. In *An improved approximate analytic solution of the Thomas–Fermi equation for atoms*, Proceedings of the Physical Society., pages 367–374. Fisher, Knight and Co., St. Albans, UK, 1950. Papers on theoretical physics from Wheatstone Physics Laboratory 1950-1952. Reprinted from the Proceedings of the Physical Society, A, vol. LXIII, p. 367, 1950.

March:1950:IAA

[4] N. H. March. An improved approximate analytic solution of the Thomas–Fermi equation for atoms. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 46(2):356–357, ???? 1950. CODEN PCPSA4. ISSN 0008-1981.

Coulson:1951:TDEa

[5] C. A. Coulson, P. W. Higgs, and N. H. March. Theoretical determination of electron density in organic molecules. *Nature*, 168(4285):1039, December 15, 1951. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `http://www.nature.com/nature/journal/v168/n4285/pdf/1681039a0.pdf; http://www.nobelprize.org/nobel_prizes/physics/laureates/2013/; http://www.ph.ed.ac.uk/higgs/peter-higgs`.

Coulson:1951:TDEb

[6] C. A. (Charles Alfred) Coulson, Peter Ware Higgs, and N. H. (Norman Henry) March. Theoretical determination of electron density in organic molecules. In *An improved approximate analytic solution of the Thomas–Fermi equation for atoms*, Nature. Macmillan Magazines, London, UK, 1951. Signed: C. A. Coulson, P. W. Higgs and N. H. March. Reprinted from *Nature*, vol. **168**, p. 1039, December 15, 1951. Papers on theoretical physics from Wheatstone Physics Laboratory 1950–1952.

Coulson:1952:EEa

[7] C. A. Coulson, N. H. March, and S. Altmann. π-electrons and σ-electrons. *Proceedings of the National Academy of Sciences of the United States of America*, 38(4):372–378, ???? 1952. CODEN PNASA6. ISSN 0027-8424 (print), 1091-6490 (electronic).

Coulson:1952:EEb

[8] C. A. (Charles Alfred) Coulson, Simon L. Altman, and N. H. (Norman Henry) March. π-electrons and σ-electrons. In *An improved approximate analytic solution of the Thomas–Fermi equation for atoms*, Proceedings of the National Academy of Sciences, pages 372–378. National Academy of Sciences, Washington, DC, USA, 1952. Reprinted from the Proceedings of the National Academy of Sciences, vol. **38**, no. 4, pp. 372–378, April 1952. Papers on theoretical physics from Wheatstone Physics Laboratory 1950–1952.

March:1952:TDEa

[9] N. H. March. Theoretical determination of the electron distribution in benzene by the Thomas–Fermi and the molecular-orbital methods. *Acta*

Crystallographica, 5(2):187–193, March 1952. CODEN ACCRA9. ISSN 0365-110X (print), 1600-8642 (electronic).

March:1952:TDEb

[10] N. H. (Norman Henry) March. Theoretical determination of the electron distribution in benzene by the Thomas–Fermi and the molecular-orbital methods. In *An improved approximate analytic solution of the Thomas–Fermi equation for atoms*, Acta Crystallographica. Munksgaard, Copenhagen, Denmark, 1952. Published for the International Union of Crystallography. Reprinted from Acta Crystallographica, vol. 5, part 2, March 1952. Papers on theoretical physics from Wheatstone Physics Laboratory 1950–1952.

March:1952:TFF

[11] N. H. March. Thomas–Fermi fields for molecules with tetrahedral and octahederal symmetry. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 48(4):665–682, ???? 1952. CODEN PCPSA4. ISSN 0008-1981.

March:1952:VTTa

[12] N. H. March. The virial theorem in the Thomas–Fermi theory. *Philosophical Magazine Series 7 (1926–1955)*, 43(345):1042–1046, ???? 1952. CODEN PHMAA4. ISSN 0031-8086.

March:1952:VTTb

[13] N. H. (Norman Henry) March. The virial theorem in the Thomas–Fermi theory. In *An improved approximate analytic solution of the Thomas–Fermi equation for atoms*, Philosophical magazine, pages 1042–1046. Taylor and Francis, London, UK, 1952. Reprinted from the Philosophical magazine, ser. 7, vol. XLIII, p. 1042, October 1952. Papers on theoretical physics from Wheatstone Physics Laboratory 1950–1952.

March:1953:EPE

[14] N. H. March. The exchange potential in an electron gas at nonzero temperature. *Physical Review (2)*, 92(2):510–511, October 15, 1953. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.92.510`.

March:1953:IET

[15] N. H. March. Introduction of exchange in the Thomas–Fermi model for atoms. *Philosophical Magazine Series 7 (1926–1955)*, 44(357):1193–1196, ???? 1953. CODEN PHMAA4. ISSN 0031-8086.

March:1953:NSP

[16] N. H. March and B. Donovan. Note on the spin paramagnetism of a free electron gas. *Proceedings of the Physical Society, London, Section A*, 66 (12):1104–1108, December 1, 1953. CODEN PPSAAM. ISSN 0370-1298 (print), 1747-3829 (electronic). URL `http://stacks.iop.org/0370-1298/66/i=12/a=304`.

March:1953:VTD

[17] N. H. March. The virial theorem for Dirac's equation. *Physical Review (2)*, 92(??):481–482, October 15, 1953. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.92.481`.

March:1953:VTF

[18] N. H. March. The virial theorem in free electron and generalized Thomas–Fermi models. *Philosophical Magazine Series 7 (1926–1955)*, 44(350):346–347, ???? 1953. CODEN PHMAA4. ISSN 0031-8086.

Ballinger:1954:BLF

[19] R. A. Ballinger and N. H. March. Bond-lengths and force constants for methane, silane and germane. *Nature*, 174(4421):179, July 24, 1954. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `http://www.nature.com/nature/journal/v174/n4421/pdf/174179a0.pdf`.

Ballinger:1954:ETF

[20] R. A. Ballinger and N. H. March. Extended Thomas–Fermi methods. *Proceedings of the Physical Society, London, Section A*, 67(4):378–381, April 1, 1954. CODEN PPSAAM. ISSN 0370-1298 (print), 1747-3829 (electronic). URL `http://stacks.iop.org/0370-1298/67/i=4/a=408`.

March:1954:CAM

[21] N. H. March. Cohesion of the alkali metals in the Thomas–Fermi–Dirac theory. *Philosophical Magazine Series 7 (1926–1955)*, 45(??):325–328, ???? 1954. CODEN PHMAA4. ISSN 0031-8086.

March:1954:FED

[22] N. H. March and B. Donovan. Free electron diamagnetism and susceptibilities of the alkali metals. *Proceedings of the Physical Society, London, Section A*, 67(5):464–465, May 1, 1954. CODEN PPSAAM. ISSN 0370-1298 (print), 1747-3829 (electronic). URL `http://stacks.iop.org/0370-1298/67/i=5/a=408`.

March:1954:MDE

[23] N. H. March. Momentum distribution of electrons in solids. Results for some metals using the Thomas–Fermi method. *Proceedings of the Physical Society, London, Section A*, 67(1):9–16, January 1, 1954. CODEN PPSAAM. ISSN 0370-1298 (print), 1747-3829 (electronic). URL `http://stacks.iop.org/0370-1298/67/i=1/a=303`.

March:1954:MDN

[24] N. H. March. On momentum distribution in nuclei. *Proceedings of the Physical Society, London, Section A*, 67(3):288–290, March 1, 1954. CODEN PPSAAM. ISSN 0370-1298 (print), 1747-3829 (electronic). URL `http://stacks.iop.org/0370-1298/67/i=3/a=416`.

Alfred:1955:FAI

[25] L. C. R. Alfred and N. H. March. Fields around impurity atoms in metals. *Philosophical Magazine Series 7 (1926–1955)*, 46(378):759–768, ???? 1955. CODEN PHMAA4. ISSN 0031-8086.

Ballinger:1955:BET

[26] R. A. Ballinger and N. H. March. The boundary effect in the Thomas–Fermi model for atoms. *Philosophical Magazine Series 7 (1926–1955)*, 46(373):246–247, ???? 1955. CODEN PHMAA4. ISSN 0031-8086.

Ballinger:1955:MTOa

[27] R. A. Ballinger and N. H. March. Molecules with tetrahedral and octahedral symmetry. II. Energy calculations and molecular constants for methane, silane and germane. *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 51(??):504–516, ???? 1955. CODEN PCPSA4. ISSN 0008-1981.

Ballinger:1955:MTOb

[28] R. A. Ballinger and N. H. March. Molecules with tetrahedral and octahedral symmetry. III. Theoretical basis of the "smoothing approximation". *Proceedings of the Cambridge Philosophical Society. Mathematical and physical sciences*, 51(??):517–518, ???? 1955. CODEN PCPSA4. ISSN 0008-1981.

Donovan:1955:SPF

[29] B. Donovan, A. B. Lidiard, and N. H. March. On the spin paramagnetism of a free electron gas: II. *Proceedings of the Physical Society, London, Section A*, 68(7):644–647, July 1, 1955. CODEN PPSAAM. ISSN 0370-1298 (print), 1747-3829 (electronic). URL `http://stacks.iop.org/0370-1298/68/i=7/a=413`.

March:1955:ESEa

[30] N. H. March. Equations of state of elements from the Thomas–Fermi theory. *Proceedings of the Physical Society, London, Section A*, 68(8): 726–734, August 1, 1955. CODEN PPSAAM. ISSN 0370-1298 (print), 1747-3829 (electronic). URL `http://stacks.iop.org/0370-1298/68/i=8/a=310`.

March:1955:ESEb

[31] N. H. March. Equations of state of elements from the Thomas–Fermi theory II: Case of incomplete degeneracy. *Proceedings of the Physical Society, London, Section A*, 68(12):1145–1151, December 1, 1955. CODEN PPSAAM. ISSN 0370-1298 (print), 1747-3829 (electronic). URL `http://stacks.iop.org/0370-1298/68/i=12/a=306`.

Alfred:1956:SDM

[32] L. C. R. Alfred and N. H. March. Solute diffusion in metals. *Physical Review*, 103(??):877–??, August 15, 1956. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.103.877`.

Banyard:1956:XRS

[33] K. E. Banyard and N. H. March. X-ray scattering by 'neon-like' molecules. *Acta Crystallographica*, 9(4):385–391, ???? 1956. CODEN ACCRA9. ISSN 0365-110X (print), 1600-8642 (electronic).

Donovan:1956:HFC

[34] B. Donovan and N. H. March. High frequency conductivity in semiconductors. *Proceedings of the Physical Society, London, Section B*, 69 (5):528–538, May 1, 1956. CODEN PPSBAP. ISSN 0370-1301 (print), 1747-3837 (electronic). URL `http://stacks.iop.org/0370-1301/69/i=5/a=304`.

Donovan:1956:MDE

[35] B. Donovan and N. H. March. Momentum distribution of electrons in solids ii: Some general results with an application to metallic lithium. *Proceedings of the Physical Society, London, Section B*, 69(12):1249–1260, December 1, 1956. CODEN PPSBAP. ISSN 0370-1301 (print), 1747-3837 (electronic). URL `http://stacks.iop.org/0370-1301/69/i=12/a=308`.

March:1956:MH

[36] N. H. March. On metallic hydrogen. *Physica*, 22(1–5):311–314, March 5, 1956. CODEN PHYSAG. ISSN 0031-8914 (print), 1873-

1767 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0031891456800426`.

March:1956:RBW

[37] Norman H. March and J. S. Plaskett. The relation between the Wentzel–Kramers–Brillouin and the Thomas–Fermi approximations. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 235(1202):419–431, May 8, 1956. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/99980`.

Alfred:1957:IVI

[38] L. C. R. Alfred and N. H. March. Impurity-vacancy interaction in a metal. *Philosophical Magazine Series 8 (1956–1977)*, 2(20):985–997, 1957. CODEN PHMAA4. ISSN 0031-8086.

Banyard:1957:CFA

[39] K. E. Banyard and N. H. March. Central-field approach for NH_3 and H_2O. *Journal of Chemical Physics*, 27(4):977–978, ???? 1957. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/27/977/1`.

Banyard:1957:DEW

[40] K. E. Banyard and N. H. March. Distribution of electrons in the water molecule. *Journal of Chemical Physics*, 26(6):1416–1420, ???? 1957. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/26/1416/1`.

Donovan:1957:AFC

[41] B. Donovan and N. H. March. On the absorption by free carriers in semiconductors. *Proceedings of the Physical Society, London, Section B*, 70(9):883–885, September 1, 1957. CODEN PPSBAP. ISSN 0370-1301 (print), 1747-3837 (electronic). URL `http://stacks.iop.org/0370-1301/70/i=9/a=410`.

Donovan:1957:ELR

[42] B. Donovan, H. Kanazawa, and N. H. March. Effect of long-range correlation on free electron diamagnetism. *Progress of Theoretical Physics*, 17(6):813–814, ???? 1957. CODEN PTPKAV. ISSN 0033-068X (print), 1347-4081 (electronic).

March:1957:DMF

[43] N. H. March. The density matrix and the foundations of the statistical theory. *Proceedings of the Physical Society, London, Section A*, 70(11):

839–841, ???? 1957. CODEN PPSAAM. ISSN 0370-1298 (print), 1747-3829 (electronic). URL `http://stacks.iop.org/0370-1298/70/i=11/a=109`.

March:1957:TFA

[44] N. H. March. The Thomas–Fermi approximation in quantum mechanics. *Advances in physics*, 6(21):1–101, 1957. CODEN ADPHAH. ISSN 0001-8732 (print), 1460-6976 (electronic).

March:1957:VMC

[45] N. H. March. A variational method for the calculation of particle densities and sums of eigenvalues in wave mechanics. *Proceedings of the Physical Society, London, Section A*, 70(3):169–175, ???? 1957. CODEN PPSAAM. ISSN 0370-1298 (print), 1747-3829 (electronic). URL `http://stacks.iop.org/0370-1298/70/i=3/a=301`.

Carter:1958:XRE

[46] C. Carter, N. H. March, and D. Vincent. X-ray and electron scattering by molecular hydrogen. *Proceedings of the Physical Society, London*, 71 (1):2–16, January 1, 1958. CODEN PPSOAU. ISSN 0370-1328. URL `http://stacks.iop.org/0370-1328/71/i=1/a=302`.

Donovan:1958:PAN

[47] B. Donovan and N. H. March. Positron annihilation in the noble metals. *Physical Review*, 110(2):582–583, April 15, 1958. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.110.582.2`.

Gilvarry:1958:AST

[48] J. J. Gilvarry and N. H. March. Asymptotic solution of the Thomas–Fermi equation for large atom radius. *Physical Review (2)*, 112(1):140–149, October 1, 1958. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.112.140`.

March:1958:KPE

[49] N. H. March. Kinetic and potential energies of an electron gas. *Physical Review (2)*, 110(3):604–605, May 1, 1958. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.110.604`.

March:1958:VMB

[50] N. H. March and W. H. Young. Variational methods based on the density matrix. *Proceedings of the Physical Society, London*, 72(2):182–192,

August 1, 1958. CODEN PPSOAU. ISSN 0370-1328. URL `http://stacks.iop.org/0370-1328/72/i=2/a=302`.

Young:1958:PTW

[51] W. H. Young and N. H. March. Perturbation theory in wave mechanics. *Physical Review (2)*, 109(5):1854–1855, March 1, 1958. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.109.1854`.

Donovan:1959:SPS

[52] B. Donovan and N. H. March. Screening of point singularities in metals, with particular reference to positron annihilation. *The Journal of Physics and Chemistry of Solids*, 11(1-2):68–72, 1959. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

March:1959:ASD

[53] N. H. March and W. H. Young. Approximate solutions of the density matrix equation for a local average field. *Nuclear Physics*, 12(3):237–240, July 2, 1959. CODEN NUPHA7. ISSN 0029-5582 (print), 1873-1546 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0029558259901695`.

March:1959:PDE

[54] N. H. March and W. H. Young. Probability density of electron separation in a uniform electron gas. *Philosophical Magazine Series 8 (1956–1977)*, 4(39):384–389, 1959. CODEN PHMAA4. ISSN 0031-8086.

March:1959:SPS

[55] N. H. March. Screening of point singularities in metals, with particular reference to positron annihilation. *The Journal of Physics and Chemistry of Solids*, 11(1–2):68–72, September 24, 1959. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369759900423`.

Flower:1960:MTI

[56] M. Flower, N. H. March, and A. M. Murray. Metallic transitions in ionic crystals: Some group theoretical results. *Physical Review (2)*, 119(??):1885–1888, September 15, 1960. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.119.1885`.

Lee:1960:SSV

[57] P. M. Lee and N. H. March. Strain scattering by vacancies and impurities in metals. *Physical Review*, 118(1):138–??, April 1, 1960. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.118.138`.

March:1960:EWF

[58] N. H. March and A. M. Murray. Electronic wave functions round a vacancy in a metal. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 256(??):400–415, ???? 1960. CODEN PRLAAZ. ISSN 0962-8444. URL `http://www.jstor.org/stable/2413832`.

March:1960:RBDa

[59] N. H. March and A. M. Murray. Relation between Dirac and canonical density matrices, with applications to imperfections in metals. *Physical Review (2)*, 120(??):830–836, November 1, 1960. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.120.830`.

March:1960:RBDb

[60] N. H. March and A. M. Murray. Relation between Dirac and canonical density matrices, with applications to imperfections in metals. *Physical Review Letters*, 5(5):220–221, 1960. CODEN PRLTAO. ISSN 0031-9007 (print), 1079-7114 (electronic), 1092-0145.

Young:1960:DMA

[61] W. H. Young and N. H. March. A density matrix approach to correlation in a uniform electron gas. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 256(??):62–80, ???? 1960. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/2413953`.

Banyard:1961:EDA

[62] K. E. Banyard and N. H. March. The electron distribution in the ammonium ion. *Acta Crystallographica*, 14(4):357–360, ???? 1961. CODEN ACCRA9. ISSN 0365-110X (print), 1600-8642 (electronic).

Corless:1961:ETI

[63] G. K. Corless and N. H. March. Electron theory of interaction between point defects in metals. *Philosophical Magazine Series 8 (1956–1977)*, 6 (??):1285–1296, ???? 1961. CODEN PHMAA4. ISSN 0031-8086.

March:1961:SCP

[64] N. H. March and A. M. Murray. Self-consistent perturbation treatment of impurities and imperfections in metals. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 261(??):119–133, ???? 1961. CODEN PRLAAZ. ISSN 0962-8444. URL `http://www.jstor.org/stable/2413903`.

Corless:1962:SPC

[65] G. K. Corless and N. H. March. Saddle-point configuration in impurity diffusion in face-centred cubic metals. *Philosophical Magazine Series 8 (1956–1977)*, 7(??):1765–1772, ???? 1962. CODEN PHMAA4. ISSN 0031-8086.

Flower:1962:TMS

[66] M. Flower and N. H. March. Transitions to metallic states in ionic crystals, with particular reference to cesium iodide. *Physical Review*, 125 (??):1144–??, February 15, 1962. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.125.1144`.

Jones:1962:EDD

[67] W. Jones, N. H. March, and S. Sampanthar. The energy and the Dirac density matrix of a non-uniform electron gas. *Physics Letters*, 1(8):303–304, 1962. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic).

March:1962:ECM

[68] N. H. March and S. Sampanthar. Electron correlation in metals: Density matrix approach. *Acta physica Academiae Scientiarum Hungaricae*, 14 (??):67–76, ???? 1962. CODEN APAHAQ. ISSN 0001-6705. URL `http://link.springer.com/article/10.1007/BF03158123`.

March:1962:EDD

[69] N. H. March and S. Sampanthar. The energy and the Dirac density matrix of a non-uniform electron gas. *Physics Letters*, 1(8):303–304, July 15, 1962. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic). URL `http://www.sciencedirect.com/science/article/pii/003191636290402X`.

March:1962:EED

[70] N. H. March and A. M. Murray. Enhancement of electron density around positive point charges in metals and lifetimes of positrons. *Physical Re-*

view, 126(??):1480–??, May 15, 1962. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.126.1480`.

March:1962:PEG

[71] N. H. March and A. M. Murray. Perturbations in an electron gas at non-zero temperatures. *Proceedings of the Physical Society, London*, 79 (5):1001–1010, May 1962. CODEN PPSOAU. ISSN 0370-1328. URL `http://stacks.iop.org/0370-1328/79/i=5/a=312`.

March:1962:SCP

[72] N. H. March and A. M. Murray. Self-consistent perturbation treatment of impurities and imperfections in metals. II. Second-order perturbation corrections. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 266(1327):559–567, March 27, 1962. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/2414310`.

Simcox:1962:HPB

[73] L. N. Simcox and N. H. March. High pressure behaviour of solid helium. *Proceedings of the Physical Society, London*, 80(4):830–838, October 1962. CODEN PPSOAU. ISSN 0370-1328. URL `http://stacks.iop.org/0370-1328/80/i=4/a=303`.

Gaskell:1963:EMD

[74] T. Gaskell and N. H. March. Electronic momentum distribution in liquid metals and long-range oscillatory interactions between ions. *Physics Letters*, 7(3):169–170, 1963. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic).

Johnson:1963:LRO

[75] M. D. Johnson and N. H. March. Long-range oscillatory interaction between ions in liquid metals. *Physics Letters*, 3(7):313–314, 1963. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic).

March:1963:EMD

[76] N. H. March. Electronic momentum distribution in liquid metals and long-range oscillatory interactions between ions. *Physics Letters*, 7(3): 169–170, November 15, 1963. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0031916363903688`.

March:1963:ICC

[77] N. H. March. International Conference on Crystal Lattice Defects, Kyoto, September 1962. *British Journal of Applied Physics*, 14(3):123–124, ???? 1963. CODEN BJAPAJ. ISSN 0508-3443 (print), 2057-7656 (electronic). URL `http://stacks.iop.org/0508-3443/14/i=3/a=302`.

March:1963:IEBa

[78] N. H. March. Interaction energies between defects in metals. *The Journal of Physics and Chemistry of Solids*, 24(11):1305–1308, November 13, 1963. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369763901756`.

March:1963:IEBb

[79] N. H. March. Interaction energies between defects in metals. *Solid State Communications*, 1(2):49, June 2, 1963. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0038109863903910`.

March:1963:LRO

[80] N. H. March. Long-range oscillatory interaction between ions in liquid metals. *Physics Letters*, 3(7):313–314, February 15, 1963. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0031916363901707`.

Worster:1963:IEB

[81] J. Worster and N. H. March. Interaction energies between defects in metals. *The Journal of Physics and Chemistry of Solids*, 24(11):1305–??, 1963. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Boardman:1964:TSH

[82] A. D. Boardman and N. H. March. Theory of specific heats of dilute alloys. *The Journal of Physics and Chemistry of Solids*, 25(12):1435–1439, ???? 1964. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Darby:1964:EPI

[83] J. K. Darby and N. H. March. Electron-phonon interaction and temperature dependence of the electrical resistivity of sodium. *Proceedings of the Physical Society, London*, 84(4):591–594, October 1964. CODEN PPSOAU. ISSN 0370-1328. URL `http://stacks.iop.org/0370-1328/84/i=4/a=315`.

Hebborn:1964:CED

[84] J. E. Hebborn and N. H. March. Conduction electron diamagnetism in alloys and magnetic-field-dependent dielectric constant of a Fermi gas. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 280(1380):85–96, July 7, 1964. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/2414874`.

Johnson:1964:IIO

[85] M. D. Johnson, P. Hutchinson, and N. H. March. Ion–ion oscillatory potentials in liquid metals. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 282 (1389):283–302, November 3, 1964. CODEN PRLAAZ. ISSN 0080-4630. URL `http://adsabs.harvard.edu/abs/1964RSPSA.282..283J; http://www.jstor.org/stable/2414811`.

March:1964:ESL

[86] N. H. March. Electronic screening in liquids and the crystal structures of metals. *Solid State Communications*, 2(8):245–247, August 21, 1964. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0038109864903722`.

March:1964:TSH

[87] N. H. March. Theory of specific heats of dilute alloys. *The Journal of Physics and Chemistry of Solids*, 25(12):1435–1439, December 2, 1964. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369764900587`.

WORSTER:1964:ESL

[88] J Worster and N. H. March. Electronic screening in liquids and the crystal structures of metals. *Solid State Communications*, 2(8):245–247, 1964. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic).

Enderby:1965:AFC

[89] J. E. Enderby, T. Gaskell, and N. H. March. Asymptotic form of correlation functions in classical fluids and in liquid helium 4. *Proceedings of the Physical Society, London*, 85(2):217–221, February 1965. CODEN PPSOAU. ISSN 0370-1328. URL `http://stacks.iop.org/0370-1328/85/i=2/a=302`.

Enderby:1965:IFS

[90] J. E. Enderby and N. H. March. Interatomic forces and structure of liquids. *Advances in physics*, 14(56):453–??, 1965. CODEN ADPHAH. ISSN 0001-8732 (print), 1460-6976 (electronic).

Jones:1965:XRS

[91] W. Jones, N. H. March, and J. W. Tucker. X-ray scattering by metals and the charge distribution in body-centred cubic iron and chromium. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 284(1397):289–301, February 23, 1965. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/2415312`.

March:1965:CSM

[92] N. H. March. Charge, spin and momentum densities in iron. *Physics Letters*, 19(5):366–367, November 15, 1965. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0031916365908978`.

Tucker:1965:CSM

[93] J. W. Tucker, W. Jones, and N. H. March. Charge spin and momentum densities in iron. *Physics Letters*, 19(5):366–??, 1965. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic).

Enderby:1966:ETM

[94] J. E. Enderby and N. H. March. Electron theory of melting in close-packed metals. *Proceedings of the Physical Society, London*, 88(3):717–721, July 1966. CODEN PPSOAU. ISSN 0370-1328. URL `http://stacks.iop.org/0370-1328/88/i=3/a=319`.

Gaskell:1966:FHS

[95] T. Gaskell, W. Jones, and N. H. March. Fermi hole and the structure factor. *Physics Letters*, 23(11):673–??, 1966. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic).

March:1966:FHS

[96] N. H. March. Fermi hole and ^{3}He structure factor. *Physics Letters*, 23 (11):673–675, December 12, 1966. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0031916366902216`.

March:1966:SXR

[97] N. H. March. Soft X-ray emission and momentum eigenfunction of metallic lithium. *Physics Letters*, 23(7):408–409, November 14, 1966. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0031916366910651`.

March:1966:VFE

[98] N. H. March. Vacancy formation energy and Debye temperature in close packed metals. *Physics Letters*, 20(3):231–232, February 15, 1966. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0031916366903386`.

Stott:1966:SXR

[99] M. J. Stott and N. H. March. Soft X-ray emission and momentum eigenfunction of metallic lithium. *Physics Letters*, 23(7):408–??, 1966. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic).

Ashcroft:1967:SFD

[100] N. W. Ashcroft and N. H. March. Structure factor and direct correlation function for a classical hard sphere fluid. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 297(1450):336–350, March 7, 1967. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/2415815`.

Enderby:1967:ETM

[101] J. E. Enderby and N. H. March. Electron theory of metals and liquid state theory. *Advances in physics*, 16(64):691, 1967. CODEN ADPHAH. ISSN 0001-8732 (print), 1460-6976 (electronic).

Gilvarry:1967:ARB

[102] J. J. Gilvarry, R. E. Hartle, and N. H. March. Asymptotic relations between the Thomas–Fermi–Dirac and Thomas–Fermi atom models. I. case of low atomic number. *Journal of Chemical Physics*, 47(3):1029–1035, ???? 1967. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/47/1029/1`.

Hilton:1967:DMA

[103] D. Hilton, N. H. March, and A. R. Curtis. Density matrices for atoms and solids. I. effective potential matrix and the Bloch equation. *Proceedings of the Royal Society of London. Series A, Mathematical and physical*

sciences, 300(1462):391–404, September 19, 1967. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/2415950`.

Kapuy:1967:TBO

[104] E. Kapuy and N. H. March. Two-body orbitals for one-dimensional fermion gas with application to repulsive δ-function interactions. *Journal of Mathematical Physics*, 8(9):1915–1920, September 1967. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL `http://jmp.aip.org/resource/1/jmapaq/v8/i9/p1915_s1`; `http://link.aip.org/link/?JMP/8/1915/1`.

March:1967:MBP

[105] Norman H. (Norman Henry) March, W. H. Young, S. Sampanthar, et al. *The Many-Body Problem in Quantum Mechanics*. Cambridge monographs on physics. Cambridge University Press, Cambridge, UK, 1967. xi + 459 pp. LCCN QC174.5 M28; QC721 .M26. URL `http://adsabs.harvard.edu/abs/1967mbpq.book.....M`.

Stoddart:1967:ETF

[106] J. C. Stoddart and N. H. March. Exact Thomas–Fermi method in perturbation theory. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 299(1457):279–286, June 14, 1967. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/2415728`.

Durkan:1968:LEI

[107] J. Durkan, R. J. Elliott, and N. H. March. Localization of electrons in impure semiconductors by a magnetic field. *Reviews of Modern Physics*, 40(4):812–815, October 1, 1968. CODEN RMPHAT. ISSN 0034-6861 (print), 1538-4527 (electronic), 1539-0756. URL `http://link.aps.org/doi/10.1103/RevModPhys.40.812`; `http://rmp.aps.org/abstract/RMP/v40/i4/p812_1`.

Durkan:1968:MFD

[108] J. Durkan and N. H. March. Magnetic field dependent impurity states in n-type InSb. *Journal of Physics C: Solid State Physics*, 1(4):1118–1127, ???? 1968. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/1/i=4/a=331`.

Gilvarry:1968:ARB

[109] J. J. Gilvarry, R. E. Hartle, and N. H. March. Asymptotic relations between Thomas–Fermi–Dirac and Thomas–Fermi atom models. I. Case

of low atomic number. *Bulletin of the American Physical Society*, 13(1): 80–??, 1968. CODEN BAPSA6. ISSN 0003-0503.

Keyes:1968:DMN

[110] R. W. Keyes, N. H. March, H. Brooks, and L. J. Neuringe. Discussion of March, N. H. *Reviews of Modern Physics*, 40(4):814–??, 1968. CODEN RMPHAT. ISSN 0034-6861 (print), 1538-4527 (electronic), 1539-0756.

March:1968:LEC

[111] N. H. March and J. C. Stoddart. Localization of electrons in condensed matter. *Reports on Progress in Physics*, 31(2):533–621, July 1968. CODEN RPPHAG. ISSN 0034-4885 (print), 1361-6633 (electronic). URL `http://adsabs.harvard.edu/abs/1968RPPh...31..533M; http://stacks.iop.org/0034-4885/31/i=2/a=303`.

March:1968:LM

[112] Norman H. (Norman Henry) March. *Liquid Metals*, volume 15 of *International series of monographs in natural philosophy.* Pergamon Press, New York, NY, USA; Oxford, UK, 1968. ISBN 0-08-003229-X. vii + 133 pp. LCCN QD171 .M315; QD171 .M28 1968.

March:1968:MBP

[113] N. H. March, W. H. Young, S. Sampanthar, and John L. Gammel. The many-body problem in quantum mechanics. *Physics Today*, 21(7):89–91, ???? 1968. CODEN PHTOAD. ISSN 0031-9228 (print), 1945-0699 (electronic). URL `http://link.aip.org/link/?PTO/21/89/1`.

Stoddart:1968:TBM

[114] J. C. Stoddart, D. Hilton, and N. H. March. Tight-binding method for pseudoatoms based on the Bloch density matrix. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 304(1476):99–112, April 2, 1968. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/2416001`.

Woodhead-Galloway:1968:DCF

[115] J. Woodhead-Galloway, T. Gaskell, and N. H. March. Direct correlation function and equation of state of fluid argon. *Journal of Physics C: Solid State Physics*, 1(2):271–285, ???? 1968. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/1/i=2/a=301`.

Hebborn:1969:WND

[116] J. E. Hebborn and N. H. March. Wave number dependent orbital diamagnetism of electrons in metals. *Physics Letters A*, A 29(8):432–??, 1969. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

March:1969:BRB

[117] N. H. March. Book review: *Three-Particle Scaftering in Quantum Mechanics. Proceedings of the Texas A&M Conference, College Station, 1968*, J. Gillespie and J. Nuttall, Eds. Benjamin, New York, 1968. x + 462 pp., illus. $15. *Science*, 164(3881):819, May 16, 1969. CODEN SCIEAS. ISSN 0036-8075 (print), 1095-9203 (electronic). URL `http://www.sciencemag.org/content/164/3881/819.1.citation`.

March:1969:WND

[118] N. H. March. Wave number dependent orbital diamagnetism of electrons in metals. *Physics Letters A*, 29(8):432–433, June 30, 1969. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960169905039`.

Stoddart:1969:ESP

[119] J. C. Stoddart, N. H. March, and M. J. Stott. Electronic structure of point defects and impurities in metals. *Physical Review*, 186(??):683–??, October 15, 1969. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRev.186.683`.

Hebborn:1970:OSM

[120] J. E. Hebborn and N. H. March. Orbital and spin magnetism and dielectric response of electrons in metals. *Advances in physics*, 19(78):175–??, 1970. CODEN ADPHAH. ISSN 0001-8732 (print), 1460-6976 (electronic).

Jones:1970:LDX

[121] W. Jones and N. H. March. Lattice dynamics, X-ray scattering and one-body potential theory. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 317(1530):359–366, June 23, 1970. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/77587`.

March:1970:NAF

[122] N. H. March. Non-analyticity of frequency spectra in classical liquids. *Physics Letters A*, 33(7):460–461, December 14, 1970. CODEN PY-

LAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960170906080`.

Rousseau:1970:IOE

[123] J. Rousseau, J. C. Stoddart, and N. H. March. Influence of order on electron states in metals. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 317(1529):211–225, June 16, 1970. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/77667`.

Stoddart:1970:OBP

[124] J. C. Stoddart, A. M. Beattie, and N. H. March. One-body potentials including electron interactions, and electron densities in crystals. *International Journal of Quantum Chemistry*, 5(S4):35–53, January 19–24, 1970. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular, and Solid-State Theory and Quantum Biology.

Stott:1970:VCP

[125] M. J. Stott, S. Baranovsky, and N. H. March. Vacancies in close-packed polyvalent metals. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 316(1525):201–222, April 14, 1970. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/77712`.

Beattie:1971:EEF

[126] A. M. Beattie, J. C. Stoddart, and N. H. March. Exchange energy as functional of electronic density from Hartree–Fock theory of inhomogeneous electron gas. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 326(1564):97–116, December 21, 1971. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/77908`.

Brown:1971:IEC

[127] R. C. Brown, J. Worster, N. H. March, R. C. Perrin, and R. Bullough. Isotope effects in close-packed metals and in alkali halides. *Zeitschrift für Naturforschung Teil A: Astrophysik, Physik, und Physikalische Chemie*, A 26(1):77–??, 1971. CODEN ZENAAU. ISSN 0044-3166.

Brown:1971:IED

[128] R. C. Brown, J. Worster, N. H. March, R. C. Perrin, and R. Bullough. Isotope effects and defect energetics for diffusion in Na and NaCl. *Philo-*

sophical Magazine Series 8 (1956–1977), 23(183):555–??, 1971. CODEN PHMAA4. ISSN 0031-8086.

Care:1971:ECW

[129] C. M. Care and N. H. March. Electrical conduction in the Wigner lattice in n-type InSb in a magnetic field. *Journal of Physics C: Solid State Physics*, 4(18):L372–L375, ???? 1971. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/4/i=18/a=005`.

March:1971:DFT

[130] N. H. March. Density-functional theory of magnetic instabilities in metals. *Annals of Physics*, 64(1):174–210, May 10, 1971. CODEN APNYA6. ISSN 0003-4916 (print), 1096-035X (electronic). URL `http://www.sciencedirect.com/science/article/pii/0003491671902831`.

Robinson:1971:IFW

[131] G. Robinson, N. H. March, and R. C. Perrin. Interatomic forces over a wide range of nuclear separations. *International Journal of Quantum Chemistry*, 5(S5):261–276, January 18–23, 1971. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular and Solid-State Theory and Quantum Biology.

Stoddart:1971:DFT

[132] J. C. Stoddart and N. H. March. Density-functional theory of magnetic instabilities in metals. *Annals of Physics*, 64(1):174–??, 1971. CODEN APNYA6. ISSN 0003-4916 (print), 1096-035x (electronic).

Stoddart:1971:LME

[133] J. C. Stoddart, N. H. March, and D. Wiid. Local moments, electron correlation and density functional theory. *International Journal of Quantum Chemistry*, 5(S5):745–762, January 18–23, 1971. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular and Solid-State Theory and Quantum Biology.

Bhatia:1972:LCE

[134] A. B. Bhatia and N. H. March. Liquidus curves for eutectic systems. *Physics Letters A*, A 41(5):397–??, 1972. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Brown:1972:TPL

[135] R. C. Brown and N. H. March. Transport properties of liquid metal hydrogen under high pressures. *Physics of the Earth and Planetary Interiors*, 6(??):206–209, ???? 1972. CODEN PEPIAM. ISSN 0031-9201 (print), 1872-7395 (electronic). URL `http://adsabs.harvard.edu/abs/1972PEPI....6..206B`.

March:1972:CPE

[136] N. H. March. Chemical potential and energies per particle in homogeneous systems. *Physics Letters A*, 39(2):150–??, April 24, 1972. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960172910584`.

March:1972:CZA

[137] N. H. March, P. Gibbs, G. M. Stocks, and J. S. Faulkner. Copper–zinc alloys as treated by virtual crystal and related approximations. *Journal de Physique, Colloque*, 33(C3):259–267, May/June 1972. CODEN JPQCAK. ISSN 0449-1947. URL `http://www.europhysicsnews.org/articles/jphyscol/abs/1972/03/jphyscol197233C340/jphyscol197233C340.html`.

March:1972:EEC

[138] N. H. March and J. C. Stoddart. Effects of electron correlation with particular reference to charge and momentum densities in crystals. In Herman et al. [1519], pages 205–218. ISBN 0-306-30583-6, 1-4684-1979-X (print), 1-4684-1977-3 (e-book). LCCN QC176-176.9. URL `http://link.springer.com/chapter/10.1007/978-1-4684-1977-1_17`.

March:1972:KFE

[139] N. H. March and J. S. Rousseau. Kanzaki forces and electron theory of displaced charge in relaxed defect lattices. In Pierre C. Gehlen, Joe R. Beeler, Jr., and Robert I. Jaffee, editors, *Interatomic Potentials and Simulation of Lattice Defects*, pages 111–138. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1972. ISBN 1-4684-1992-7 (print), 1-4684-1992-7 (e-book). URL `http://link.springer.com/chapter/10.1007/978-1-4684-1992-4_5`.

March:1972:LCE

[140] N. H. March. Liquidus curves for eutectic systems. *Physics Letters A*, 41(5):397–399, October 23, 1972. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960172903763`.

March:1972:NRT

[141] N. H. March and R. J. White. Non-relativistic theory of atomic and ionic binding energies for large atomic number. *Journal of Physics B: Atomic and Molecular Physics*, 5(3):466–475, ???? 1972. CODEN JPAMA4. ISSN 0953-4075 (print), 1361-6455 (electronic). URL `http://stacks.iop.org/0022-3700/5/i=3/a=011`.

March:1972:PPP

[142] N. H. March and M. P. Tosi. Plasmons propagating in periodic lattices and their dispersion. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 330(1582):373–387, October 17, 1972. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/78193`.

March:1972:TPL

[143] N. H. March. Transport properties of liquid metal hydrogen under high pressures. *Physics of the Earth and Planetary Interiors*, 6(1-3):206–209, January 10, 1972. CODEN PEPIAM. ISSN 0031-9201 (print), 1872-7395 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0031920172900556`.

Robinson:1972:EVW

[144] G. Robinson and N. H. March. Effective van der Waals interaction between rare gas atoms in a dense classical fluid. *Journal of Physics C: Solid State Physics*, 5(18):2553–2561, ???? 1972. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/5/i=18/a=004`.

Rousseau:1972:ERL

[145] J. S. Rousseau, J. C. Stoddart, and N. H. March. The electrical resistivity of liquid metals. *Journal of Physics C: Solid State Physics*, 5(14):L175–L177, ???? 1972. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/5/i=14/a=001`.

Bhatia:1973:CFC

[146] A. B. Bhatia, W. H. Hargrove, and N. H. March. Concentration fluctuations in conformal solutions and partial structure factor in alloys. *Journal of Physics C: Solid State Physics*, 6(4):621–630, ???? 1973. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/6/i=4/a=008`.

Brown:1973:RBB

[147] R. C. Brown and N. H. March. Relation between bulk compressibility and surface energy of liquid metals. *Journal of Physics C: Solid State Physics*, 6(19):L363–L366, ???? 1973. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/6/i=19/a=002`.

Claesson:1973:MEM

[148] A. Claesson, W. Jones, G. G. Chell, and N. H. March. Many-electron and many-body force effects in the lattice dynamics of metals and semiconductors. *International Journal of Quantum Chemistry*, 7(S7):629–652, January 21–27, 1973. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular and Solid-State Theory and Quantum Biology.

Dancz:1973:ESD

[149] J. Dancz, S. F. Edwards, and N. H. March. The electronic structure of a disordered network. *Journal of Physics C: Solid State Physics*, 6(5): 873–879, ???? 1973. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/6/i=5/a=016`.

Jones:1973:NED

[150] William Jones and Norman H. (Norman Henry) March. *Non-Equilibrium and Disorder*, volume 27 of *Interscience monographs and texts in physics and astronomy*. Wiley-Interscience, New York, NY, USA, 1973. ISBN 0-471-44901-6. xv + 681–1301 pp. LCCN QC176.A1 J57 vol. 2; QC176.

Jones:1973:PLE

[151] William Jones and Norman H. (Norman Henry) March. *Perfect Lattices in Equilibrium*, volume 27 of *Interscience monographs and texts in physics and astronomy*. Wiley-Interscience, New York, NY, USA, 1973. ISBN 0-471-44900-8. xvi + 680 pp. LCCN QC176.A1 J57 1973b vol. 1.

Jones:1973:TSSa

[152] William Jones and Norman H. (Norman Henry) March. *Theoretical Solid State Physics*, volume 27 of *Interscience monographs and texts in physics and astronomy*. Wiley-Interscience, New York, NY, USA, 1973. ISBN 0-471-44900-8 (vol. 1). ???? pp. LCCN QC176.A1 J57 1973b; QC176 .J79 1984a.

Jones:1973:TSSb

[153] William Jones and Norman H. (Norman Henry) March. *Theoretical Solid State Physics*, volume 27 of *Interscience monographs and texts in physics*

and astronomy. Wiley-Interscience, New York, NY, USA, 1973. ISBN 0-471-44901-6 (vol. 2). ???? pp. LCCN QC176.A1 J57.

March:1973:DCF

[154] N. H. March. Displaced charge and formation energies of point defects in metals. *Journal of Physics F: Metal Physics*, 3(2):233–247, February 1973. CODEN JPFMAT. ISSN 0305-4608. URL `http://stacks.iop.org/0305-4608/3/i=2/a=002`.

March:1973:ECFa

[155] N. H. March, M. P. Tosi, and A. B. Bhatia. Electronic correlation functions at long wavelength in liquid metal alloys. *Journal of Physics C: Solid State Physics*, 6(4):L59–L63, ???? 1973. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/6/i=4/a=001`.

March:1973:ECFb

[156] N. H. March. Electronic correlation functions in liquid metals and alloys. *Physics of the Earth and Planetary Interiors*, 6(1-3):230–236, January 10, 1973. CODEN PEPIAM. ISSN 0031-9201 (print), 1872-7395 (electronic). URL `http://www.sciencedirect.com/science/article/pii/B9780124603509500412`.

March:1973:LEF

[157] N. H. March and M. P. Tosi. Lattice effects in fast electron-energy losses by plasmon excitation in metals. *Philosophical Magazine Series 8 (1956–1977)*, 28(1):91–102, 1973. CODEN PHMAA4. ISSN 0031-8086.

March:1973:QTP

[158] N. H. March and M. P. Tosi. Quantum theory of pure liquid metals as two-component systems. *Annals of Physics*, 81(2):414–437, December 1973. CODEN APNYA6. ISSN 0003-4916 (print), 1096-035X (electronic). URL `http://www.sciencedirect.com/science/article/pii/0003491673901644`.

Stoney:1973:WDO

[159] P. Stoney and N. H. March. Wavenumber dependent orbital diamagnetism of nearly free electrons. *International Journal of Quantum Chemistry*, 7(S7):569–576, January 21–27, 1973. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular and Solid-State Theory and Quantum Biology.

Tosi:1973:SAS

[160] M. P. Tosi and N. H. March. Small-angle scattering from liquid-metals and alloys and electronic correlation-functions. *Nuovo Cimento della Societa Italiana di Fisica B — General Physics Relativity Astronomy and Mathematical Physics and Methods*, B 15(2):308–319, June 1973. CODEN NIFBAP. ISSN 1594-9982, 1826-9877, 2037-4895. URL `http://link.springer.com/article/10.1007/BF02894788`.

Bhatia:1974:LCE

[161] A. B. Bhatia, N. H. March, and L. Rivaud. Liquid curves of eutectic system Na–K under pressure. *Physics Letters A*, A 47(3):203–204, 1974. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Brown:1974:CVM

[162] J. S. Brown, R. C. Brown, and N. H. March. Covalent versus metallic bond for H_2 molecule outside a metal-surface. *Physics Letters A*, A 47(6): 489–490, 1974. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Brown:1974:FHN

[163] J. S. Brown, R. C. Brown, and N. H. March. Fermi hole near a metal-surface. *Physics Letters A*, A 46(7):463–464, 1974. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Egelstaff:1974:ECF

[164] P. A. Egelstaff, N. H. March, and N. C. McGill. Electron correlation functions in liquids from scattering data. *Canadian Journal of Physics = Journal canadien de physique*, 52(17):1651–1659, ???? 1974. CODEN CJPHAD. ISSN 0008-4204 (print), 1208-6045 (electronic). URL `http://www.nrcresearchpress.com/doi/abs/10.1139/p74-216`.

Grout:1974:PSM

[165] P. J. Grout and N. H. March. Pyroelectricity and strength of many-body forces. *Physics Letters A*, A 47(4):288–290, 1974. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

March:1974:CVM

[166] N. H. March. Covalent versus metallic bond for H_2 molecule outside a metal surface. *Physics Letters A*, 47(6):489–490, May 6, 1974. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960174905908`.

March:1974:FHN

[167] N. H. March. Fermi hole near a metal surface. *Physics Letters A*, 46 (7):463–464, February 11, 1974. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960174909657`.

March:1974:LCE

[168] N. H. March and L. Rivaud. Liquid curves of eutectic system na-K under pressure. *Physics Letters A*, 47(3):203–204, March 25, 1974. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960174900085`.

March:1974:PIE

[169] N. H. March. Plasmons in inhomogeneous electron gases. In Jozef T. Devreese, A. B. Kunz, and T. C. Collins, editors, *Elementary Excitations in Solids, Molecules, and Atoms*, volume 2 of *NATO Advanced Study Institutes Series*, pages 97–115. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1974. ISBN 1-4684-2820-9 (print), 1-4684-2820-9 (e-book). URL `http://link.springer.com/chapter/10.1007/978-1-4684-2820-9_4`.

March:1974:PSM

[170] N. H. March. Pyroelectricity and the strength of many-body forces. *Physics Letters A*, 47(4):288–290, April 8, 1974. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960174901698`.

March:1974:STM

[171] N. H. March and M. P. Tosi. Structure of transition metal chlorides in aqueous solution. *Physics Letters A*, 50(3):224–226, December 2, 1974. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960174907993`.

Parrinello:1974:CDE

[172] M. Parrinello, N. H. March, and M. P. Tosi. Concentration dependence of electrical transport coefficients in conformal liquid metal alloys. *Journal of Physics F: Metal Physics*, 4(6):L142–L144, June 1974. CODEN JPFMAT. ISSN 0305-4608. URL `http://stacks.iop.org/0305-4608/4/i=6/a=004`.

Parrinello:1974:EAT

[173] M. Parrinello, M. P. Tosi, and N. H. March. Excitations and atomic transport in classical binary isotopic fluids. *Journal of Physics C: Solid State Physics*, 7(15):2577–2592, ???? 1974. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/7/i=15/a=008`.

Parrinello:1974:PSF

[174] M. Parrinello, M. P. Tosi, and N. H. March. Partial structure factors and atomic dynamics in conformal solutions. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 341 (1624):91–104, October 29, 1974. CODEN PRLAAZ. ISSN 0080-4630. URL `http://www.jstor.org/stable/78670`.

Stoddart:1974:ECC

[175] J. C. Stoddart, P. Stoney, N. H. March, and I. B. Ortenburger. Exchange and correlation contribution to one-body potential in metallic beryllium. *Nuovo Cimento della Societa Italiana di Fisica B — General Physics Relativity Astronomy and Mathematical Physics and Methods*, B 23(1):15–26, September 1974. CODEN NIFBAP. ISSN 1594-9982, 1826-9877, 2037-4895. URL `http://link.springer.com/article/10.1007/BF02737495`.

Tosi:1974:EED

[176] M. P. Tosi, M. Parrinello, and N. H. March. Electronic effects in dynamical structure of liquid-metals. *Nuovo Cimento della Societa Italiana di Fisica B — General Physics Relativity Astronomy and Mathematical Physics and Methods*, B 23(1):135–171, September 1974. CODEN NIFBAP. ISSN 1594-9982, 1826-9877, 2037-4895. URL `http://link.springer.com/article/10.1007/BF02737503`.

Bhatia:1975:SEP

[177] A. B. Bhatia and N. H. March. Size effects, peaks in concentration fluctuations and liquidus curves of Na-Cs. *Journal of Physics F: Metal Physics*, 5(6):1100–1106, June 1975. CODEN JPFMAT. ISSN 0305-4608. URL `http://stacks.iop.org/0305-4608/5/i=6/a=011`.

Bhatia:1975:SRO

[178] A. B. Bhatia and N. H. March. Short-range order and phase-diagrams of binary-alloys. *Physics Letters A*, A 51(7):401–402, 1975. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Brown:1975:DMH

[179] R. C. Brown, P. J. Dobson, and N. H. March. Is 2-dimensional metallic hydrogen possible on a [111] platinum surface? *Physics Letters A*, 54(3): 207–208, 1975. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Care:1975:EC

[180] C. M. Care and N. H. March. Electron crystallization. *Advances in physics*, 24(1):101–116, 1975. CODEN ADPHAH. ISSN 0001-8732 (print), 1460-6976 (electronic).

Cusack:1975:CMD

[181] S. Cusack and N. H. March. Charge and momentum density in metals and alloys. *International Journal of Quantum Chemistry*, 9(S9):481–496, January 19–25, 1975. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular, and Solid-State Theory and Quantum Statistics.

Goreslavsky:1975:XRR

[182] S. P. Goreslavsky, M. I. Ryazanov, R. C. Brown, and N. H. March. X-ray reflection and electron-density profile at liquid-metal surfaces. *Physics Letters A*, 55(2):123–124, 1975. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Grout:1975:AMC

[183] P. J. Grout and N. H. March. Acoustic-mode contributions to pyroelectric compliance — reply. *Journal of Physics C: Solid State Physics*, 8 (24):L594–L595, 1975. CODEN JPSOAW. ISSN 0022-3719.

Grout:1975:PME

[184] P. J. Grout, N. H. March, and T. L. Thorp. Pyroelectricity: microscopic estimates and upper bounds. *Journal of Physics C: Solid State Physics*, 8(13):2167–2182, ???? 1975. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/8/i=13/a=026`.

Grout:1975:RAM

[185] P. J. Grout and N. H. March. A reply to "Acoustic-mode contributions to pyroelectric compliance" by M. E. Lines. *Journal of Physics C: Solid State Physics*, 8(24):L594–L595, ???? 1975. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/8/i=24/a=007`.

Handler:1975:LRT

[186] George S. Handler and Norman H. March. Linear response theory and molecular vibrations: The Thomas–Fermi model. *Journal of Chemical Physics*, 63(1):438–442, ???? 1975. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/63/438/1`.

Johnson:1975:WDC

[187] M. W. Johnson, N. H. March, M. Parrinello, M. P. Tosi, and D. I. Page. Wavenumber-dependent concentration fluctuations in liquid mixtures. *Journal of Physics C: Solid State Physics*, 8(6):751–760, ???? 1975. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/8/i=6/a=005`.

March:1975:ERF

[188] N. H. March. Exact resistivity formula for finite-range spherical potential of arbitrary strength. *Philosophical Magazine Series 8 (1956–1977)*, 32 (2):497–499, 1975. CODEN PHMAA4. ISSN 0031-8086.

March:1975:FFO

[189] N. H. March. Form of first-order density matrix for jellium near to the diagonal. *Journal of Physics A (Mathematical and General)*, 8(11):L133–L135, ???? 1975. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/8/i=11/a=004`.

March:1975:KEE

[190] N. H. March. Kinetic emission of electrons from solids by resonant absorption of excitation quanta. *Physics Letters A*, 53(1):69–71, May 19, 1975. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960175903503`.

March:1975:LEE

[191] N. H. March. Localizability of energy and electronic density in molecules and crystals. In Odilon Chalvet, Raymond Daudel, Simon Diner, and Jean Paul Malrieu, editors, *Localization and Delocalization in Quantum Chemistry. Volume I. Atoms and Molecules in the Ground State*, volume 1, pages 115–129. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1975. ISBN 94-010-1778-6 (print), 94-010-1778-6 (e-book). URL `http://link.springer.com/chapter/10.1007/978-94-010-1778-7_12`.

March:1975:QT

[192] N. H. March. Quantum theory. *Nature*, 254(5501):638, April 17, 1975. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `http://www.nature.com/nature/journal/v254/n5501/pdf/254638a0.pdf`.

March:1975:SCF

[193] Norman H. (Norman Henry) March. *Self-Consistent Fields in Atoms: Hartree and Thomas–Fermi Atoms*. Pergamon international library of science, technology, engineering and social studies; Selected readings in physics. Pergamon Press, New York, NY, USA; Oxford, UK, 1975. ISBN 0-08-017819-7, 0-08-017820-0 (fleXicover). ix + 233 pp. LCCN QC173 .M3633 1975. See pages 205–213 for an English translation of [1518].

March:1975:SRO

[194] N. H. March. Short range order and phase diagrams of binary alloys. *Physics Letters A*, 51(7):401–402, April 21, 1975. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/037596017590746X`.

March:1975:TDM

[195] N. H. March. Is two-dimensional metallic hydrogen possible on a 111 platinum surface? *Physics Letters A*, 54(3):207–208, September 8, 1975. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/037596017590167X`.

March:1975:WWD

[196] N. H. March. Watch words for dilettanti. *Nature*, 255(5506):354, May 22, 1975. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic). URL `http://www.nature.com/nature/journal/v255/n5506/pdf/255354a0.pdf`.

March:1975:XRR

[197] N. H. March. X-ray reflection and the electron density profile at liquid metal surfaces. *Physics Letters A*, 55(2):123–124, November 17, 1975. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960175901516`.

Parrinello:1975:HEL

[198] M. Parrinello, M. P. Tosi, and N. H. March. Is Haeffner effect in liquid-metals related to electrical-resistivity of isotopic mixture? *Lettere al*

Nuovo Cimento, 12(16):605–608, April 1975. CODEN NCLTAX. ISSN 0024-1318, 0375-930x, 1827-613x. URL `http://link.springer.com/article/10.1007/BF02780752`.

Perrin:1975:CDL

[199] R. C. Perrin, R. Taylor, and N. H. March. Charge density, local density of states and response functions in body centred cubic lithium metal. *Journal of Physics F: Metal Physics*, 5(8):1490–1501, August 1975. CODEN JPFMAT. ISSN 0305-4608. URL `http://stacks.iop.org/0305-4608/5/i=8/a=008`.

Ryazanov:1975:KEE

[200] M. I. Ryazanov and N. H. March. Kinetic emission of electrons from solids by resonant absorption of excitation quanta. *Physics Letters A*, A 53(1):69–71, 1975. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Sayers:1975:SXR

[201] C. M. Sayers, N. H. March, A. Dev, D. J. Fabian, and L. M. Watson. Soft X-ray emission study of the screening of Al impurities in Fe. *Journal of Physics F: Metal Physics*, 5(11):L207–L210, November 1975. CODEN JPFMAT. ISSN 0305-4608. URL `http://stacks.iop.org/0305-4608/5/i=11/a=009`.

Bhatia:1976:PDE

[202] A. B. Bhatia, W. B. Leung, and N. H. March. Phase-diagrams and elementary excitations. *Physics Letters A*, 58(3):205–206, 1976. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Cusack:1976:EEP

[203] S. Cusack, N. H. March, M. Parrinello, and M. P. Tosi. Electron-electron pair correlation function in solid and molten nearly-free electron metals. *Journal of Physics F: Metal Physics*, 6(5):749–765, May 1976. CODEN JPFMAT. ISSN 0305-4608. URL `http://stacks.iop.org/0305-4608/6/i=5/a=017`.

DeAngelis:1976:LMP

[204] U. De Angelis and N. H. March. Liquid-metal pair potentials from structure data. *Physics Letters A*, 56(4):287–288, April 5, 1976. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Gillan:1976:SCL

[205] M. Gillan, B. Larsen, M. P. Tosi, and N. H. March. Structure of classical liquid of charged hard spheres and point ions. *Journal of Physics C:*

Solid State Physics, 9(6):889–907, ???? 1976. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/9/i=6/a=010`.

Grout:1976:IEV

[206] P. J. Grout and N. H. March. Internal energy versus moment for ferromagnets and pyroelectrics. *Physical Review B: Solid State*, 14(??): 4027–??, November 1, 1976. CODEN PLRBAQ. ISSN 0556-2805. URL `http://link.aps.org/doi/10.1103/PhysRevB.14.4027`.

Grout:1976:LTB

[207] P. J. Grout and N. H. March. Low-temperature behavior of pyroelectricity. *Physical Review Letters*, 37(??):791–??, September 20, 1976. CODEN PRLTAO. ISSN 0031-9007 (print), 1079-7114 (electronic), 1092-0145. URL `http://link.aps.org/doi/10.1103/PhysRevLett.37.791`.

Johnson:1976:SEP

[208] M. W. Johnson, N. H. March, B. McCoy, S. K. Mitra, D. I. Page, and R. C. Perrin. Structure and effective pair interaction in liquid nickel. *Philosophical Magazine Series 8 (1956–1977)*, 33(1):203–206, 1976. CODEN PHMAA4. ISSN 0031-8086.

Leung:1976:PPD

[209] W. B. Leung, N. H. March, and H. Motz. Primitive phase-diagram for hydrogen. *Physics Letters A*, 56(6):425–426, 1976. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Mahanty:1976:CBW

[210] J. Mahanty and N. H. March. Chemical bonds well outside metal surfaces. *Journal of Physics C: Solid State Physics*, 9(15):2905–2909, ???? 1976. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/9/i=15/a=013`.

Mahanty:1976:NIS

[211] J. Mahanty, D. D. Richardson, and N. H. March. Neutron inelastic scattering from covered surfaces: hydrogen on platinum. *Journal of Physics C: Solid State Physics*, 9(18):3421–3436, ???? 1976. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/9/i=18/a=010`.

March:1976:ADLa

[212] Norman H. (Norman Henry) March and M. P. (Mario P) Tosi. *Atomic Dynamics in Liquids*. MacMillan Publishing Company, New York, NY,

USA, 1976. ISBN 0-333-11278-4 (Macmillan). vii + 330 pp. LCCN QC145.2 .M37 1976.

March:1976:ADLb

[213] Norman H. (Norman Henry) March and M. P. (Mario P) Tosi. *Atomic Dynamics in Liquids*. John Wiley, New York, NY, USA, 1976. ISBN 0-470-15145-5 (Wiley). vii + 330 pp. LCCN QC145.2 .M37 1976.

March:1976:DME

[214] N. H. March. Density matrices and exchange hole for metal surfaces. *Annals of Physics*, 97(1):136–159, March 29, 1976. CODEN APNYA6. ISSN 0003-4916 (print), 1096-035X (electronic). URL `http://www.sciencedirect.com/science/article/pii/0003491676902244`.

March:1976:LED

[215] N. H. March, S. W. Wilkins, and J. E. Tibballs. Localized electron-densities and microstructure of metallic alloys from scattering experiments. *Crystal Lattice Defects*, 6(4):253–270, 1976. CODEN CLADA8. ISSN 0011-2305.

March:1976:LMP

[216] N. H. March. Liquid metal pair potentials from structure data. *Physics Letters A*, 56(4):287–288, April 5, 1976. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960176903108`.

March:1976:NRB

[217] N. H. March. Non-relativistic binding energies for heavy ions. *Journal of Physics B: Atomic and Molecular Physics*, 9(5):L73–L76, ???? 1976. CODEN JPAMA4. ISSN 0953-4075 (print), 1361-6455 (electronic). URL `http://stacks.iop.org/0022-3700/9/i=5/a=002`.

March:1976:PDE

[218] N. H. March. Phase diagrams and elementary excitations. *Physics Letters A*, 58(3):205–206, August 23, 1976. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960176902917`.

March:1976:PFD

[219] N. H. March. Partition function of a disordered assembly. *Physics Letters A*, 59(4):249–250, December 13, 1976. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960176907817`.

March:1976:PPD

[220] N. H. March and H. Motz. Primitive phase diagram for hydrogen. *Physics Letters A*, 56(6):425–426, May 3, 1976. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960176907131`.

March:1976:SEL

[221] N. H. March. Structure and excitations in liquid and solid surfaces. *Physics Reports*, 24(2):77–169, March 29, 1976. CODEN PRPLCM. ISSN 0370-1573 (print), 1873-6270 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0370157376900235`.

March:1976:SIM

[222] N. H. March. Scattering intensities and model partial structure factors in vitreous silica and amorphous silicon. *Physics Letters A*, 57(1): 99–101, May 17, 1976. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960176904709`.

Moore:1976:DME

[223] I. D. Moore and N. H. March. Density matrices and exchange hole for metal surfaces. *Annals of Physics*, 97(1):136–159, ???? 1976. CODEN APNYA6. ISSN 0003-4916 (print), 1096-035x (electronic).

Parrinello:1976:TWC

[224] M. Parrinello and N. H. March. Thermodynamics of Wigner crystallization. *Journal of Physics C: Solid State Physics*, 9(6):L147–L150, ???? 1976. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/9/i=6/a=003`.

Stenhouse:1976:SIM

[225] B. Stenhouse, P. J. Grout, and N. H. March. Scattering intensities and model partial structure factors in vitreous silica and amorphous silicon. *Physics Letters A*, 57(1):99–101, 1976. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Watson:1976:ETC

[226] B. W. Watson, R. E. Woodrough, and N. H. March. The effect of temperature on canine papillary muscle. *Biophysics of structure and mechanism*, 2(2):99–104, ???? 1976. CODEN BSMHBH. ISSN 0340-1057. URL `http://link.springer.com/article/10.1007/BF00863703`.

Bhuiyan:1977:PSF

[227] L. B. Bhuiyan, N. H. March, M. C. Abramo, C. Caccamo, and G. Pizzimenti. Partial structure factors of an ionic model of liquid UO_2. *Molecular Physics*, 34(3):755–764, ???? 1977. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Giaquinta:1977:LSH

[228] P. V. Giaquinta, N. H. March, M. Parrinello, and M. P. Tosi. Linear specific heat of disordered solids at low temperatures. *Physical Review Letters*, 39(??):41–??, July 4, 1977. CODEN PRLTAO. ISSN 0031-9007 (print), 1079-7114 (electronic), 1092-0145. URL `http://link.aps.org/doi/10.1103/PhysRevLett.39.41`.

Leung:1977:RSH

[229] W. B. Leung and N. H. March. Resistivity of a structureless hydrogen plasma due to weak electron-ion interaction. *Plasma Physics*, 19(3):277–281, ???? 1977. CODEN PLPHBZ. ISSN 0032-1028 (print), 1879-2979 (electronic). URL `http://stacks.iop.org/0032-1028/19/i=3/a=008`.

March:1977:DSN

[230] N. H. March, P. V. Giaquinta, M. Parrinello, and M. P. Tosi. Diffusion and structure of nickel chloride in aqueous solution. *Chemical Physics*, 26(2):237–241, December 1, 1977. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic). URL `http://www.sciencedirect.com/science/article/pii/030101047787047X`.

March:1977:ESL

[231] N. H. March. Electron states in liquid metals: especially optical and magnetic properties. *Canadian Journal of Chemistry == Journal canadien de chimie*, 55(11):2165–2187, ???? 1977. CODEN CJCHAG. ISSN 0008-4042 (print), 1480-3291 (electronic). URL `http://www.nrcresearchpress.com/doi/abs/10.1139/v77-300`.

March:1977:GIH

[232] N. H. March and C. J. Wright. Geometry and interactions of hydrogen outside a platinum (111) surface. *Physics Letters A*, 64(2):231–234, December 12, 1977. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960177907265`.

March:1977:IBT

[233] N. H. March and I. D. Moore. Interaction between two hydrogen atoms approaching a metal surface. *Surface Science*, 69(1):133–143,

December 1, 1977. CODEN SUSCAS. ISSN 0039-6028 (print), 1879-2758 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0039602877901650`.

March:1977:OBP

[234] N. H. March. One-body potentials in crystals. In Phariseau and Scheire [1523], pages 236–273. ISBN 0-306-35724-0, 1-4684-2813-6 (print), 1-4684-2811-X (e-book). LCCN QC176.8.E4 N34 1976. URL `http://link.springer.com/book/10.1007/978-1-4684-2811-7`.

March:1977:ODD

[235] N. H. March. One-dimensional density-potential relation for independent fermions in a local density approximation. *Journal of Chemical Physics*, 67(12):5970, ???? 1977. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/67/5970/1`.

March:1977:PSG

[236] N. H. March. Partial summation of gradient expansion of canonical density matrix. *Physics Letters A*, 64(2):185–186, December 12, 1977. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960177907101`.

March:1977:RBT

[237] N. H. March. Relation between the total energy and eigenvalue sum for neutral atoms and molecules. *Journal of Chemical Physics*, 67(10):4618–4619, ???? 1977. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/67/4618/1`.

March:1977:SP

[238] N. H. March. Surface phenomena. In Asghar Qadir Riazuddin, editor, *Physics and Contemporary Needs*, volume 1, pages 53–95. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1977. ISBN 1-4684-2429-7 (print), 1-4684-2427-0 (e-book). URL `http://link.springer.com/chapter/10.1007/978-1-4684-2427-0_2`.

Mills:1977:DSN

[239] R. Mills, N. H. March, P. V. Giaquinta, M. Parrinello, and M. P. Tosi. Diffusion and structure of nickel chloride in aqueous-solution. *Chemical Physics*, 26(2):237–241, ???? 1977. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic).

Parrinello:1977:ERL

[240] M. Parrinello, N. H. March, and M. P. Tosi. Electrical resistivity of liquid rare-earth metals. *Il Nuovo Cimento B Series 11*, 39(1):233–247, May 11, 1977. CODEN NCIBAW. ISSN 0369-3554 (print), 1826-9877 (electronic). URL `http://link.springer.com/article/10.1007/BF02738191`.

Parrinello:1977:PSH

[241] M. Parrinello, E. Tosatti, N. H. March, and M. P. Tosi. Photoelectron spectroscopy and hole-electron valence bound state in crystalline xenon. *Lettere al Nuovo Cimento*, 18(11):341–345, March 12, 1977. CODEN NCLTAX. ISSN 0024-1318, 0375-930X, 1827-613X. URL `http://link.springer.com/article/10.1007/BF02784916`.

Sayers:1977:SXR

[242] C. M. Sayers, N. H. March, L. M. Watson, and D. J. Fabian. On the soft X-ray emission from Fe–Al alloys. *Journal of Physics F: Metal Physics*, 7(3):L77–L79, March 1977. CODEN JPFMAT. ISSN 0305-4608. URL `http://stacks.iop.org/0305-4608/7/i=3/a=005`.

Stenhouse:1977:CBE

[243] B. Stenhouse, P. J. Grout, N. H. March, and J. Wenzel. Chemical bonding effects on diffraction intensities in amorphous silicon and carbon. *Philosophical Magazine Series 8 (1956–1977)*, 36(1):129–145, ???? 1977. CODEN PHMAA4. ISSN 0031-8086.

Bhatia:1978:GER

[244] A. B. Bhatia, N. H. March, and J. Sutton. Gradient expansion result for surface tension of binary liquid mixtures. *Journal of Chemical Physics*, 69(5):2258–2259, ???? 1978. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/69/2258/1`.

Bhatia:1978:STC

[245] A. B. Bhatia and N. H. March. Surface tension, compressibility, and surface segregation in liquid binary alloys. *Journal of Chemical Physics*, 68(10):4651–4656, ???? 1978. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/68/4651/1`.

Bhatia:1978:TLS

[246] A. B. Bhatia and N. H. March. Theory of liquid surface tension–bulk modulus relation. *Journal of Chemical Physics*, 68(4):1999–2000, ????

1978. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/68/1999/1`.

Ferraz:1978:MCW

[247] A. Ferraz, N. H. March, and M. Suzuki. Melting curve of Wigner electron crystal. *Physics and Chemistry of Liquids*, 8(3):153–156, ???? 1978. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Ferraz:1978:MRP

[248] A. Ferraz, P. J. Grout, and N. H. March. Model results for pi-electrons in polyenes. *Physics Letters A*, 66(2):155–156, ???? 1978. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Giaquinta:1978:PLF

[249] P. V. Giaquinta, N. H. March, and M. P. Tosi. Power law frequency dependent dielectric function and nonanalyticity properties. *Journal of Chemical Physics*, 68(6):2621–2625, ???? 1978. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/68/2621/1`.

Grout:1978:LTB

[250] P. J. Grout, N. H. March, and Y. Ohmura. Low-temperature behavior of pyroelectric glasses. *Applied Physics Letters*, 32(8):453–454, ???? 1978. CODEN APPLAB. ISSN 0003-6951 (print), 1077-3118 (electronic), 1520-8842. URL `http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4847290; http://link.aip.org/link/?APL/32/453/1`.

March:1978:AFF

[251] N. H. March. Average force and force correlation formulas for momentum transfer cross section. *Journal of Mathematical Physics*, 19(10):2023, October 1978. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL `http://jmp.aip.org/resource/1/jmapaq/v19/i10/p2023_s1; http://link.aip.org/link/?JMP/19/2023/1`.

March:1978:BLO

[252] N. H. March. Bound on lowest-order gradient correction in kinetic energies of atoms. *Physics Letters A*, 66(4):285–286, May 29, 1978. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960178902384`.

March:1978:BSD

[253] N. H. March. Bonding, superlattices and diffraction from chrystals. *Physics Letters A*, 68(3–4):351–354, October 16, 1978. CODEN PY-

LAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/0375960178905297.

March:1978:CES

[254] N. H. March. Correlation energy in solids. In André et al. [1524], pages 49–73. ISBN 94-009-9814-7 (print), 94-009-9812-0 (e-book). URL http://link.springer.com/chapter/10.1007/978-94-009-9812-4_4.

March:1978:EXR

[255] N. H. March and S. W. Wilkins. Elastic X-ray scattering from solids containing non-rigid pseudoatoms. *Acta crystallographica. Section A*, 34 (1):19–26, ???? 1978. CODEN ACACBN. ISSN 1600-5724.

March:1978:MRE

[256] N. H. March. Model results for π electrons in polyenes. *Physics Letters A*, 66(2):155–156, May 1, 1978. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/0375960178900257.

March:1978:PDSa

[257] N. H. March. Point defect-solute interactions in metals. *Physics Letters A*, 374(46):490–520, February 18, 1978. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/0022311578902623.

March:1978:PDSb

[258] N. H. March. Point defect-solute interactions in metals. *Journal of Nuclear Materials*, 69–7(1–2):490–520, ???? 1978. CODEN JNUMAM. ISSN 0022-3115 (print), 1873-4820 (electronic).

March:1978:RBN

[259] N. H. March and M. S. Yusaf. Relation between non-relativistic neutral atom and ionic binding energies. *Physics Letters A*, 67(5-6): 342–344, September 4, 1978. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/0375960178903250.

Matthai:1978:FFB

[260] C. C. Matthai, P. J. Grout, and N. H. March. Force fields in *d*-band metals. *International Journal of Quantum Chemistry*, 14(S12):443–459, March 12–18, 1978. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Sym-

posium on Atomic, Molecular, and Solid-state Theory, Collision Phenomena, and Computational Methods.

Tosi:1978:IMF

[261] M. P. Tosi and N. H. March. Ion migration and frequency-dependent dielectric loss. *Physics and Chemistry of Liquids*, 8(3):143–151, ???? 1978. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Bhatia:1979:SMT

[262] A. B. Bhatia and N. H. March. Statistical mechanical theory of liquid surface-tension. *Physics and Chemistry of Liquids*, 9(1):1–9, ???? 1979. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Ferraz:1979:AMC

[263] A. Ferraz, N. H. March, and M. Suzuki. Approximate melting curve of Wigner electron crystal. *Physics and Chemistry of Liquids*, 9(1):59–65, ???? 1979. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Ferraz:1979:ELR

[264] A. Ferraz and N. H. March. Electrical-resistivity of liquid-metals in regime of short mean free-path. *Physics and Chemistry of Liquids*, 8 (4):271–278, ???? 1979. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Ferraz:1979:LMN

[265] A. Ferraz and N. H. March. Liquid-phase metal non metal transition in carbon. *Physics and Chemistry of Liquids*, 8(4):289–297, ???? 1979. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Flores:1979:ADC

[266] F. Flores, N. H. March, Y. Ohmura, and A. M. Stoneham. Asymptotic displaced charge round impurities in metal crystals with and without surfaces. *The Journal of Physics and Chemistry of Solids*, 40(7):531–537, ???? 1979. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Lawes:1979:ELD

[267] G. P. Lawes and N. H. March. Exact local density method for linear harmonic oscillator. *Journal of Chemical Physics*, 71(2):1007–1009, ???? 1979. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/71/1007/1`.

March:1979:ADC

[268] N. H. March, Y. Ohmura, and A. M. Stoneham. Asymptotic displaced charge round impurities in metal crystals with and without surfaces. *The Journal of Physics and Chemistry of Solids*, 40(7):531–537, June 13, 1979. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369779900817`.

March:1979:BPI

[269] N. H. March and Y. Tomishima. Behavior of positive ions in extremely strong magnetic fields. *Physical Review D (Particles and Fields)*, 19(??): 449–450, January 15, 1979. CODEN PRVDAQ. ISSN 0556-2821 (print), 1089-4918 (electronic), 1538-4500 (CD-ROM). URL `http://link.aps.org/doi/10.1103/PhysRevD.19.449`.

March:1979:CPE

[270] N. H. March. Chemical potential and electronegativity in terms of electron density. *Journal of Chemical Physics*, 71(2):1004–1006, ???? 1979. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/71/1004/1`.

March:1979:EDP

[271] N. H. March. Exact density–potential relation for fermions in one dimension. *Journal of Chemical Physics*, 70(1):587–588, ???? 1979. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/70/587/1`.

March:1979:MLA

[272] N. H. March and C. M. Sayers. Magnetic-properties of liquid-metal alloys. *Advances in physics*, 28(1):1–47, ???? 1979. CODEN ADPHAH. ISSN 0001-8732 (print), 1460-6976 (electronic).

March:1979:PTF

[273] N. H. March, M. Suzuki, and M. Parrinello. Phenomenological theory of first- and second-order metal-insulator transitions at absolute zero. *Physical Review B: Condensed Matter and Materials Physics*, 19(??): 2027–??, February 15, 1979. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.19.2027`.

Mucci:1979:RNN

[274] J. F. Mucci and N. H. March. Regularities in nuclear–nuclear potential energy of molecules at equilibrium. *Journal of Chemical Physics*, 71(12):

5270–5275, ???? 1979. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/71/5270/1`.

Mucci:1979:TDR

[275] J. F. Mucci and N. H. March. Theory of the deviation from the Ruedenberg energy relation for molecules. *Journal of Chemical Physics*, 71(3): 1495–1497, ???? 1979. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/71/1495/1`.

Bhatia:1980:TSL

[276] A. B. Bhatia, N. H. March, and M. P. Tosi. Theory of surface-tension in liquid-mixtures. *Physics and Chemistry of Liquids*, 9(3):229–244, ???? 1980. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Brah:1980:EMA

[277] A. S. Brah, L. Virdhee, and N. H. March. Electron-scattering by molten aluminum. *Philosophical Magazine B: Physics of Condensed Matter: Statistical Mechanics, Electronic, Optical and Magnetic Properties*, 42 (4):511–515, ???? 1980. CODEN PMABDJ. ISSN 1364-2812 (print), 1463-6417 (electronic).

Dreizler:1980:AFC

[278] R. M. Dreizler and N. H. March. Asymptotic form of the chemical potential and the eigenvalue sum for the hydrogen-like molecule ion. *Zeitschrift für Physik A: Hadrons and Nuclei*, 294(3):203–205, September 1980. CODEN ZPAHEX. ISSN 0939-7922 (print), 1431-5831 (electronic). URL `http://link.springer.com/article/10.1007/BF01438156`.

Ferraz:1980:CWC

[279] A. Ferraz and N. H. March. Classical Wigner crystallization, liquid structure factor peak height and freezing of liquid alkalis. *Solid State Communications*, 36(11):977–978, ???? 1980. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic).

Gabbay:1980:MSI

[280] I. Gabbay and N. H. March. Metal surfaces in interaction with molecular adsorbates. *International Journal of Quantum Chemistry*, 18(S14): 665–679, March 10–20, 1980. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular, and Solid-State Theory, Collision Phenomena, Quantum Statistics, and Computational Methods.

Grout:1980:TLM

[281] P. J. Grout, M. P. Tosi, and N. H. March. Two-level model of dielectric loss in glasses. *Journal of Chemical Physics*, 72(4):2394–2396, ???? 1980. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/72/2394/1`.

Lawes:1980:ADE

[282] G. P. Lawes and N. H. March. An approximate differential equation for calculating the electron density in closed shell atoms and in molecules. *Physica Scripta*, 21(3–4):402–408, ???? 1980. CODEN PHSTBO. ISSN 0031-8949 (print), 1402-4896 (electronic). URL `http://iopscience.iop.org/1402-4896/21/3-4/028`.

March:1980:BAI

[283] N. H. March and M. P. Tosi. Boiling of alkali-halides — an ionic to molecular-phase transition. *Physics and Chemistry of Liquids*, 10(1): 95–97, ???? 1980. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1980:CLS

[284] N. H. March and M. P. Tosi. Charge-charge liquid structure factor and the freezing of alkali-halides. *Physics and Chemistry of Liquids*, 10(2): 185–188, ???? 1980. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1980:CPT

[285] Norman H. March and Robert G. Parr. Chemical potential, Teller's theorem, and the scaling of atomic and molecular energies. *Proceedings of the National Academy of Sciences of the United States of America*, 77(11):6285–6288, November 1980. CODEN PNASA6. ISSN 0027-8424 (print), 1091-6490 (electronic). URL `http://www.jstor.org/stable/9523`.

March:1980:CST

[286] N. H. March, D. D. Richardson, and M. P. Tosi. Correlation of the superionic transition temperature and the Frenkel energy in fluorite crystals. *Solid State Communications*, 35(11):903–905, September 15, 1980. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0038109880910509`.

March:1980:CWC

[287] N. H. March. Classical Wigner crystallization, liquid structure factor peak height and freezing of liquid alkalis. *Solid State Communications*, 36(11):977–978, December 21, 1980. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0038109880911953`.

March:1980:EHP

[288] N. H. March. Energy of heavy positive ions related to eigenvalue sum and chemical potential. *Journal of Chemical Physics*, 72(3):1994–1995, ???? 1980. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/72/1994/1`.

March:1980:IXL

[289] N. H. March and M. P. Tosi. Interpretation of X-ray-diffraction from liquid alkali-metals. *Physics and Chemistry of Liquids*, 10(2):113–119, ???? 1980. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1980:MBI

[290] N. H. March and M. P. Tosi. Melting and boiling from ionic to molecular-phases. *Physics and Chemistry of Liquids*, 10(1):39–47, ???? 1980. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1980:MID

[291] N. H. March. Melting of ionic-crystals, defect energies and fast ion conduction. *Physics and Chemistry of Liquids*, 10(1):1–9, ???? 1980. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1980:RBC

[292] N. H. March and R. F. W. Bader. Relation between chemical and ionization potentials in atoms. *Physics Letters A*, 78(3):242–243, August 4, 1980. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/037596018090081X`.

March:1980:SWM

[293] N. H. March. Shape of a water molecule as function of O–H separation. *Physics Letters A*, 75(5):337–339, February 4, 1980. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960180908336`.

Matthai:1980:SXR

[294] C. C. Matthai, P. J. Grout, and N. H. March. Study of X-ray scattering in Be using Wannier functions. *Journal of Physics F: Metal Physics*, 10 (7):1621–1626, July 1980. CODEN JPFMAT. ISSN 0305-4608. URL `http://stacks.iop.org/0305-4608/10/i=7/a=028`.

Mccaskill:1980:DAI

[295] J. S. Mccaskill and N. H. March. Dynamics of adatoms interacting with metals and metal surfaces: The validity of the description given by Kramers' equation. *International Journal of Quantum Chemistry*, 18 (S14):681–693, March 10–20, 1980. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular, and Solid-State Theory, Collision Phenomena, Quantum Statistics, and Computational Methods.

Yusaf:1980:AFA

[296] M. S. Yusaf, G. P. Lawes, and N. H. March. Asymptotic forms of atomic scattering factors and momentum densities. *International Journal of Quantum Chemistry*, 17(5):833–844, May 1980. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Alonso:1981:RRS

[297] J. A. Alonso and N. H. March. Relation of regular solution theory of liquid-metal alloys to Miedema work. *Physics and Chemistry of Liquids*, 11(2):135–139, ???? 1981. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Baird:1981:TSV

[298] J. K. Baird, J. S. McCaskill, and N. H. March. On the theory of the Stern–Volmer coefficient for dense fluids. *Journal of Chemical Physics*, 74(12):6812–6816, ???? 1981. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/74/6812/1`.

Flores:1981:RRV

[299] F. Flores and N. H. March. Relaxation round vacancies in the alkali-metals. *The Journal of Physics and Chemistry of Solids*, 42(5):439–443, ???? 1981. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Flores:1981:TCE

[300] F. Flores, I. Gabbay, and N. H. March. Trends in chemisorption energies with atomic-number. *Chemical Physics*, 63(3):391–399, ???? 1981. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic).

Grout:1981:MPP

[301] P. J. Grout, N. H. March, and J. W. E. Lewis. A model pyroelectric — properties by computer-simulation. *Ferroelectrics*, 33(1–4):167–172, ???? 1981. CODEN FEROA8. ISSN 0015-0193 (print), 1563-5112 (electronic).

Leavens:1981:FMF

[302] C. R. Leavens, A. H. Macdonald, R. Taylor, A. Ferraz, and N. H. March. Finite mean-free-paths and the electrical-resistivity of liquid simple metals. *Physics and Chemistry of Liquids*, 11(2):115–128, ???? 1981. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1981:AFF

[303] N. H. March and R. Pucci. Asymptotic form of first-order density matrix for atoms and molecules. *Journal of Chemical Physics*, 75(1):496–497, ???? 1981. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/75/496/1`.

March:1981:AFT

[304] N. H. March and R. Pucci. Asymptotic form of two-particle density matrix in atoms and molecules. *Physics Letters A*, 86(5):289–290, November 23, 1981. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960181903698`.

March:1981:AKE

[305] N. H. March. Approximate kinetic energy relations in density functional theory. *Journal of Chemical Physics*, 74(4):2376–2378, ???? 1981. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/74/2376/1`.

March:1981:CMB

[306] N. H. March and A. Ferraz. Conduction mechanism in biopolymers. *Physics Letters A*, 81(8):491–492, February 16, 1981. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960181904229`.

March:1981:CNM

[307] N. H. March. Conformation of NH_3 and C_2H_4 molecules approaching a metal surface. *Physics Letters A*, 85(8-9):433–435, October 19, 1981. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/037596018190431X`.

March:1981:EDD

[308] N. H. March. Electron density description of atoms and molecules. *Theoretical Chemistry (London)*, 4(??):92–174, ???? 1981. CODEN THCHDM. ISBN 0-85186-784-7. ISSN 0305-9995.

March:1981:EDT

[309] N. H. March and R. Pucci. Electron density in two-electron ions in the limit of large nuclear charge. *Physics Letters A*, 85(2):75–76, September 14, 1981. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960181902255`.

March:1981:EED

[310] N. H. March. Exchange energy density of inhomogeneous electron gas near a metal surface. *Surface Science*, 111(1):119–127, October 2, 1981. CODEN SUSCAS. ISSN 0039-6028 (print), 1879-2758 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0039602881904799`.

March:1981:EIO

[311] N. H. March. Electronic and ionic ordering in condensed matter plasmas (phase-transitions induced by Coulomb interactions). *Physics and Chemistry of Liquids*, 11(2):101–114, ???? 1981. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1981:FIM

[312] N. H. March and M. P. Tosi. Freezing of ionic melts into a superionic phase. *Physics and Chemistry of Liquids*, 11(1):89–94, ???? 1981. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1981:FWR

[313] N. H. March. Foundations of Walsh's rules for molecular shape. *Journal of Chemical Physics*, 74(5):2973–2974, ???? 1981. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/74/2973/1`.

March:1981:IFB

[314] N. H. March. Interatomic forces in the b.c.c. transition metals. *The Journal of Physics and Chemistry of Solids*, 42(4):317–322, May 26, 1981. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369781901475`.

March:1981:IFD

[315] N. H. March and M. P. Tosi. Interacting Frenkel defects at high concentration and the superionic transition in fluorite crystals. *The Journal of Physics and Chemistry of Solids*, 42(9):809–812, February 21, 1981. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369781901670`.

March:1981:IPA

[316] N. H. March. Ionization potential and asymptotic form of first-order density matrix for atoms and molecules. *Physics Letters A*, 84(6):319–320, August 10, 1981. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960181907714`.

March:1981:KEC

[317] Norman H. March, Robert G. Parr, and Joe F. Mucci. The kinetic energy change on covalent bond formation. *Proceedings of the National Academy of Sciences of the United States of America*, 78(10):5942–5945, October 1981. CODEN PNASA6. ISSN 0027-8424 (print), 1091-6490 (electronic). URL `http://www.jstor.org/stable/10978; http://www.pnas.org/content/78/10/5942.abstract`.

March:1981:LDC

[318] N. H. March and M. P. Tosi. Liquid direct correlation-function, singlet densities and the theory of freezing. *Physics and Chemistry of Liquids*, 11 (2):129–133, ???? 1981. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1981:LTD

[319] N. H. March. Linear temperature dependence of low temperature pyroelectric coefficient. *The Journal of Physics and Chemistry of Solids*, 42(4):323–328, February 16, 1981. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369781901487`.

March:1981:RBE

[320] N. H. March. Relation between electrostatic potential of electron cloud at nucleus and chemical potential in atomic ions. *Physics Letters A*, 82(2):73–74, March 9, 1981. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960181909415`.

March:1981:RDE

[321] N. H. March and J. F. Mucci. Relation of dissociation energy, internuclear distance, and overlap integral for hydrogen halides to atomic ionization potentials. *Journal of Chemical Physics*, 75(9):4743–4745, ???? 1981. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/75/4743/1`.

March:1981:RRV

[322] N. H. March. Relaxation round vacancies in the alkali metals. *The Journal of Physics and Chemistry of Solids*, 42(5):439–443, May 26, 1981. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369781900548`.

March:1981:TCE

[323] N. H. March. Trends in chemisorption energies with atomic number. *Chemical Physics*, 63(3):391–399, December 15, 1981. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0301010481870140`.

March:1981:TFA

[324] N. H. March and M. P. Tosi. Theory of freezing of alkali-halides and binary-alloys. *Physics and Chemistry of Liquids*, 11(1):79–87, ???? 1981. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1981:VBK

[325] N. H. March. The virial, boundary kinetic-energy density and electron density, in one dimension and in spherical symmetry. *Physics Letters A*, 83(9):455–456, June 29, 1981. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960181904795`.

March:1981:WMC

[326] N. H. March. Water molecule conformation outside a metal surface. *Surface Science*, 107(1):127–138, May 2, 1981. CODEN SUSCAS.

ISSN 0039-6028 (print), 1879-2758 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0039602881906166`.

Marini:1981:RTB

[327] U. Marini, Bettolo Marconi, and N. H. March. Relativistic theory of binding energies of heavy positive ions. *International Journal of Quantum Chemistry*, 20(3):693–704, September 1981. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Mucci:1981:MIP

[328] J. F. Mucci and N. H. March. Molecular ionization potential and dissociation energies related to atomic ionization potentials for singly bonded diatomics. *Journal of Chemical Physics*, 75(12):5789–5790, ???? 1981. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/75/5789/1`.

Painter:1981:MID

[329] K. R. Painter, P. J. Grout, N. H. March, and M. P. Tosi. A model of the ice-*d*-electron-metal interface. *Il Nuovo Cimento B Series 11*, 66(2):202–206, December 11, 1981. CODEN NCIBAW. ISSN 0369-3554 (print), 1826-9877 (electronic). URL `http://link.springer.com/article/10.1007/BF02721187`.

Pucci:1981:KED

[330] R. Pucci and N. H. March. Kinetic energy density functional of Hückel theory for planar hydrocarbons. *Journal of Chemical Physics*, 74(5):2936–2937, ???? 1981. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/74/2936/1`.

Pucci:1981:LCM

[331] R. Pucci and N. H. March. Liquid crystal model for hydrocarbons under shock wave conditions. *Journal of Chemical Physics*, 74(2):1373–1378, ???? 1981. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/74/1373/1`.

Alonso:1982:CFSa

[332] J. A. Alonso, J. M. López, and N. H. March. Concentration fluctuations in simple liquid alloys with atomic size mismatch. *Journal de Physique, Lettres*, 43(12):441–445, June 1982. CODEN JPSLBO. ISSN 0302-072X. URL `http://www.europhysicsnews.org/articles/jphyslet/abs/1982/12/jphyslet_1982__43_12_441_0/jphyslet_1982__43_12_441_0.html`.

Alonso:1982:CFSb

[333] J. A. Alonso and N. H. March. Concentration fluctuations in simple metallic liquid alloys. *Physica. B + C; B: Physics of condensed matter. C: Atomic, molecular and plasma physics; optics*, 114(1):67–70, ???? 1982. CODEN PHBCDQ. ISSN 0378-4363 (print), 1873-2127 (electronic).

Flores:1982:SIV

[334] F. Flores and N. H. March. Self interstitials and vacancies in metallic potassium and sodium. *Journal of Physics F: Metal Physics*, 12(9):L133–L135, September 1982. CODEN JPFMAT. ISSN 0305-4608. URL `http://stacks.iop.org/0305-4608/12/i=9/a=001`.

Kumar:1982:CPL

[335] N. Kumar, N. H. March, and A. Wasserman. Critical-point properties of liquids and the Born–Green Theory. *Physics and Chemistry of Liquids*, 11(3):271–275, ???? 1982. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Lawes:1982:SEB

[336] G. P. Lawes and N. H. March. Scaling of equilibrium bond lengths, chemical potential, and energy in a model of heavy tetrahedral and octahedral positive molecular ions. *Journal of Chemical Physics*, 76(1):458–462, ???? 1982. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/76/458/1`.

March:1982:ASD

[337] N. H. March. Applications of singlet density-direct correlation-function equations to surface-tension of multicomponent fluids and to the theory of freezing. *Molecular Physics*, 46(3):657–658, ???? 1982. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

March:1982:BEH

[338] N. H. March and J. F. Mucci. Bonding energetics in HF and their relation to H_2 and F_2. *Physics Letters A*, 88(7):348–349, March 29, 1982. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960182906119`.

March:1982:CES

[339] Norman H. (Norman Henry) March and M. Parrinello. *Collective Effects in Solids and Liquids*. Graduate student series in physics., 0261-7242. Adam Hilger Ltd., Bristol, UK, 1982. ISBN 0-85274-528-1. xi + 274 pp. LCCN QC176 .M27 1982; QC176.8.P45 M37 1982.

March:1982:CFS

[340] N. H. March. Concentration fluctuations in simple metallic liquid alloys. *Physica. B + C; B: Physics of condensed matter. C: Atomic, molecular and plasma physics; optics*, 114(1):67–70, June 25, 1982. CODEN PHBCDQ. ISSN 0378-4363 (print), 1873-2127 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0378436382900080`.

March:1982:CPI

[341] N. H. March. Chemical potential, ionization energies, and electron correlation in atoms. *Journal of Chemical Physics*, 76(4):1869–1871, ???? 1982. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/76/1869/1`.

March:1982:CPT

[342] N. H. March. Chemical potential and total energy of heavy positive atomic ions in the weak ionization limit. *Journal of Chemical Physics*, 76(3):1430–1432, ???? 1982. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/76/1430/1`.

March:1982:DMM

[343] N. H. March and J. F. Mucci. Dipole moments, molecular ionization potentials, and asymptotic form of electron density in hydrogen halides and other heteronuclear diatomic molecules. *Journal of Chemical Physics*, 77(9):4555–4557, ???? 1982. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/77/4555/1`.

March:1982:EDT

[344] N. H. March. Electron density theory of atoms and molecules. *Journal of Physical Chemistry*, 82(12):2262–2267, ???? 1982. CODEN JPCHAX. ISSN 0022-3654 (print), 1541-5740 (electronic). URL `http://pubs.acs.org/doi/abs/10.1021/j100209a022`.

March:1982:IPS

[345] N. H. March. Interatomic potentials in solids. In C. R. A. Catlow and W. C. Mackrodt, editors, *Computer Simulation of Solids*, volume 166 of *Lecture Notes in Physics*, pages 95–114. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1982. CODEN ???? ISBN 3-540-11588-9 (print), 3-540-39347-1 (e-book). ISSN ???? URL `http://link.springer.com/chapter/10.1007/BFb0017935`.

March:1982:KEC

[346] N. H. March. Kinetic energy change due to interaction between charged centres in metals and its relation to that occurring in covalent bond formation. *Physics Letters A*, 87(8):396–397, February 1, 1982. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960182901670`.

March:1982:RED

[347] N. H. March. N representability of electron density and first-order density matrix. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 26 (??):1845–??, October 1, 1982. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.26.1845`.

March:1982:SDL

[348] N. H. March and M. P. Tosi. Saturation of Debye-Screening length and the free-energy of superionic PbF_2. *Solid State Communications*, 42(8): 623–624, ???? 1982. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic).

March:1982:SDS

[349] N. H. March and M. P. Tosi. Saturation of Debye screening length and the free energy of superionic PbF_2. *Solid State Communications*, 42(8):623–624, May 26, 1982. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0038109882906226`.

March:1982:SML

[350] N. H. March. Simple model for liquid metal alloys and relation to Miedema's variables. *Physica. B + C; B: Physics of condensed matter. C: Atomic, molecular and plasma physics; optics*, 114(2):141–146, August 31, 1982. CODEN PHBCDQ. ISSN 0378-4363 (print), 1873-2127 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0378436382900304`.

Matthai:1982:SSL

[351] C. C. Matthai and N. H. March. Small-angle scattering from liquids — van der Waals forces in argon and collective mode in Na. *Physics and Chemistry of Liquids*, 11(3):207–217, ???? 1982. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

McCaskill:1982:ETS

[352] J. S. McCaskill and N. H. March. Electronic transport in short mean-free path liquid-metals. *Physics and Chemistry of Liquids*, 12(1):1–16, ???? 1982. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Page:1982:NSM

[353] D. I. Page, U. De Angelis, and N. H. March. Neutron-scattering measurements from liquid Na–K alloys and associated inter-ionic potentials. *Physics and Chemistry of Liquids*, 12(1):53–68, ???? 1982. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Pucci:1982:SMR

[354] R. Pucci and N. H. March. Some moments of radial electron density in closed-shell atoms and their atomic scattering factors. *Journal of Chemical Physics*, 76(8):4089–4093, ???? 1982. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/76/4089/1`.

Pucci:1982:TEA

[355] R. Pucci and N. H. March. Total energy of atomic ions related to low-order ionization potentials and to diamagnetic susceptibility. *Journal of Chemical Physics*, 76(12):6091–6094, ???? 1982. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/76/6091/1`.

Rovere:1982:FTR

[356] M. Rovere, M. P. Tosi, and N. H. March. Freezing theory of RbCl. *Physics and Chemistry of Liquids*, 12(2):177–180, ???? 1982. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Allan:1983:CPS

[357] N. L. Allan and N. H. March. Compton profile, $(e, 2e)$ studies, and "atoms in molecules". *International Journal of Quantum Chemistry*, 24 (S17):227–240, March 3–12, 1983. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular and Solid-state Theory, Collision Phenomena, and Computational Quantum Chemistry.

Alonso:1983:DFE

[358] J. A. Alonso and N. H. March. Density functional estimates of charge-transfer and chemical-potentials in hydrogen halides and mixed halides.

Chemical Physics, 76(1):121–124, ???? 1983. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic).

Alonso:1983:DFT

[359] J. A. Alonso and N. H. March. Density functional theory of asymptotic form of electron density in heteronuclear diatomic molecules. *Journal of Chemical Physics*, 79(4):1903–1905, ???? 1983. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/79/1903/1`.

Alonso:1983:EIP

[360] J. A. Alonso and N. H. March. Equivalence of ionization potential and magnitude of chemical potential in Hartree–Fock theory of atoms. *Journal of Chemical Physics*, 78(3):1382–1383, ???? 1983. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/78/1382/1`.

Alonso:1983:SCM

[361] J. A. Alonso, L. C. Balbas, and N. H. March. Simple charge-transfer model of X-ray-scattering by 10-electron molecules. *Molecular Physics*, 50(4):789–796, ???? 1983. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Baird:1983:FCF

[362] J. K. Baird, J. S. McCaskill, and N. H. March. Finite concentration fluorescence quenching in the presence of diffusion. *Journal of Chemical Physics*, 78(11):6598–6601, ???? 1983. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/78/6598/1`.

Ebbsjo:1983:SFS

[363] I. Ebbsjo, G. G. Robinson, and N. H. March. Structure and forces in simple liquid-metals. *Physics and Chemistry of Liquids*, 13(1):65–73, ???? 1983. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Giaquinta:1983:CCI

[364] P. V. Giaquinta, M. P. Tosi, and N. H. March. Coordination chemistry and ionic solvation in divalent metal halide aqueous-solutions. *Physics and Chemistry of Liquids*, 13(1):1–24, ???? 1983. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Grout:1983:TEH

[365] P. J. Grout, N. H. March, and Y. Tal. Total energy of heavy positive ions especially near the weak ionization limit. *Journal of Chemical Physics*, 79 (1):331–333, ???? 1983. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/79/331/1`.

Hill:1983:CPT

[366] S. H. Hill, P. J. Grout, and N. H. March. Chemical potential and total energy of heavy positive ions in extremely strong magnetic fields, near the weak ionisation limit. *Journal of Physics B: Atomic and Molecular Physics*, 16(13):2301–2307, ???? 1983. CODEN JPAMA4. ISSN 0953-4075 (print), 1361-6455 (electronic). URL `http://stacks.iop.org/0022-3700/16/i=13/a=004`.

March:1983:BES

[367] N. H. March. Bound and Efimov states for $^4He_2$ and $^4He_3$ and Bose–Einstein condensation. *Journal of Chemical Physics*, 79(1):529–530, ???? 1983. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/79/529/1`.

March:1983:BRBa

[368] N. H. March. Book review: *Rigorous Atomic and Molecular Physics*. Edited by G. Velo and a. s. Wightman. (Plenum Press, New York, 1981). Pp. viii + 495. Price $59.50. *Journal of the Chemical Society — Faraday Transactions II*, 79(??):330–331, ???? 1983. CODEN JCFTBS. ISSN 0300-9238 (print), 2050-5663 (electronic).

March:1983:BRBb

[369] N. H. March. Book review: *Springer Series in Chemical Physics, Volume 13. Atomic Many-body Theory*. By I. Lindgren and J. Morrison. (Springer-Verlag, Berlin, 1982). Pp. xiii + 469. Price $55, DM 110. *Journal of the Chemical Society — Faraday Transactions II*, 79(??):1320, ???? 1983. CODEN JCFTBS. ISSN 0300-9238 (print), 2050-5663 (electronic).

March:1983:CBSa

[370] N. H. March. Is the condition for bound-state formation insensitive to structure changes in a finite cluster of like charges with self-consistent Thomas–Fermi screening? *Physics Letters A*, 95(5):223–224, May 2, 1983. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960183906096`.

March:1983:CBSb

[371] N. H. March. Comparison of bound-state properties of self-consistent Thomas–Fermi potentials for neutral systems in two and three dimensions. *Physics Letters A*, 99(8):361–362, December 19, 1983. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960183902931`.

March:1983:CDO

[372] N. H. March. Charge displaced by a one-body potential in a fermion assembly in terms of the highest occupied state. *Physics Letters A*, 96(9):460–462, August 1, 1983. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960183901652`.

March:1983:CED

[373] N. H. March and M. P. Tosi. Chemical effects in diffusion and structure of zinc chloride in aqueous solution. *Chemical Physics*, 76(1):125–128, April 1, 1983. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0301010483850575`.

March:1983:CMM

[374] N. H. March. Capacitance of metal-molten-salt interfaces. *Surface Science*, 133(1):89–100, October 1, 1983. CODEN SUSCAS. ISSN 0039-6028 (print), 1879-2758 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0039602883904855`.

March:1983:CPR

[375] N. H. March and R. Pucci. Chemical potential related to total energy in isoelectronic sequences of positive ions. *Journal of Chemical Physics*, 78(5):2480–2484, ???? 1983. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/78/2480/1`.

March:1983:DCP

[376] N. H. March. Definition of chemical potential for non-interacting particles in one dimension. *Physics Letters A*, 95(9):478–480, May 30, 1983. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960183905005`.

March:1983:DFE

[377] N. H. March. Density functional estimates of charge transfer and chemical potentials in hydrogen halides and mixed halides. *Chemical Physics*, 76(1):121–124, April 1, 1983. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0301010483850563`.

March:1983:ESL

[378] N. H. March. Electronic structure of linear polyacenes in alternant molecular orbital theory. *Physics Letters A*, 96(2):105–106, June 13, 1983. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960183906023`.

March:1983:ETF

[379] N. H. March. Exact Thomas–Fermi method for kinetic energy and other averages of Compton profile for atomic closed shells in a bare Coulomb field. *Journal of Chemical Physics*, 79(7):3404–3409, ???? 1983. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/79/3404/1`.

March:1983:MEE

[380] N. H. March. Mean π-electron energy and ionization potential in linear polyacenes with many rings, and Hückel parameters. *Physics Letters A*, 94(1):63–66, February 21, 1983. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/037596018390289X`.

March:1983:MSS

[381] N. H. March and M. P. Tosi. Monolayer structure for some dissociatively adsorbed molecules and molecular H_2O on noble and transition metal surfaces. *Physics Letters A*, 98(4):195–198, October 17, 1983. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960183905820`.

March:1983:OAG

[382] N. H. March. Overlap of He atom and He^+ ground-state wave functions and calculation of ionization potential. *Physics Letters A*, 94(9):434–436, April 4, 1983. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960183908472`.

March:1983:OTF

[383] N. H. March. Origins — the Thomas–Fermi theory. In Lundqvist and March [1525], chapter 1, page ?? ISBN 0-306-41207-1, 1-4899-0417-4, 1-4899-0415-8. LCCN QC175.16.E6 T46 1983. URL `http://link.springer.com/chapter/10.1007/978-1-4899-0415-7_1/`.

March:1983:QMA

[384] N. H. March. Quantum mechanics has accounted for a large part of physics and the whole of chemistry. True or false? *Contemporary physics*, 24(4):373–387, ???? 1983. CODEN CTPHAF. ISSN 0010-7514 (print), 1366-5812 (electronic).

March:1983:SFC

[385] N. H. March. Surface friction constant and range of dynamical interaction between adatoms on metal surfaces. *Surface Science*, 131(1):34–48, August 2, 1983. CODEN SUSCAS. ISSN 0039-6028 (print), 1879-2758 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0039602883901188`.

March:1983:TLT

[386] N. H. March and M. Silbert. Is there a linear term in the X-ray or neutron-scattering in a liquid-metal at small wave number. *Physics and Chemistry of Liquids*, 13(2):155–157, ???? 1983. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1983:TMS

[387] N. H. March. On the thickness of the metal-semiconductor interface. *Surface Science*, 124(2-3):329–335, January 2, 1983. CODEN SUSCAS. ISSN 0039-6028 (print), 1879-2758 (electronic). URL `http://www.sciencedirect.com/science/article/pii/003960288390794X`.

Mucci:1983:DED

[388] J. F. Mucci and N. H. March. Dissociation energies of diatoms related to molecular electron density gradients. *Journal of Chemical Physics*, 78(10):6187–6189, ???? 1983. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/78/6187/1`.

Mucci:1983:NNP

[389] J. F. Mucci and N. H. March. Nuclear–nuclear potential energy related to total number of electrons in light molecules. *Journal of Chemical Physics*, 79(2):870–872, ???? 1983. CODEN JCPSA6. ISSN 0021-

9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/79/870/1`.

Pucci:1983:EBL

[390] R. Pucci and N. H. March. Equilibrium bond lengths related to nuclear charge and atomic energies for homonuclear diatoms. *Journal of Chemical Physics*, 78(5):2466–2467, ???? 1983. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/78/2466/1`.

Senatore:1983:CMS

[391] G. Senatore, M. P. Tosi, and N. H. March. Critical-behavior of monatomic and symmetric charged liquids in approximate theories of structure. *Physics and Chemistry of Liquids*, 13(1):55–64, ???? 1983. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Arimitsu:1984:RTP

[392] N. Arimitsu, B. V. Paranjape, and N. H. March. Reflection and transmission of phonons at a planar interface between two dissimilar solids. *Solid State Communications*, 52(4):399–400, October 4, 1984. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/003810988490022X`.

Ballone:1984:DCM

[393] P. Ballone, G. Pastore, M. P. Tosi, K. R. Painter, P. J. Grout, and N. H. March. Dependence of capacitance of metal-molten salt interface on local density profiles near electrode. *Physics and Chemistry of Liquids*, 13(4):269–277, ???? 1984. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Bhatia:1984:PLD

[394] A. B. Bhatia and N. H. March. Properties of a liquid direct correlation function at melting temperature related to vacancy formation energy in condensed phases of rare gases. *Journal of Chemical Physics*, 80(5):2076–2078, ???? 1984. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/80/2076/1`.

Bhatia:1984:RBP

[395] A. B. Bhatia and N. H. March. Relation between principal peak height, position and width of structure factor in dense monatomic liquids. *Physics and Chemistry of Liquids*, 13(4):313–316, ???? 1984. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Callaway:1984:DFM

[396] J. Callaway and N. H. March. Density functional methods — theory and applications. *Solid State Physics — Advances in Research and Applications*, 38(??):135–221, ???? 1984.

Dawson:1984:DDF

[397] K. A. Dawson and N. H. March. The density-matrix, density, and Fermi hole in Hartree–Fock theory. *Journal of Chemical Physics*, 81(12):5850–5854, ???? 1984. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic).

Dawson:1984:DFT

[398] K. A. Dawson and N. H. March. Density functional theories which are upper bounds to the Hartree–Fock limit in one dimension. *Physics Letters A*, 106(4):161–164, ???? 1984. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Dawson:1984:DMD

[399] K. A. Dawson and N. H. March. The density matrix, density, and Fermi hole in Hartree–Fock theory. *Journal of Chemical Physics*, 81 (12 (part 2)):5850–5854, ???? 1984. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/81/5850/1`.

Dawson:1984:PFS

[400] K. A. Dawson and N. H. March. Pair function and structure factor of an interacting electron liquid. *Physics and Chemistry of Liquids*, 14(2): 131–134, ???? 1984. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Dawson:1984:SSO

[401] K. A. Dawson and N. H. March. Slater sum in one dimension: explicit kinetic energy functional. *Physics Letters A*, 106(4):158–160, ???? 1984. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Ferraz:1984:MHE

[402] A. Ferraz, N. H. March, and F. Flores. Metal-insulator-transition in hydrogen and in expanded alkali-metals. *The Journal of Physics and Chemistry of Solids*, 45(6):627–635, ???? 1984. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Herman:1984:CMM

[403] F. Herman and N. H. March. Cooperative magnetism in metallic jellium and in the insulating Wigner electron crystal. *Solid State Communications*, 50(8):725–728, ???? 1984. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic).

Hill:1984:EPN

[404] S. H. Hill, P. J. Grout, and N. H. March. Electrostatic potential at the nucleus in atomic ions and relation to chemical potential. *Journal of Chemical Physics*, 80(8):3714–3719, ???? 1984. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/80/3714/1`.

Hill:1984:RTE

[405] S. H. Hill, P. J. Grout, and N. H. March. Relativistic total energy and chemical potential of heavy atoms and positive ions. *Journal of Physics B: Atomic and Molecular Physics*, 17(24):4819–4831, ???? 1984. CODEN JPAMA4. ISSN 0953-4075 (print), 1361-6455 (electronic). URL `http://stacks.iop.org/0022-3700/17/i=24/a=017`.

March:1984:AFM

[406] N. H. March and G. R. Freeman. Anion formation in molecular liquids: Is it correlated with molecular shape? *Physics and Chemistry of Liquids*, 13(4):279–283, ???? 1984. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1984:ARB

[407] N. H. March. Asymptotic relation between eigenvalue sum and chemical potential for electrons moving in bare point-charge potentials in d dimensions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 30(??):2936–??, December 1, 1984. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.30.2936`.

March:1984:BRB

[408] N. H. March. Book review: *Electron Correlations in Solids, Molecules and Atoms*. Edited by J. T. Devreese and F. Brosens. (Plenum Press, New York, 1983). Pp. xi + 435. Price \$55. *Journal of the Chemical Society — Faraday Transactions II*, 80(??):746, ???? 1984. CODEN JCFTBS. ISSN 0300-9238 (print), 2050-5663 (electronic).

March:1984:CL

[409] Norman H. (Norman Henry) March and M. P. (Mario P) Tosi. *Coulomb Liquids*. Academic Press, New York, USA, 1984. ISBN 0-12-470520-0. ix + 351 pp. LCCN QC145.2 .M38 1984; QC794.8.E4 M37 1984.

March:1984:CMM

[410] N. H. March. Cooperative magnetism in metallic jellium and in the insulating Wigner electron crystal. *Solid State Communications*, 50(8): 725–728, May 26, 1984. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0038109884909736`.

March:1984:CMP

[411] N. H. March, Ph. Lambin, and F. Herman. Cooperative magnetic properties in single- and two-phase 3d metallic alloys relevant to exchange and magnetocrystalline anisotropy. *Journal of Magnetism and Magnetic Materials*, 44(1–2):1–19, September 30, 1984. CODEN JMMMDC. ISSN 0304-8853 (print), 1873-4766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/030488538490043X`.

March:1984:CMS

[412] N. H. March, P. Lambin, and F. Herman. Cooperative magnetic-properties in single-phase and 2-phase 3D metallic alloys relevant to exchange and magnetocrystalline anisotropy. *Journal of Magnetism and Magnetic Materials*, 44(1–2):1–19, ???? 1984. CODEN JMMMDC. ISSN 0304-8853 (print), 1873-4766 (electronic).

March:1984:DFM

[413] N. H. March. Density functional methods:theory and applications. *Physics Letters A*, 64(2):135–221, December 12, 1984. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0081194708603136`.

March:1984:DFT

[414] N. H. March. Density functional theories which are upper bounds to the Hartree–Fock limit in one dimension. *Physics Letters A*, 106 (4):161–164, December 3, 1984. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960184903086`.

March:1984:ERD

[415] N. H. March. Energy relations in the density functional theory of d-dimensional heavy positive ions. *Physics Letters A*, 103(4):186–187,

July 2, 1984. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960184902470`.

March:1984:ESC

[416] N. H. March, A. Martin-Rodero, and G. Senatore. Electronic structure and conformation of ethene when adsorbed on transition and noble metals. *Surface Science*, 140(2):400–414, May 2, 1984. CODEN SUSCAS. ISSN 0039-6028 (print), 1879-2758 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0039602884907416`.

March:1984:HDJ

[417] N. H. March and B. V. Paranjape. High-density jellium-model calculation of force between half-planes of a nearly-free-electron metal at small separation. *Physical Review B: Condensed Matter and Materials Physics*, 30 (??):3131–??, September 15, 1984. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.30.3131`.

March:1984:LDI

[418] N. H. March and H. Suhl. Are long-range dynamical interactions between screened ions in liquid-metals observable in atomic transport and neutron-scattering? *Physics and Chemistry of Liquids*, 14(2):159–161, ???? 1984. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1984:MIT

[419] N. H. March and F. Flores. Metal-insulator transition in hydrogen and in expanded alkali metals. *The Journal of Physics and Chemistry of Solids*, 45(6):627–635, August 30, 1984. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369784900556`.

March:1984:OPM

[420] N. H. March. Osmotic pressure and models of binary liquid mixtures. *Physics Letters A*, 104(5):264–266, September 3, 1984. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960184900677`.

March:1984:RBS

[421] N. H. March. The role of bound states in electronic transport. *The Journal of Physics and Chemistry of Solids*, 45(2):215–222, November 10, 1984. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-

2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369784901215`.

March:1984:RMB

[422] N. H. March. Reply to "^{4}He n-mers and Bose–Einstein condensation in He II". *Journal of Chemical Physics*, 81(1):587, July 1, 1984. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic).

March:1984:SDR

[423] N. H. March. Self-diffusion related to shear viscosity at the melting temperature of metals. *Journal of Chemical Physics*, 80(10):5345, ???? 1984. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/80/5345/1`.

March:1984:SSL

[424] N. H. March. Small-angle scattering from liquids. *Physics and Chemistry of Liquids*, 13(3):163–168, ???? 1984. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1984:SSO

[425] N. H. March. Slater sum in one dimension: Explicit kinetic energy functional. *Physics Letters A*, 106(4):158–160, December 3, 1984. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960184903074`.

March:1984:SSR

[426] N. H. March. Surface segregation and related properties in binary-liquid transition-metal alloys containing Mn and Cr. *Physics and Chemistry of Liquids*, 14(1):79–82, ???? 1984. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1984:TCT

[427] N. H. March and G. Senatore. Thermodynamically consistent theory of classical liquid structure and inverse problem of extracting pair potential. *Physics and Chemistry of Liquids*, 13(4):285–292, ???? 1984. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1984:TLE

[428] N. H. March and S. B. Woods. On the theory of the low-temperature electrical-resistivity of potassium. *Solid State Communications*, 49(11):993–995, ???? 1984. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic).

March:1984:TLT

[429] N. H. March and S. B. Woods. On the theory of the low-temperature electrical resistivity of potassium. *Solid State Communications*, 49 (11):993–995, March 24, 1984. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0038109884904071`.

March:1984:XRI

[430] N. H. March and F. Flores. Is the X-ray intensity at the forbidden 222 reflection a useful order parameter for diamond-lattice semiconductor-metal phase transition? *Solid State Communications*, 49(7):649–650, February 12, 1984. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0038109884902126`.

Mccaskill:1984:RBE

[431] J. S. Mccaskill and N. H. March. The role of bound-states in electronic transport. *The Journal of Physics and Chemistry of Solids*, 45(2):215–222, ???? 1984. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Pucci:1984:RBC

[432] R. Pucci and N. H. March. Relation between carbon–carbon bond length and compressibility from high pressure studies on liquid benzene. *Journal of Chemical Physics*, 80(8):3919–3921, ???? 1984. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/80/3919/1`.

Senatore:1984:BTC

[433] G. Senatore and N. H. March. Behavior of triplet correlation function at critical point of simple classical fluids. *Journal of Chemical Physics*, 80(10):5242–5244, ???? 1984. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/80/5242/1`.

Allan:1985:GEK

[434] N. L. Allan, C. G. West, D. L. Cooper, P. J. Grout, and N. H. March. The gradient expansions of the kinetic energy and the mean momentum for light diatomic molecules. *Journal of Chemical Physics*, 83(9):4562–4564, ???? 1985. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/83/4562/1`.

Allan:1985:LDA

[435] Neil L. Allan, David L. Cooper, Craig G. West, Peter J. Grout, and Norman H. March. Local density approximations to moments of momentum of diatomic molecules with Hartree–Fock–Roothaan quality electron distributions. *Journal of Chemical Physics*, 83(1):239–240, ???? 1985. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/83/239/1`.

Alonso:1985:EEE

[436] J. A. Alonso, T. E. Cranshaw, and N. H. March. Electronic and elastic effects in the interaction of impurities in ternary metallic alloys. *The Journal of Physics and Chemistry of Solids*, 46(10):1147–1151, ???? 1985. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Dawson:1985:APS

[437] K. A. Dawson and N. H. March. The asymptotic properties of second-order density matrices in N-electron atoms and molecules. *Journal of Chemical Physics*, 82(4):1967–1968, ???? 1985. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/82/1967/1`.

Dawson:1985:APT

[438] K. A. Dawson and N. H. March. Asymptotic properties of two-particle and single-particle density matrices in N-electron atoms and molecules. *Journal of Chemical Physics*, 82(1):323–324, ???? 1985. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/82/323/1`.

Ginoza:1985:IEL

[439] M. Ginoza and N. H. March. Isotope effects in liquid-metals. *Physics and Chemistry of Liquids*, 15(2):75–112, ???? 1985. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Hill:1985:RTF

[440] S. H. Hill, P. J. Grout, and N. H. March. Relativistic Thomas–Fermi equation in an extremely high magnetic field, and its solution for atomic ions. *Journal of Physics B: Atomic and Molecular Physics*, 18(24):4665–4673, ???? 1985. CODEN JPAMA4. ISSN 0953-4075 (print), 1361-6455 (electronic). URL `http://stacks.iop.org/0022-3700/18/i=24/a=011`.

Jones:1985:TSS

[441] William Jones and Norman H. (Norman Henry) March. *Theoretical Solid State Physics*. Dover books on physics and chemistry. Dover Publications, Inc., New York, NY, USA, 1985. ISBN 0-486-65015-4 (paperback: vol. 1), 0-486-65016-2 (paperback: vol. 2). xvi + 1301 (two volumes) pp. LCCN QC176 .J79 1985; QC176.A1 J572 1985. URL `http://www.loc.gov/catdir/enhancements/fy0714/85010165-d.html`. Reprint of [152, 153].

Kariotis:1985:CAT

[442] R. Kariotis and N. H. March. On the calculation of atomic transport-coefficients in liquid-metals. *Physics and Chemistry of Liquids*, 14(4): 241–252, ???? 1985. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Kemister:1985:IPM

[443] G. Kemister and N. H. March. Ionization potentials of molecular systems with many electrons. *International Journal of Quantum Chemistry*, 28 (S19):257–265, March 18–23, 1985. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Quantum Biology and Quantum Pharmacology.

March:1985:BDM

[444] N. H. March and M. P. Tosi. The Bloch density matrix for a localised oscillator in a magnetic field. *Journal of Physics A (Mathematical and General)*, 18(11):L643–L645, ???? 1985. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/18/i=11/a=002; http://stacks.iop.org/0305-4470/18/L643`.

March:1985:BR

[445] Norman H. March. Book review. *Foundations of Physics*, 15(3): 403–405, March 1985. CODEN FNDPA4. ISSN 0015-9018 (print), 1572-9516 (electronic). URL `http://link.springer.com/article/10.1007/BF00737329`.

March:1985:BSS

[446] N. H. March. Bound-state Slater sum for a bare Coulomb field derived from s-states alone. *Physics Letters A*, 111(1–2):47–48, August 26, 1985. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/037596018590800X`.

March:1985:CB

[447] N. H. March. Chemical bonding. In March and Tosi [1528], pages 291–334. ISBN 1-4612-9448-7 (print), 1-4613-2367-3 (e-book). LCCN QC176.9. URL `http://link.springer.com/chapter/10.1007/978-1-4613-2367-9_12`.

March:1985:DEG

[448] N. H. March. Differential equation for the ground-state density in finite and extended inhomogeneous electron gases. *Physics Letters A*, 113(2):66–68, December 2, 1985. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960185906541`.

March:1985:DET

[449] N. H. March and J. F. Mucci. Dissociation energies of tetrahedral and octahedral molecules related to nuclear-nuclear potential energy. *Physics Letters A*, 111(4):191–192, September 9, 1985. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960185905742`.

March:1985:ECE

[450] N. H. March. Electron correlation and electron momenta in polyacetylene. *International Journal of Quantum Chemistry*, 28(S19):719–727, March 18–23, 1985. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Quantum Biology and Quantum Pharmacology.

March:1985:EDD

[451] N. H. March. Electron density description of chemical bonding in light molecules. *Physica Scripta*, 32(4):303–307, ???? 1985. CODEN PHSTBO. ISSN 0031-8949 (print), 1402-4896 (electronic). URL `http://stacks.iop.org/1402-4896/32/i=4/a=010`.

March:1985:EEC

[452] N. H. March. Effect of exchange and Coulomb interactions on the π-electron assembly in polyacetylene. *Physics Letters A*, 108(7):368–370, April 15, 1985. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960185901197`.

March:1985:EEE

[453] N. H. March. Electronic and elastic effects in the interaction of impurities in ternary metallic alloys. *The Journal of Physics and Chemistry of*

Solids, 46(10):1147–1151, July 21, 1985. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/002236978590143X`.

March:1985:LFI

[454] N. H. March and B. V. Paranjape. Long-range force and interfacial energy between dissimilar metals. *Applications of Surface Science (1977–1985)*, 22–23:1042–1048, May 1985. CODEN ASUSDD. ISSN 0378-5963 (print), 1878-1071 (electronic).

March:1985:LME

[455] N. H. March and M. P. Tosi. Liquid Madelung energy and Schottky defect energy related to liquid structure and melting temperature for alkali-halides. *The Journal of Physics and Chemistry of Solids*, 46 (6):757–760, January 24, 1985. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369785901659`.

March:1985:LRC

[456] N. H. March. Long-range Coulomb interaction versus chemical bonding effects in the theory of metal-insulator transitions. In Hellmut Fritzsche and David Adler, editors, *Localization and Metal-Insulator Transitions*, Institute for Amorphous Studies Series, pages 229–238. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1985. ISBN 1-4612-9521-1 (print), 1-4613-2517-X (e-book). URL `http://link.springer.com/chapter/10.1007/978-1-4613-2517-8_18`.

March:1985:LRF

[457] N. H. March and B. V. Paranjape. Long-range force and interfacial energy between dissimilar metals. *Applications of Surface Science (1977–1985)*, 84(3):1042–1048, May 28, 1985. CODEN ASUSDD. ISSN 0378-5963 (print), 1878-1071 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0378596385902399`.

March:1985:LSM

[458] N. H. March. Liquid structure at the melting temperature related to surface-energy and to vacancy formation energy in the hot crystal. *Physics and Chemistry of Liquids*, 15(1):1–9, ???? 1985. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1985:MCC

[459] N. H. March and M. P. Tosi. Melting criteria for classical and quantal Wigner crystals. *Physics and Chemistry of Liquids*, 14(4):303–306, ????

1985. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1985:RTE

[460] N. H. March. Relativistic total energy of heavy atomic ions: Dimensionality dependent scaling. *International Journal of Quantum Chemistry*, 27(5):595–599, May 1985. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:1985:SEL

[461] N. H. March. Surface energy of liquid metals at the melting temperature related to bulk liquid structure. *Surface Science*, 160(2): 509–516, September 2, 1985. CODEN SUSCAS. ISSN 0039-6028 (print), 1879-2758 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0039602885907903`.

March:1985:SPT

[462] N. H. March. Scaling properties of total energy of heavy positive ions in d-dimensions. *Journal of Mathematical Physics*, 26(3):554–555, March 1985. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL `http://jmp.aip.org/resource/1/jmapaq/v26/i3/p554_s1; http://link.aip.org/link/?JMP/26/554/1`.

March:1985:TAO

[463] N. H. March and M. P. Tosi. Thermally averaged orbital diamagnetism of a localized Wigner oscillator. *Nuovo Cimento della Societa Italiana di Fisica, D: Condensed Matter, Atomic, Molecular and Chemical Physics, Fluids, Plasmas, Biophysics*, 6(6):521–526, December 1985. CODEN ???? ISSN 0392-6737 (print), 1826-9893 (electronic). URL `http://link.springer.com/article/10.1007/BF02450587`.

March:1985:TFC

[464] N. H. March, R. C. Perrin, and R. Taylor. Topology of Fermi-surface and the calculation of the phase-diagram of lithium by variable cell molecular-dynamics. *Solid State Communications*, 53(3):287–288, ???? 1985. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic).

March:1985:TFS

[465] N. H. March, R. C. Perrin, and Roger Taylor. Topology of Fermi surface and the calculation of the phase diagram of lithium by variable cell molecular dynamics. *Solid State Communications*, 53(3):287–288,

January 24, 1985. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0038109885900547`.

Mucci:1985:DED

[466] J. F. Mucci and N. H. March. Dissociation energies of diatomic molecules related to equilibrium bond lengths. *Journal of Chemical Physics*, 82(11): 5099–5101, ???? 1985. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/82/5099/1`.

Roman:1985:EMS

[467] E. Roman, M. P. Tosi, P. J. Grout, and N. H. March. Effect of microscopic structure of metal-electrode on capacitance of metal-molten salt interface. *Physics and Chemistry of Liquids*, 15(2):123–127, ???? 1985. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Senatore:1985:APR

[468] G. Senatore and N. H. March. Analytic properties of the relativistic Thomas–Fermi equation and the total energy of atomic ions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 32(??):3277–??, December 1, 1985. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.32.3277`.

Senatore:1985:NWK

[469] G. Senatore and N. H. March. Nonrelativistic Wentzel–Kramers–Brillouin eigenvalues of the Thomas–Fermi neutral-atom potential in the large-atomic-number limit. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 32(??):1322–??, September 1, 1985. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.32.1322`.

Senatore:1985:ZEH

[470] G. Senatore and N. H. March. The $1/Z$ expansion for heavy positive atomic ions. *Journal of Chemical Physics*, 83(3):1232–1233, ???? 1985. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/83/1232/1`.

Bernasconi:1986:DCP

[471] J. M. Bernasconi and N. H. March. Direct correlation-function properties of liquid-metals near freezing. *Physics and Chemistry of Liquids*, 15(3): 169–183, ???? 1986. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Bernasconi:1986:VFE

[472] J. M. Bernasconi, N. H. March, and M. P. Tosi. Vacancy formation energy of close-packed metals related to liquid structure at the melting-point. *Physics and Chemistry of Liquids*, 16(1):39–46, ???? 1986. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Chapman:1986:ERB

[473] R. G. Chapman and N. H. March. Empirical relations between the critical constants of fluid alkali-metals. *Physics and Chemistry of Liquids*, 16(1): 77–82, ???? 1986. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Chapman:1986:PCG

[474] R. G. Chapman and N. H. March. Pressure-dependence of the Curie-temperature of gadolinium — dependence of fermiology. *Journal of Magnetism and Magnetic Materials*, 61(1–2):81–82, ???? 1986. CODEN JMMMDC. ISSN 0304-8853 (print), 1873-4766 (electronic).

Easteal:1986:DMT

[475] A. J. Easteal, P. V. Giaquinta, N. H. March, and M. P. Tosi. Diffusion measurements and their relation to structure for cadmium and sulfate-ions in concentrated aqueous-solutions. *Chemical Physics Letters*, 125 (3):279–282, ???? 1986. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Ferraz:1986:PAM

[476] A. Ferraz, R. G. Chapman, N. H. March, B. Alascio, and C. M. Sayers. Phenomenology of antiferromagnetic metal-insulator-transition in 3D transition-metal dichalcogenides. *Solid State Communications*, 57 (12):937–939, ???? 1986. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic).

Lung:1986:EDM

[477] C. W. Lung and N. H. March. Electronic-structure of defects in metals and relation to positron-annihilation studies. *Crystal Lattice Defects and Amorphous Materials*, 13(1):31–63, ???? 1986. ISSN 0732-8699.

March:1986:BFM

[478] N. H. March. Bridge function in modified hypernetted chain approximation related to structure factor in liquid-metals. *Physics and Chemistry of Liquids*, 16(2):117–119, ???? 1986. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1986:CBO

[479] Norman H. (Norman Henry) March. *Chemical Bonds Outside Metal Surfaces*. Physics of Solids and Liquids. Plenum Press, New York, NY, USA; London, UK, 1986. ISBN 0-306-42059-7. xii + 284 pp. LCCN QC173.4.S94 M37 1986; QD450-882.

March:1986:DDE

[480] N. H. March. Dimensionality dependence of energy of heavy positive ions and the $1/Z$ expansion. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 34(??):5106–??, December 1, 1986. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.34.5106`.

March:1986:DEE

[481] N. H. March. Differential equation for the electron density in large molecules. *International Journal of Quantum Chemistry*, 30(S13):3–8, March 6–8, 1986. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Quantum Biology and Quantum Pharmacology.

March:1986:DMT

[482] N. H. March and M. P. Tosi. Diffusion measurements and their relation to structure for cadmium and sulphate ions in concentrated aqueous solutions. *Chemical Physics Letters*, 125(3):279–282, April 4, 1986. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0009261486870646`.

March:1986:EMM

[483] N. H. March. Electron momenta in molecules and low-dimensional solids. *International Journal of Quantum Chemistry*, 30(S20):367–376, March 10–15, 1986. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Syposium on Atomic, Molecular, and Solid-State Theory, Scattering Problems, Many Body Phenomena, and Computational Quantum Chemistry.

March:1986:KEF

[484] N. H. March. Kinetic energy functional for s-states in a one-body central field. *Physics Letters A*, 114(6):301–302, March 3, 1986. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960186905633`.

March:1986:LPD

[485] N. H. March. The local potential determining the square root of the ground-state electron density of atoms and molecules from the Schrödinger equation. *Physics Letters A*, 113(9):476–478, January 20, 1986. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0375960186901234`.

March:1986:MVF

[486] N. H. March and F. Siringo. Maximum in vibrational frequency shift of a hydrogen molecule in solid hydrogen under pressure. *The Journal of Physics and Chemistry of Solids*, 47(2):231–236, March 10, 1986. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369786901344`.

March:1986:PAM

[487] N. H. March, B. Alascio, and C. M. Sayers. Phenomenology of antiferromagnetic metal-insulator transition in 3 d transition metal dichalcogenides. *Solid State Communications*, 57(12):937–939, March 10, 1986. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0038109886909282`.

March:1986:PDC

[488] N. H. March. Pressure dependence of the Curie temperature of gadolinium: Dependence of fermiology. *Journal of Magnetism and Magnetic Materials*, 61(1–2):81–82, September 1, 1986. CODEN JMMMDC. ISSN 0304-8853 (print), 1873-4766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0304885386900685`.

March:1986:RCE

[489] N. H. March. Relativistic correction to equilibrium bond lengths for heavy, almost spherical molecules. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 34(??):5104–??, December 1, 1986. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.34.5104`.

March:1986:SDG

[490] N. H. March. Spatially dependent generalization of Kato's theorem for atomic closed shells in a bare Coulomb field. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 33(1):88–89, January 1, 1986. CODEN

PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.33.88`.

March:1986:TVF

[491] N. H. March and M. P. Tosi. Theory of vacancy formation energies in metallic alloys and in mixtures. *The Journal of Physics and Chemistry of Solids*, 47(10):999–1002, May 26, 1986. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369786901150`.

March:1986:VFE

[492] N. H. March and M. P. Tosi. Vacancy formation energy related to liquid structure in a nonlinear scaled potential theory. *Nuovo Cimento della Societa Italiana di Fisica, D: Condensed Matter, Atomic, Molecular and Chemical Physics, Fluids, Plasmas, Biophysics*, 7(5):734–738, May 1986. CODEN ???? ISSN 0392-6737 (print), 1826-9893 (electronic). URL `http://link.springer.com/article/10.1007/BF02450439`.

Pucci:1986:EBL

[493] R. Pucci and N. H. March. Equilibrium-bond-length predictions of very heavy heteronuclear molecules. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 33(??):3511–??, May 1, 1986. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.33.3511`.

Pucci:1986:GZE

[494] R. Pucci and N. H. March. Generalized $1/Z$ expansion for heteronuclear molecules. *International Journal of Quantum Chemistry*, 29(4):949–958, April 1986. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Rashid:1986:ORC

[495] Rima Rashid and N. H. March. Osmotic-pressure related to concentration fluctuations, with application to liquid-metal alloys. *Physics and Chemistry of Liquids*, 15(3):155–168, ???? 1986. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Rashid:1986:STT

[496] Rima Rashid, G. Senatore, and N. H. March. Some tests of a thermodynamically consistent decomposition of fluid direct correlation-functions. *Physics and Chemistry of Liquids*, 16(1):1–8, ???? 1986. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Senatore:1986:RBD

[497] G. Senatore and N. H. March. Relation between direct and total 3-body correlations. *Physics and Chemistry of Liquids*, 16(2):131–135, ???? 1986. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Theophilou:1986:DMD

[498] A. K. Theophilou and N. H. March. Density matrices derived from polynomial approximations and other models. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 34(??):3630–??, November 1, 1986. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.34.3630`.

Baltin:1987:EKE

[499] R. Baltin and N. H. March. Electron and kinetic energy densities from Dirac's equation for a model semi-infinite inhomogeneous electron gas. *Journal of Physics A (Mathematical and General)*, 20(16):5517–5528, ???? 1987. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/20/i=16/a=026`.

Chapman:1987:MSL

[500] R. G. Chapman and N. H. March. Model-equations of state for liquid alkali-metals. *Physics and Chemistry of Liquids*, 17(2):165–168, ???? 1987. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1987:MMC

[501] G. R. Freeman and N. H. March. The minimum in the mobility-density curve for electrons injected into insulating dense gases. *Physics and Chemistry of Liquids*, 16(4):269–278, ???? 1987. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Hill:1987:TBE

[502] S. H. Hill, P. J. Grout, and N. H. March. Total binding energy of heavy positive ions including density treatment of Darwin and Breit corrections. *Journal of Physics B: Atomic and Molecular Physics*, 20(1):11–22, ???? 1987. CODEN JPAMA4. ISSN 0953-4075 (print), 1361-6455 (electronic). URL `http://stacks.iop.org/0022-3700/20/i=1/a=007`.

Holas:1987:LBP

[503] A. Holas and N. H. March. Long-range behavior of the pair-correlation function of a dense electron liquid. *Physics and Chemistry of Liquids*, 17

(3):215–246, ???? 1987. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Joyce:1987:IIB

[504] K. Joyce, A. Martin-Rodero, F. Flores, P. J. Grout, and N. H. March. Indirect interactions between CO molecules on transition-metal surfaces and the interpretation of thermal desorption experiments. *Journal of Physics C: Solid State Physics*, 20(22):3381–3389, ???? 1987. CODEN JPSOAW. ISSN 0022-3719. URL `http://stacks.iop.org/0022-3719/20/i=22/a=010`.

March:1987:AFF

[505] N. H. March. Asymptotic formula far from nucleus for exchange energy density in Hartree–Fock theory of closed-shell atoms. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 36(??):5077–??, November 15, 1987. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.36.5077`.

March:1987:ARD

[506] N. H. March and R. Pucci. Asymptotic results for density matrices and electron density in atoms and nearly spherical molecules. In Erdahl and Smith, Jr. [1530], pages 613–627. ISBN 94-009-3855-1 (print), 94-010-8214-6 (e-book). LCCN QC174.17.D44 D47 1987. URL `http://link.springer.com/chapter/10.1007/978-94-009-3855-7_33`.

March:1987:CKE

[507] N. H. March. Characterization of kinetic energy density for central fields by total and s-state Slater sums. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 35(??):5247–??, June 15, 1987. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.35.5247`.

March:1987:DAP

[508] N. H. March. The density amplitude $\rho^{1/2}$ and the potential which generates it. *Journal of Computational Chemistry*, 8(4):375–379, June 1987. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).

March:1987:DJL

[509] N. H. March. Departures from Joule law in dense liquids near freezing related to vacancy properties in hot crystals. *Physics and Chemistry of Liquids*, 16(3):209–215, ???? 1987. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1987:DRC

[510] N. H. March and B. V. Paranjape. Dispersion relation for collective modes in classical monatomic liquids and amorphous solids. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 35(??):5285–??, June 15, 1987. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.35.5285`.

March:1987:EDP

[511] N. H. March and R. F. Nalewajski. Exact density-potential relation for the ground state of the Be atom. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 35(??):525–??, January 15, 1987. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.35.525`.

March:1987:EDS

[512] N. H. March. Electron density and Slater sum of a semi-infinite electron gas in d dimensions. *Journal of Mathematical Physics*, 28(12):2975–2976, December 1987. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL `http://jmp.aip.org/resource/1/jmapaq/v28/i12/p2975_s1; http://link.aip.org/link/?JMP/28/2975/1`.

March:1987:EPD

[513] N. H. March. Effective potential determining one-dimensional Slater sum in independent-particle theory. *Journal of Mathematical Physics*, 28(12):2973–2974, December 1987. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL `http://jmp.aip.org/resource/1/jmapaq/v28/i12/p2973_s1; http://link.aip.org/link/?JMP/28/2973/1`.

March:1987:IOI

[514] N. H. March. Indirect oscillatory interactions between molecules chemisorbed on metal surfaces. *Progress in Surface Science*, 25(1-4):229–251, May 2, 1987. CODEN PSSFBP. ISSN 0079-6816 (print), 1878-4240 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0079681687800163`.

March:1987:ITL

[515] N. H. March. Image theory of lateral interactions applied to desorption rate of Xe from W and Ag. *Surface Science Letters*, 181(3):

L141–L146, March 2, 1987. ISSN 0167-2584 (print), 1878-1047 (electronic). URL http://www.sciencedirect.com/science/article/pii/0039602887901865; http://www.sciencedirect.com/science/article/pii/0167258487903641.

March:1987:LST

[516] N. H. March. Liquid structural theories related via a force correlation-function. *Physics and Chemistry of Liquids*, 16(3):205–208, ???? 1987. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1987:MFE

[517] N. H. March and B. V. Paranjape. Mean free-path effects in the dielectric function of a liquid-metal. *Physics and Chemistry of Liquids*, 17(1):55–71, ???? 1987. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1987:PEP

[518] N. H. March. Pauli and exchange potentials for determining density amplitude in an inhomogeneous electron liquid. *Physics and Chemistry of Liquids*, 17(2):169–172, ???? 1987. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1987:PLD

[519] N. H. March. The power-law dependence of the AC conductivity in disordered systems and non-analyticity of the relaxation spectrum. *Journal of Physics C: Solid State Physics*, 20(13):L241–L242, ???? 1987. CODEN JPSOAW. ISSN 0022-3719. URL http://stacks.iop.org/0022-3719/20/i=13/a=005.

March:1987:PLF

[520] N. H. March, B. V. Paranjape, and R. Teshima. Plasmon loss function related to relaxation-time in metals and alloys. *Solid State Communications*, 63(8):757–759, August 13, 1987. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL http://www.sciencedirect.com/science/article/pii/0038109887901256.

March:1987:RBS

[521] N. H. March. Relation between spectral functions for diffusion and sound-wave attenuation in both liquid-metals and charged colloidal liquids near freezing. *Physics and Chemistry of Liquids*, 17(2):161–164, ???? 1987. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1987:SEV

[522] N. H. March. Size effects in vacancy formation energies in binary metallic alloys and mixtures and in the vacancy-solute interaction. *Solid State Communications*, 63(11):1075–1076, September 29, 1987. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL `http://www.sciencedirect.com/science/article/pii/003810988790665X`.

March:1987:SFL

[523] N. H. March. Structure and forces in liquid metals and alloys. *Canadian Journal of Physics = Journal canadien de physique*, 65(3):219–240, ???? 1987. CODEN CJPHAD. ISSN 0008-4204 (print), 1208-6045 (electronic). URL `http://www.nrcresearchpress.com/doi/abs/10.1139/p87-034`.

March:1987:SOC

[524] N. H. March. Spatial ordering of conduction electrons in metals from liquid-phase diffraction. *Physics and Chemistry of Liquids*, 17(3):173–180, ???? 1987. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1987:VFE

[525] N. H. March. Vacancy formation energy, liquid structure and criteria for liquid solid-phase transitions. *Physics and Chemistry of Liquids*, 17 (1):1–10, ???? 1987. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1987:VLA

[526] N. H. March. On the validity of Liboff approximate theory of liquid structure for metals near freezing. *Physics and Chemistry of Liquids*, 16 (3):231–233, ???? 1987. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Pucci:1987:CRR

[527] R. Pucci and N. H. March. Convolution representation of the relation between total electron density and that of s states in closed-shell atoms. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 35(??): 491–??, January 15, 1987. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.35.491`.

Pucci:1987:RLO

[528] R. Pucci and N. H. March. Representation of lowest-order density-gradient correction to kinetic energy in light molecules at equilibrium.

Physical Review A (Atomic, Molecular, and Optical Physics), 35(??): 4428–??, May 15, 1987. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.35.4428`.

Senatore:1987:TFT

[529] G. Senatore and N. H. March. Thomas–Fermi theory and its generalizations, applied to strongly coupled plasmas. In Rogers and Dewitt [1532], pages 239–?? ISBN 0-306-42581-5. LCCN QC717.6 .N366 1986. URL `http://adsabs.harvard.edu/abs/1987scpp.conf..239S`.

Ascough:1988:ERB

[530] J. Ascough, R. G. Chapman, and N. H. March. Empirical relationships between transport-coefficients of liquid-metals over a range of thermodynamic states. *Physics and Chemistry of Liquids*, 18(3):253–267, ???? 1988. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Balbas:1988:XRS

[531] L. C. Balbas, A. Rubio, J. A. Alonso, N. H. March, and G. Borstel. X-ray-scattering factors of crystalline silicon and germanium from a bond charge model. *The Journal of Physics and Chemistry of Solids*, 49(9): 1013–1017, ???? 1988. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Baltin:1988:CDR

[532] R. Baltin and N. H. March. Charge displaced in a relativistic electron gas by a weak local potential. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 37(??):3942–??, May 15, 1988. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.37.3942`.

Chapman:1988:MSE

[533] R. G. Chapman and N. H. March. Magnetic susceptibility of expanded fluid alkali metals. *Physical Review B: Condensed Matter and Materials Physics*, 38(??):792–??, July 1, 1988. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.38.792`.

Kemister:1988:RBT

[534] G. Kemister and N. H. March. Relation between total energy and orbital energy sum in molecules — atomic and bonding contributions. *Chemical Physics*, 122(1):39–44, ???? 1988. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic).

Kreuzer:1988:NTS

[535] H. J. Kreuzer, R. G. Chapman, and N. H. March. Nonequilibrium thermodynamics of sublimation, evaporation, and condensation. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 37(??):582–??, January 15, 1988. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.37.582`.

Kreuzer:1988:OIC

[536] H. J. Kreuzer and N. H. March. Origin and information content of the compensation effect. *Theoretica Chimica Acta*, 74(4):339–348, October 1988. CODEN TCHAAM. ISSN 0040-5744. URL `http://link.springer.com/article/10.1007/BF00530231`.

Mahanty:1988:IBR

[537] J. Mahanty, N. H. March, and B. V. Paranjape. Interaction between rare-gas atoms outside metal-surfaces — role of plasma excitations. *Applied Surface Science*, 33–4(??):309–314, ???? 1988. CODEN ASUSEE. ISSN 0169-4332 (print), 1873-5584 (electronic).

March:1988:CMW

[538] N. H. March. Comment on "melting of the Wigner crystal at finite temperature". *Physical Review A (Atomic, Molecular, and Optical Physics)*, 37(??):4526–??, June 1, 1988. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.37.4526`.

March:1988:CRA

[539] N. H. March and Y. Ohmura. Characterization of rare-gas atoms in cold dense-plasma. *Physics and Chemistry of Liquids*, 18(2):175–178, ???? 1988. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1988:DDT

[540] N. H. March and J. Cizek. Dimensionality dependence of total energy of closed shells in a bare Coulomb field for large atomic number. *International Journal of Quantum Chemistry*, 33(4):301–304, April 1988. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:1988:DFO

[541] N. H. March. Density-functional one-body potential theory of the Fermi surface via the Kohn anomaly. *Physical Review B: Condensed Matter and*

Materials Physics, 38(??):10067, November 15, 1988. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.38.10067`.

March:1988:DFS

[542] N. H. March. Dispersion forces and small-angle neutron-scattering from liquid noble-metals. *Physics and Chemistry of Liquids*, 17(4):323–326, ???? 1988. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1988:DGA

[543] N. H. March. Direct generation of approximate relativistic electron densities from the nonrelativistic limit. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 37(??):1869–??, March 15, 1988. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.37.1869`.

March:1988:EFL

[544] N. H. March and G. Senatore. Extraction of force laws from measured liquid structure via decoupling of triplet direct correlation-function. *Physics and Chemistry of Liquids*, 17(4):331–333, ???? 1988. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1988:EMH

[545] N. H. March. Enskog modification of hard-sphere theory related to Andrade melting-point formula for shear viscosity. *Physics and Chemistry of Liquids*, 17(4):327–329, ???? 1988. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1988:ERB

[546] N. H. March and R. Santamara. Exact relation between density-matrix and density-functional theory for K plus L closed shells in a bare Coulomb field. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 38(??):5002–??, November 15, 1988. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.38.5002`.

March:1988:FEL

[547] N. H. March. Formally exact link between electron density and potential energy in single-nondegenerate-band model of an insulating crystal. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 37(??):1361–??, February 15, 1988. CODEN PLRAAN. ISSN 1050-2947 (print),

1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.37.1361`.

March:1988:IBR

[548] N. H. March and B. V. Paranjape. Interaction between rare gas atoms outside metal surfaces: Role of plasma excitations. *Physics Letters A*, 47 (3):309–314, September 25, 1988. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0169433288903212`.

March:1988:INS

[549] N. H. March. Ion-pair neutralization — solution of Smoluchowski equation for Coulomb field. *Physics and Chemistry of Liquids*, 18(3):227–233, ???? 1988. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1988:LVC

[550] N. H. March, M. P. Tosi, and R. G. Chapman. Liquid vapor coexistence curves from a model equation of state. *Physics and Chemistry of Liquids*, 18(3):195–205, ???? 1988. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1988:RBT

[551] N. H. March. Relation between total energy and orbital energy sum in molecules: Atomic and bonding contributions. *Chemical Physics*, 122(1):39–44, May 1, 1988. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0301010488872574`.

March:1988:SCE

[552] N. H. March. Spatial correlation of electrons in metals. *International Journal of Quantum Chemistry*, 34(S22):655–664, March 12–19, 1988. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Syposium on Quantum Chemistry, Solid-State Theory, and Computational Methods.

March:1988:SCM

[553] N. H. March and M. P. Tosi. Spinodal curves of monatomic fluids from model-equations of state. *Physics and Chemistry of Liquids*, 18(3):269–272, ???? 1988. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1988:XRS

[554] N. H. March and G. Borstel. X-ray scattering factors of crystalline silicon and germanium from a bond charge model. *The Journal of Physics and Chemistry of Solids*, 49(9):1013–1017, February 15, 1988. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369788901473`.

Martin-Rodero:1988:TBT

[555] A. Martín-Rodero, F. Flores, and N. H. March. Tight-binding theory of tunneling current with chemisorbed species. *Physical Review B: Condensed Matter and Materials Physics*, 38(??):10047, November 15, 1988. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.38.10047`.

Pucci:1988:BRE

[556] R. Pucci, F. Siringo, and N. H. March. Bond repulsion, electron correlation, and dimerization in low-dimensional solids under pressure. *Physical Review B: Condensed Matter and Materials Physics*, 38(??):9517–??, November 15, 1988. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.38.9517`.

Rashid:1988:VFE

[557] R. I. M. A. Rashid and N. H. March. Vacancy formation energies in close packed crystals correlated with melting temperature via thermodynamics and liquid structure. Technical Report IC/88/240, ????, ????, 1988.

Siringo:1988:ETT

[558] F. Siringo, R. Pucci, and N. H. March. Electronic transport and three-dimensional band structure of crystalline iodine under high pressure. *Physical Review B: Condensed Matter and Materials Physics*, 38(??):9567–??, November 15, 1988. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.38.9567`.

Siringo:1988:MIT

[559] F. Siringo, R. Pucci, and N. H. March. Metal-insulator transition of elemental iodine under pressure. *Physical Review B: Condensed Matter and Materials Physics*, 37(??):2491–??, February 15, 1988. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.37.2491`.

Alonso:1989:EMA

[560] J. A. (Julio A.) Alonso and Norman H. (Norman Henry) March. *Electrons in Metals and Alloys*. Academic Press, New York, USA, 1989.

ISBN 0-12-053620-X. xi + 603 pp. LCCN QC176.8.E4 A46 1989. URL `http://www.loc.gov/catdir/description/els032/89213009.html; http://www.loc.gov/catdir/toc/els031/89213009.html`.

Alonso:1989:VFE

[561] J. A. Alonso and N. H. March. Vacancy formation energy in close-packed metals connected with liquid thermodynamics at melting. *Physics and Chemistry of Liquids*, 20(4):235–240, ???? 1989. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Ascough:1989:HMD

[562] J. Ascough and N. H. March. Hydrodynamic modes, density-fluctuations and transport-coefficients in liquid-metals. *Physics and Chemistry of Liquids*, 19(1):1–5, ???? 1989. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Ascough:1989:WDV

[563] J. Ascough and N. H. March. Wave-number dependent viscosity of liquid-metals. *Physics and Chemistry of Liquids*, 20(1):61–64, ???? 1989. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Baltin:1989:ERB

[564] R. Baltin and N. H. March. Exact relation between relativistic and non-relativistic green functions for independent particles in a given external potential. *Journal of Physics A (Mathematical and General)*, 22(11): L477–L481, ???? 1989. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/22/i=11/a=005`.

Baltin:1989:LRR

[565] R. Baltin and N. H. March. Linear response relation between charge displaced in an electron liquid by relativistic and nonrelativistic theory. *Physics and Chemistry of Liquids*, 19(3):189–192, ???? 1989. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Baltin:1989:VPR

[566] R. Baltin and N. H. March. Variational principle of relativistic density functional theory for weakly inhomogeneous electron liquid. *Physics and Chemistry of Liquids*, 20(4):227–234, ???? 1989. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Hammel:1989:GFE

[567] H. T. Hammel and N. H. March. Gravitational-field effects on membrane equilibrium, distended water and the liquid-vapor interface. *Physics and Chemistry of Liquids*, 20(2–3):177–186, ???? 1989. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Hunter:1989:EDP

[568] G. Hunter and N. H. March. Explicit density–potential relation for 4-electron atoms in 2-orbital S states. *International Journal of Quantum Chemistry*, 35(5):649–663, May 1989. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Kozlowski:1989:ADE

[569] P. M. Kozlowski and N. H. March. Approximate density–external potential relation and the Pauli potential for systems with Coulombic interaction. *International Journal of Quantum Chemistry*, 36(6):741–748, December 1989. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Kozlowski:1989:ESP

[570] P. M. Kozlowski and N. H. March. Exact single-particle kinetic energy functional for general two-level and model n-level one-dimensional systems: Dependence only on electron density and its gradient. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 39(??):4270–??, April 15, 1989. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.39.4270`.

Lea:1989:QMW

[571] M. J. Lea and N. H. March. Quantum-mechanical Wigner electron crystallization with and without magnetic fields. *International Journal of Quantum Chemistry*, 36(S23):717–729, April 1–8, 1989. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Quantum Biology and Quantum Pharmacology.

March:1989:AFT

[572] N. H. March. 3- alloy formation in terms of chemical properties of the components. *Surface Science Letters*, 124(2-3):21–54, January 20, 1989. CODEN ???? ISSN 0167-2584 (print), 1878-1047 (electronic). URL `http://www.sciencedirect.com/science/article/pii/B978012053620750007X`.

March:1989:BO

[573] N. H. March. 1- background and outline. *Surface Science Letters*, 160(2):1–6, September 2, 1989. CODEN ???? ISSN 0167-2584 (print), 1878-1047 (electronic). URL `http://www.sciencedirect.com/science/article/pii/B9780120536207500056`.

March:1989:CA

[574] N. H. March. 6- Crystalline alloys. *Biochemical and Biophysical Research Communications*, 96(3):205–285, October 16, 1989. CODEN BBRCA9. ISSN 0006-291X (print), 1090-2104 (electronic). URL `http://www.sciencedirect.com/science/article/pii/B978012053620750010X`.

March:1989:ECC

[575] N. H. March. Electron correlation, chemical bonding and the metal-insulator-transition in expanded fluid alkalis. *Physics and Chemistry of Liquids*, 20(4):241–245, ???? 1989. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1989:ECH

[576] N. H. March. Electron correlation and the Hall-effect in liquid-metals. *Physics and Chemistry of Liquids*, 19(1):59–61, ???? 1989. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1989:EDT

[577] N. H. March. 2- electron-density theory. *Surface Science Letters*, 160(2):7–19, September 2, 1989. CODEN ???? ISSN 0167-2584 (print), 1878-1047 (electronic). URL `http://www.sciencedirect.com/science/article/pii/B9780120536207500068`.

March:1989:EKE

[578] N. H. March and R. Santamaria. Electron and kinetic energy densities for an arbitrarily closed shell in a bare Coulomb field from s-state densities. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 39(??): 2835–??, March 15, 1989. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.39.2835`.

March:1989:ESM

[579] N. H. March. 4- electronic structure of metals. *Surface Science Letters*, 160(2):55–127, September 2, 1989. CODEN ???? ISSN 0167-2584 (print), 1878-1047 (electronic). URL `http://www.sciencedirect.com/science/article/pii/B9780120536207500081`.

March:1989:ESR

[580] N. H. March. 7- electronic states related to the thermodynamics of disordered systems. *Surface Science Letters*, 124(2-3):287–327, January 20, 1989. CODEN ???? ISSN 0167-2584 (print), 1878-1047 (electronic). URL `http://www.sciencedirect.com/science/article/pii/B9780120536207500111`.

March:1989:ETO

[581] N. H. March. 8- electrical transport and optical properties. *Surface Science Letters*, 160(2):329–361, September 2, 1989. CODEN ???? ISSN 0167-2584 (print), 1878-1047 (electronic). URL `http://www.sciencedirect.com/science/article/pii/B9780120536207500123`.

March:1989:ILV

[582] N. H. March. Inequality linking vacancy-formation energy and rigidity in a liquid at melting point from a density-independent pair potential theory. *Physical Review B: Condensed Matter and Materials Physics*, 40 (??):3356–??, August 15, 1989. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.40.3356`.

March:1989:M

[583] N. H. March. 9- magnetism. *Biochemical and Biophysical Research Communications*, 96(3):363–432, October 16, 1989. CODEN BBRCA9. ISSN 0006-291X (print), 1090-2104 (electronic). URL `http://www.sciencedirect.com/science/article/pii/B9780120536207500135`.

March:1989:MBE

[584] N. H. March. Many-body effects in polymers: especially polyacetylene. *Journal of Molecular Structure. Theochem*, 188(3–4):261–276, August 2, 1989. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0166128089851164`.

March:1989:PD

[585] N. H. March. 5-point defects. *Surface Science Letters*, 124(2-3):129–203, January 20, 1989. CODEN ???? ISSN 0167-2584 (print), 1878-1047 (electronic). URL `http://www.sciencedirect.com/science/article/pii/B9780120536207500093`.

March:1989:RBK

[586] N. H. March and R. Santamaria. Relation between kinetic and exchange energies in a relativistic inhomogeneous electron liquid. *Physics and*

Chemistry of Liquids, 19(3):187–188, ???? 1989. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1989:RDF

[587] N. H. March. Relativistic density functional theory. *Physics Letters A*, 372(10):75–83, September 3, 1989. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0166128089800430`.

March:1989:SI

[588] N. H. March. 10-surfaces and interfaces. *Surface Science Letters*, 160(2):433–511, September 2, 1989. CODEN ???? ISSN 0167-2584 (print), 1878-1047 (electronic). URL `http://www.sciencedirect.com/science/article/pii/B9780120536207500147`.

March:1989:TDI

[589] N. H. March. Thermal desorption, indirect lateral interactions, and the $2\pi^*$ resonance model of CO chemisorbed on transition metals. *Physical Review B: Condensed Matter and Materials Physics*, 39(2):1385–1386, January 15, 1989. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.39.1385`.

Nagy:1989:EPP

[590] Á. Nagy and N. H. March. Exact potential-phase relation for the ground state of the C atom. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 40(??):554–??, July 15, 1989. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.40.554`.

Nagy:1989:OBP

[591] A. Nagy and N. H. March. One-body potential theory in terms of the phase of wave functions for the ground state of the Be atom. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 39(??):5512–??, June 1, 1989. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.39.5512`.

Piccitto:1989:EEI

[592] G. Piccitto, R. Pucci, N. H. March, and A. Grassi. Electron–electron interaction energy in homonuclear diatomic molecules. *International Journal of Quantum Chemistry*, 36(4):525–531, October 1989. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Rashid:1989:VFE

[593] Rima Rashid and N. H. March. Vacancy formation energies in close-packed crystals correlated with melting temperature via thermodynamics and liquid structure. *Physics and Chemistry of Liquids*, 19(1):41–46, ???? 1989. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:1990:CPC

[594] C. Amovilli and N. H. March. Characterization of potential-energy curves for H_2^+ and H_2 by local values of electron-density. *Chemical Physics*, 146 (1–2):207–210, ???? 1990. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic).

Ascough:1990:SIP

[595] J. A. Ascough and N. H. March. Structure inversion — pair potentials with common characteristics from three theories at low-density on liquid vapor coexistence curve of Cs. *Physics and Chemistry of Liquids*, 21(4): 251–255, ???? 1990. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Holas:1990:GRL

[596] A. Holas and N. H. March. A generalisation of the Runge–Lenz constant of classical motion in a central potential. *Journal of Physics A (Mathematical and General)*, 23(5):735–749, ???? 1990. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/23/735; http://stacks.iop.org/0305-4470/23/i=5/a=017`.

Kozlowski:1990:GCC

[597] P. M. Kozlowski and N. H. March. Generalization of Coulomb classical Runge–Lenz vector to central field model of molecules CH_4, SiH_4, etc. *Il Nuovo Cimento B Series 11*, 105(12):1291–1296, December 1990. CODEN NCIBAW. ISSN 0369-3554 (print), 1826-9877 (electronic). URL `http://link.springer.com/article/10.1007/BF02742684`.

Kozlowski:1990:SPK

[598] P. M. Kozlowski and N. H. March. Single-particle kinetic-energy for N-fermions in one-dimension — general and model results. *Europhysics Letters*, 11(7):613–617, ???? 1990. CODEN EULEEJ. ISSN 0295-5075 (print), 1286-4854 (electronic).

Lea:1990:ELS

[599] M. J. Lea and N. H. March. The electron liquid-solid phase-transition in 2-dimensions in a magnetic-field. *Physics and Chemistry of Liquids*, 21 (3):183–193, ???? 1990. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1990:CML

[600] N. H. March, K. N. Pathak, and J. A. Ascough. Collective modes and liquid structure-theory of metallic Rb. *Physics and Chemistry of Liquids*, 21(3):203–206, ???? 1990. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1990:CPE

[601] N. H. March. Characterization of potential energy curves for H_2^+ and H_2 by local values of electron density. *Chemical Physics*, 146(1–2):207–210, September 15, 1990. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0301010490900185`.

March:1990:CPL

[602] Norman H. (Norman Henry) March. *Chemical Physics of Liquids*, volume 1 of *Contemporary topics in pure and applied condensed matter science, 1043-3996*. Gordon and Breach Science Publishers, New York, NY, USA, 1990. ISBN 2-88124-722-9 (Switzerland). xii + 326 pp. LCCN QD541 .M337 1990. URL `http://www.loc.gov/catdir/enhancements/fy0653/89023739-d.html`.

March:1990:EPL

[603] N. H. March. Effective potentials for light atoms and ions at zero and finite temperatures. *Physics Letters A*, 144(4-5):241–243, March 5, 1990. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/037596019090928H`.

March:1990:GSE

[604] N. H. March. Ground-state energy and one-body virial in density functional theory of atomic ions. *Chemical Physics*, 140(3):339–341, February 1, 1990. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic). URL `http://www.sciencedirect.com/science/article/pii/030101049080001E`.

March:1990:IDE

[605] N. H. March. Information-content of diffraction experiments on liquids and amorphous solids. *Physics and Chemistry of Liquids*, 22(3):133–148, ???? 1990. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1990:KED

[606] N. H. March. Kinetic energy density as a function of subshell electron densities. *Surface Science Letters*, 111(1):35–41, February 2, 1990. CODEN ???? ISSN 0167-2584 (print), 1878-1047 (electronic). URL `http://www.sciencedirect.com/science/article/pii/016612809085105V`.

March:1990:LMC

[607] Norman H. (Norman Henry) March. *Liquid Metals: Concepts and Theory*. Cambridge monographs on mathematical physics. Cambridge University Press, Cambridge, UK, 1990. ISBN 0-521-30279-X. xii + 492 pp. LCCN QD171 .M37 1990; QD171 .M28 1990; TA463. URL `http://adsabs.harvard.edu/abs/1990lmct.book.....M`.

March:1990:MBF

[608] N. H. March. Molecular binding in free space and in cold dense plasmas. *International Journal of Quantum Chemistry*, 38(S24):621–632, March 17–24, 1990. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Quantum Chemistry, Solid-State Physics, and Computational Methods.

March:1990:MSC

[609] N. H. March. Magnetic-susceptibility of strongly correlated expanded liquid Cs related to electrical-resistivity near criticality. *Physics and Chemistry of Liquids*, 22(3):191–194, ???? 1990. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1990:PTI

[610] N. H. March. Point-defects and their interaction with impurities in metals. *Journal of the Chemical Society — Faraday Transactions*, 86(8): 1203–1207, ???? 1990. ISSN 0956-5000 (print), 1364-5455 (electronic).

March:1990:RBD

[611] N. H. March and B. V. Paranjape. A relation between diffusion and viscosity in binary fluid mixtures. *Physics and Chemistry of Liquids*, 21 (3):173–176, ???? 1990. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1990:RCD

[612] N. H. March and B. V. Paranjape. Reply to "comment on 'dispersion relation for collective modes in classical monatomic liquids and amorphous solids"'. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 41(??):4548–??, April 15, 1990. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.41.4548`.

March:1990:RED

[613] N. H. March, P. M. Kozlowski, and F. Perrot. The role of electron density and potential at the bond midpoint in homonuclear diatomic binding. *Journal of Molecular Structure. Theochem*, 209(3–4):433–437, October 15, 1990. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0166128090800945`.

March:1990:SCE

[614] N. H. March. Strongly correlated electronic ground states in metals near the metal-insulator transition. *Journal of Mathematical Chemistry*, 4(1):271–293, ???? 1990. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/BF01170017`.

March:1990:TMA

[615] N. H. March. Thomas–Fermi modeling of atoms in cold dense-plasmas. *Physics and Chemistry of Liquids*, 21(3):157–167, ???? 1990. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1990:TPF

[616] N. H. March. Theory of phase factors for a one-body potential of arbitrary symmetry. *The Journal of Physics and Chemistry of Solids*, 64(3):373–378, January 2, 1990. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0166128090850885`.

Nagy:1990:APP

[617] A. Nagy and N. H. March. Asymptotic-behavior of the Pauli potential for a perfectly screened charge embedded in an almost degenerate dense-plasma. *Physics and Chemistry of Liquids*, 22(1–2):129–131, ???? 1990. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Nagy:1990:EPL

[618] A. Nagy and N. H. March. Effective potentials for light-atoms and ions at zero and finite temperatures. *Physics Letters A*, 144(4–5):241–243, ???? 1990. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Nagy:1990:GEO

[619] A. Nagy and N. H. March. Ground-state energy and one-body virial in density functional theory of atomic ions. *Chemical Physics*, 140(3):339–341, ???? 1990. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic).

Perrot:1990:BPP

[620] F. Perrot and N. H. March. Binding in pair potentials of liquid simple metals from nonlocality in electronic kinetic-energy. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 42(8):4884–4893, October 15, 1990. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.42.4884`.

Perrot:1990:PPL

[621] F. Perrot and N. H. March. Pair potentials for liquid-sodium near freezing from electron theory and from inversion of the measured structure factor. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 41(8):4521–4523, April 15, 1990. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.41.4521`.

Santamaria:1990:KDF

[622] R. Santamaria and N. H. March. Kinetic-energy density as a function of subshell electron-densities. *Journal of Molecular Structure. Theochem*, 64(??):35–41, ???? 1990. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Amovilli:1991:MCA

[623] C. Amovilli, N. H. March, and S. Pfalzner. Model of confined atoms in arbitrary static electric-fields — relevance to nondegenerate plasmas. *Physics and Chemistry of Liquids*, 24(1–2):79–89, ???? 1991. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:1991:NCA

[624] C. Amovilli and N. H. March. Nonrelativistic current-density for atoms in arbitrarily strong magnetic-fields. *Physical Review A (Atomic, Molec-*

ular, and Optical Physics), 43(5):2528–2530, ???? 1991. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519.

Amovilli:1991:NCD

[625] C. Amovilli and N. H. March. Nonrelativistic current density for atoms in arbitrarily strong magnetic fields. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 43(??):2528–??, March 1, 1991. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.43.2528`.

Amovilli:1991:TDS

[626] C. Amovilli and N. H. March. Temperature dependence of the Slater sum: generalization of the one-dimensional Thomas–Fermi theory. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 44(5):2846–2849, September 1, 1991. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.44.2846`.

Amovilli:1991:TSS

[627] C. Amovilli and N. H. March. Temperature-dependence of the Slater sum — generalization of the one-dimensional Thomas–Fermi theory. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 44(5):2846–2849, ???? 1991. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519.

Ascough:1991:EEF

[628] J. A. Ascough and N. H. March. Electrical-resistivity of expanded fluid rubidium. *Physics and Chemistry of Liquids*, 23(1):37–48, ???? 1991. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Egorov:1991:DAD

[629] S. A. Egorov and N. H. March. Deformation of atomic density in a homonuclear diatomic molecule due to dispersion interaction. *Physics Letters A*, 157(1):57–59, ???? 1991. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Engel:1991:CGS

[630] G. E. Engel, Behnam Farid, C. M. M. Nex, and N. H. March. Calculation of the GW self-energy in semiconducting crystals. *Physical Review B: Condensed Matter and Materials Physics*, 44(24):13356–13373, December 15, 1991. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.44.13356`.

Freeman:1991:BDE

[631] G. R. Freeman and N. H. March. Bound and delocalized electrons in strong magnetic fields. *European Journal of Physics*, 12(1):19–22, ???? 1991. CODEN EJPHD4. ISSN 0143-0807 (print), 1361-6404 (electronic). URL `http://stacks.iop.org/0143-0807/12/i=1/a=004`.

Hammel:1991:CAI

[632] H. T. Hammel, N. H. March, and B. W. Watson. Can the aqueous-solution inside a cell-membrane characterize normal and cancerous forms. *Physics and Chemistry of Liquids*, 23(1):57–59, ???? 1991. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Holas:1991:CPP

[633] A. Holas and N. H. March. Construction of the Pauli potential, Pauli energy, and effective potential from the electron density. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 44(9):5521–5536, November 1, 1991. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.44.5521`.

Holas:1991:KDP

[634] A. Holas, P. M. Kozlowski, and N. H. March. Kinetic-energy density and Pauli potential — dimensionality dependence, gradient expansions and nonlocality. *Journal of Physics A (Mathematical and General)*, 24 (18):4249–4260, ???? 1991. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic).

Holas:1991:KED

[635] A. Holas, P. M. Kozlowski, and N. H. March. Kinetic energy density and Pauli potential: dimensionality dependence, gradient expansions and nonlocality. *Journal of Physics A (Mathematical and General)*, 24(18): 4249–4260, ???? 1991. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/24/4249; http://stacks.iop.org/0305-4470/24/i=18/a=013`.

Holas:1991:RFW

[636] A. Holas and N. H. March. Remnants of the Fermi-surface in the Wigner electron crystal phase of a strongly interacting one-dimensional system. *Physics Letters A*, 157(2–3):160–162, ???? 1991. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Lea:1991:SMP

[637] M. J. Lea and N. H. March. The shear modulus and the phase diagram for two-dimensional Wigner electron crystals. *Journal of Physics: Condensed Matter*, 3(20):3493–3503, ???? 1991. CODEN JCOMEL. ISSN 0953-8984 (print), 1361-648X (electronic). URL `http://stacks.iop.org/0953-8984/3/i=20/a=010`.

Lea:1991:TMT

[638] M. J. Lea, N. H. March, and W. Sung. Thermodynamics of melting of a two-dimensional Wigner electron crystal. *Journal of Physics: Condensed Matter*, 3(23):4301–4306, ???? 1991. CODEN JCOMEL. ISSN 0953-8984 (print), 1361-648X (electronic). URL `http://stacks.iop.org/0953-8984/3/i=23/a=020`.

March:1991:ADL

[639] Norman H. (Norman Henry) March and M. P. (Mario P) Tosi. *Atomic Dynamics in Liquids*. Dover Publications, Inc., New York, NY, USA, 1991. ISBN 0-486-66598-4 (paperback). vii + 330 pp. LCCN QC145.2 .M37 1991. URL `http://www.loc.gov/catdir/description/dover032/90021861.html`.

March:1991:AII

[640] N. H. March. Atoms and ions in intense magnetic and electric fields. *International Journal of Quantum Chemistry*, 40(S25):401–414, ???? 1991. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceeding of the International Symposium on Quantum Chemistry Solid-State Physics, and Computational Methods.

March:1991:CCP

[641] N. H. March. Compression of condensed phases of "almost spherical" molecules XH_4: the equilibrium X–H bond length for heavy atoms X. *Physics Letters A*, 153(2–3):133–135, February 25, 1991. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://adsabs.harvard.edu/abs/1991PhLA..153..133M; http://www.sciencedirect.com/science/article/pii/0375960191908553`.

March:1991:CHL

[642] N. H. March, B. V. Paranjape, and F. Siringo. Can the hole liquid undergo Wigner crystallization in high-T_c $La_{2-x}Sr_xCuO_4$ at low-density. *Physics and Chemistry of Liquids*, 24(1–2):131–135, ???? 1991. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1991:DAD

[643] N. H. March. Deformation of atomic density in a homonuclear diatomic molecule due to dispersion interaction. *Physics Letters A*, 157(1):57–59, July 15, 1991. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/037596019190408Z`.

March:1991:EDT

[644] Norman H. (Norman Henry) March. Electron density theory of force fields in relation to liquid structure inversion. Technical report, United Kingdom Atomic Energy Authority, Harwell, UK, 1991. 17 pp.

March:1991:IEG

[645] N. H. March. Inhomogeneous electron gas theory of molecular dissociation energies. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 24(19):4123–4128, ???? 1991. CODEN JPAPEH. ISSN 0953-4075 (print), 1361-6455 (electronic). URL `http://stacks.iop.org/0953-4075/24/i=19/a=007`.

March:1991:IET

[646] N. H. March. Inhomogeneous electron-gas theory of molecular dissociation-energies. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 24(19):4123–4128, ???? 1991. CODEN JPAPEH. ISSN 0953-4075 (print), 1361-6455 (electronic).

March:1991:KET

[647] N. H. March. Kinetic energy in terms of electron density for atomic s and p shells in a bare Coulomb field. *Chemical Physics Letters*, 181 (2–3):279–280, June 21, 1991. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/000926149190367I`.

March:1991:NLR

[648] N. H. March and R. Santamaria. Non-local relation between kinetic and exchange energy densities in Hartree–Fock theory. *International Journal of Quantum Chemistry*, 39(4):585–592, April 1991. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:1991:NRB

[649] N. H. March and R. Santamaria. Nonlocal relation between kinetic and exchange energy densities in Hartree–Fock theory. *International Journal*

of Quantum Chemistry, 39(4):585–592, ???? 1991. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:1991:RBT

[650] N. H. March. Relation between total energy and sum of orbital energies for neutral atoms. *Chemical Physics*, 153(1–2):141–145, May 15, 1991. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic). URL `http://www.sciencedirect.com/science/article/pii/030101049190014K`.

March:1991:RFS

[651] N. H. March. Remnants of the Fermi surface in the Wigner electron crystal phase of a strongly interacting one-dimensional system. *Physics Letters A*, 157(2–3):160–162, July 22, 1991. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/037596019190091L`.

Nagy:1991:EFP

[652] A. Nagy and N. H. March. The exact form of the Pauli potential for the ground state of two- and three-level atoms and ions. *International Journal of Quantum Chemistry*, 39(4):615–623, April 1991. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Nagy:1991:KTE

[653] A. Nagy and N. H. March. Kinetic-energy in terms of electron-density for atomic S-shell and P-shell in a bare Coulomb field. *Chemical Physics Letters*, 181(2–3):279–280, ???? 1991. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Nagy:1991:RBT

[654] A. Nagy and N. H. March. Relation between total energy and sum of orbital energies for neutral atoms. *Chemical Physics*, 153(1–2):141–145, ???? 1991. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic).

Schmidt:1991:SII

[655] K. Schmidt, W. D. Kraeft, and N. H. March. A screened ion ion potential for liquid-metals derived from the green-function technique. *Physics and Chemistry of Liquids*, 24(1–2):103–117, ???? 1991. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Siringo:1991:SFC

[656] F. Siringo, M. J. Lea, and N. H. March. Self-consistent force-constant calculation for a 2-dimensional Wigner electron crystal in high magnetic-fields, and limitations of Lindemann Law of Melting. *Physics and Chemistry of Liquids*, 23(2):115–121, ???? 1991. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Egorov:1992:EEE

[657] S. A. Egorov, N. H. March, and R. Santamaria. Effects of exchange on equilibrium bond lengths of heavy, almost spherical, tetrahedral molecules XH_4. *International Journal of Quantum Chemistry*, 42(6): 1641–1649, June 20, 1992. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Egorov:1992:MED

[658] S. A. Egorov and N. H. March. Model and experimental direct correlation-functions in dense charged fluids. *Physics and Chemistry of Liquids*, 24(3):199–204, ???? 1992. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1992:CDI

[659] Gordon R. Freeman and Norman H. March. Current density for independent harmonically confined electrons in a constant magnetic field. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 45(??): 6879–??, May 1, 1992. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.45.6879`.

Freeman:1992:CIH

[660] Gordon R. Freeman and N. H. March. Current-density for independent harmonically confined electrons in a constant magnetic-field. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 45(9):6879–6880, ???? 1992. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519.

Holas:1992:KEE

[661] A. Holas and N. H. March. Kinetic and exchange energy densities of an inhomogeneous electron liquid related in Hartree–Fock theory and other models. *Physics and Chemistry of Liquids*, 25(1):43–50, ???? 1992. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Kozlowski:1992:CRB

[662] P. M. Kozlowski and N. H. March. Closed relation between single-particle kinetic-energy and electron-density in one-dimensional 2-level systems. *Acta Physica Polonica A*, 82(3):421–424, ???? 1992. CODEN ATPLB6. ISSN 0587-4246 (print), 1898-794x (electronic).

Lea:1992:MWE

[663] M. J. Lea, N. H. March, and W. Sung. Melting of Wigner electron crystals — phenomenology and anyon magnetism. *Journal of Physics: Condensed Matter*, 4(23):5263–5272, ???? 1992. CODEN JCOMEL. ISSN 0953-8984 (print), 1361-648X (electronic). URL `http://stacks.iop.org/0953-8984/4/i=23/a=003`.

March:1992:ASG

[664] N. H. March and P. Wind. An asymptotic spatial generalization of Kato's Theorem for really heavy-atoms in nonrelativistic theory. *Molecular Physics*, 76(5):1199–1202, ???? 1992. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

March:1992:EDG

[665] N. H. March. Electron density in the ground states of atoms and molecules. *Physics of the Earth and Planetary Interiors*, 6(1-3):273–298, July 31, 1992. CODEN PEPIAM. ISSN 0031-9201 (print), 1872-7395 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0166128092870496`.

March:1992:EDTa

[666] N. H. March. Electron density theory in extreme homogeneous and heterogeneous environments and in intense external fields. *International Journal of Quantum Chemistry*, 44(S26):377–391, March 14–21, 1992. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular, and Condensed Matter Theory and Computational Methods.

March:1992:EDTb

[667] Norman H. (Norman Henry) March. *Electron Density Theory of Atoms and Molecules*. Theoretical chemistry. Academic Press, New York, USA, 1992. ISBN 0-12-470525-1. xii + 339 pp. LCCN QC173 .M363 1992; QD461 .M263 1992.

March:1992:EGA

[668] N. H. March. Electron-density in the ground-states of atoms and molecules. *Journal of Molecular Structure. Theochem*, 92(??):273–298,

???? 1992. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

March:1992:ETE

[669] N. H. March. Electron-density theory in extreme homogeneous and heterogeneous environments and in intense external fields. *International Journal of Quantum Chemistry*, ??(??):377–391, ???? 1992. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:1992:FAS

[670] N. H. March and B. V. Paranjape. Forces acting on solid spheres and bubbles moving through dense liquid. *Physics and Chemistry of Liquids*, 24(4):273–277, ???? 1992. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1992:IET

[671] N. H. March and B. V. Paranjape. Ionic and electronic transport in liquid-metals — relation between longitudinal and transverse effects. *The Journal of Physics and Chemistry of Solids*, 53(8):1055–1057, August 30, 1992. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/002236979290077Q`.

March:1992:LRP

[672] Norman H. (Norman Henry) March. Long-range polarization interaction in simple liquid metals. Technical report, AEA Technology, Harwell, UK, September 1992. 12 pp.

March:1992:OLA

[673] N. H. March and P. Wind. Origin of the linear-dependence with atomic-number of correlation energies in neutral atoms. *Molecular Physics*, 77 (4):791–796, ???? 1992. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

March:1992:OSP

[674] N. H. March and A. Nagy. One-sixth power law for molecular dissociation energies in terms of inhomogeneity kinetic energy. *The Journal of Physics and Chemistry of Solids*, 63(2):129–133, December 10, 1992. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/016612809287135M`.

March:1992:PLM

[675] N. H. March and A. Nagy. 1/6 power law for molecular dissociation-energies in terms of inhomogeneity kinetic-energy. *Journal of Molecular Structure. Theochem*, 96(??):129–133, ???? 1992. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

March:1992:SCE

[676] N. H. March and B. V. Paranjape. Single-particle and collective effects in liquid-metals near freezing and in their hot solids. *Physics and Chemistry of Liquids*, 24(4):223–230, ???? 1992. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1992:TIE

[677] N. H. March and A. Nagy. Theory of the inhomogeneous electron liquid, transcending Hartree–Fock. *Physics and Chemistry of Liquids*, 24(3): 183–191, ???? 1992. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Nagy:1992:RBP

[678] A. Nagy and N. H. March. Relation between the Pauli potential and the Pauli energy density in an inhomogeneous electron liquid. *Physics and Chemistry of Liquids*, 25(1):37–42, ???? 1992. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Tankeshwar:1992:DPP

[679] K. Tankeshwar and N. H. March. The deviation of the pair potential from the potential of mean force in molten na near freezing. *Physics and Chemistry of Liquids*, 25(1):59–64, ???? 1992. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Blazej:1993:LPI

[680] M. Blazej and N. H. March. Long-range polarization interaction in simple liquid-metals. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 48(3):1782–1786, ???? 1993. CODEN PLEEE8. ISSN 1063-651X.

Blazej:1993:LRP

[681] M. Blazej and N. H. March. Long-range polarization interaction in simple liquid metals. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 48(??):1782–??, September 1, 1993. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRevE.48.1782`.

Cordero:1993:DAC

[682] N. A. Cordero, J. A. Alonso, J. M. Lopez, and N. H. March. Dissociation-energy of alkali-metal clusters related to inhomogeneous electron-gas theory. *Molecular Physics*, 79(2):393–403, ???? 1993. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Freeman:1993:CFS

[683] Gordon R. Freeman and N. H. March. Common features in slow-electron scattering by methane and the heavier noble-gases. *Chemical Physics*, 173(3):451–455, ???? 1993. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic).

Freeman:1993:RCB

[684] Gordon R. Freeman and N. H. March. Resonant coupling between atoms in time modulation of fluorescence following photodissociation of Ca_2. *Journal of Molecular Structure. Theochem*, 102(??):117–119, ???? 1993. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Freeman:1993:RCE

[685] Gordon R. Freeman and Norman H. March. Ring confinement of electrons in a uniform magnetic-field. *Journal of Physical Chemistry*, 97 (16):4076–4077, ???? 1993. CODEN JPCHAX. ISSN 0022-3654 (print), 1541-5740 (electronic). URL `http://pubs.acs.org/doi/abs/10.1021/j100118a023`.

Golden:1993:CST

[686] K. I. Golden, N. H. March, and A. K. Ray. 3-particle correlation-function and structural theories of dense metallic liquids. *Molecular Physics*, 80 (4):915–924, ???? 1993. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Golden:1993:LAD

[687] K. I. Golden and N. H. March. Long-wavelength analysis of the direct correlation-function for Coulomb liquids. *Physics and Chemistry of Liquids*, 26(1):59–66, ???? 1993. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Golden:1993:TCC

[688] K. I. Golden and N. H. March. Thermodynamic consistency and classical liquid structural theory. *Physics and Chemistry of Liquids*, 26(1):1–13, ???? 1993. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Holas:1993:HFM

[689] A. Holas, N. H. March, Y. Takahashi, and C. Zhang. Hartree–Fock method posed as a density-functional theory: Application to the Be atom. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 48(??):2708–??, October 1, 1993. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.48.2708`.

Holas:1993:HMP

[690] A. Holas, N. H. March, Y. Takahashi, and C. Zhang. Hartree–Fock method posed as a density-functional theory — application to the Be atom. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 48 (4):2708–2715, ???? 1993. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519.

Holas:1993:RDF

[691] A. Holas and N. H. March. Relativistic density functional theory — reduction of many-electron problem of atoms and molecules to a one-electron Dirac-equation. *Journal of Molecular Structure. Theochem*, 98 (??):273–279, ???? 1993. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Lopez:1993:HDS

[692] J. M. Lopez, J. A. Alonso, and N. H. March. Homonuclear diatomic systems — differential-equation for mirror plane electron-density, and fragment model. *Journal of Molecular Structure. Theochem*, 107(3):235–243, ???? 1993. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

March:1993:CLR

[693] N. H. March. Completely local relativistic density-functional theory — the role of the virial. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 48(6):4778–4779, December 1, 1993. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.48.4778`.

March:1993:CPF

[694] Norman H. (Norman Henry) March and Joseph F. Mucci. *Chemical Physics of Free Molecules*. Plenum Press, New York, NY, USA; London, UK, 1993. ISBN 0-306-44270-1. xix + 393 pp. LCCN QD461 .M26 1993. URL `http://catdir.loc.gov/catdir/enhancements/fy0820/93024193-d.html; http://catdir.loc.gov/catdir/enhancements/fy0820/93024193-t.html`.

March:1993:EHL

[695] N. H. March. Electron or hole liquids flowing through antiferromagnetic assemblies — relevance to high t(c) materials. *Physics and Chemistry of Liquids*, 25(2):65–73, ???? 1993. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1993:ESC

[696] N. H. March. Electronic-structure and stability of clusters, especially of alkali-metals and carbon. *Journal of Molecular Structure*, 300(??):479–500, ???? 1993. CODEN JMOSB4. ISSN 0022-2860 (print), 1872-8014 (electronic).

March:1993:ESS

[697] N. H. March. Electronic structure and stability of clusters, especially of alkali metals and carbon. *Physics Letters A*, 67(5-6):479–500, December 3, 1993. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022286093870417`.

March:1993:GSE

[698] N. H. March. The ground-state energy of atomic and molecular ions and its variation with the number of electrons. In K. D. Sen, editor, *Chemical Hardness*, volume 80 of *Structure and Bonding*, pages 71–86. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1993. CODEN ???? ISBN 3-540-56091-2 (print), 3-540-47442-0 (e-book). ISSN 0081-5993 (print), 1616-8550 (electronic). URL `http://link.springer.com/chapter/10.1007/BFb0036800`.

March:1993:HDS

[699] N. H. March. Homonuclear diatomic systems: differential equation for mirror plane electron density, and fragment model. *Journal of Molecular Structure. Theochem*, 288(3):235–243, December 13, 1993. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/016612809387054H`.

March:1993:LPI

[700] N. H. March. Light particles interacting with organic molecules. *International Journal of Quantum Chemistry*, 48(S27):607–620, ???? 1993. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:1993:MDE

[701] N. H. March. Molecular dissociation energies characterized by number of electrons and equilibrium bond length. *Journal of Molecular Structure.*

Theochem, 281(1):53–60, April 22, 1993. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL http://www.sciencedirect.com/science/article/pii/016612809380028X.

March:1993:MMI

[702] N. H. March. Melting of a magnetically induced Wigner electron solid and anyon properties. *Journal of Physics: Condensed Matter*, 5(34B): B149–B156, ???? 1993. CODEN JCOMEL. ISSN 0953-8984 (print), 1361-648X (electronic). URL http://stacks.iop.org/0953-8984/5/i=34B/a=018.

March:1993:NER

[703] N. H. March, B. V. Paranjape, and R. E. Robson. Nernst, Ettingshausen and Righi–Leduc phenomena in relation to the quantum Hall effect in two-dimensional electron assemblies. *The Journal of Physics and Chemistry of Solids*, 54(6):745–746, June 14, 1993. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL http://www.sciencedirect.com/science/article/pii/002236979390135E.

March:1993:PCH

[704] N. H. March, J. A. Alonso, and J. M. Lopez. Potential-energy curve of h-2(+) related to mirror-plane ground-state electron-density. *Molecular Physics*, 79(5):1143–1146, ???? 1993. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

March:1993:RCB

[705] N. H. March. Resonant coupling between atoms in time modulation of fluorescence following photodissociation of Ca_2. *Physics Letters A*, 57(1):117–119, July 17, 1993. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/0166128093871203.

March:1993:RDF

[706] N. H. March. Relativistic density functional theory: reduction of many-electron problem of atoms and molecules to a one-electron Dirac equation. *Physics Letters A*, 86(5):273–279, February 25, 1993. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/016612809390075M.

March:1993:SDF

[707] N. H. March, N. Gidopoulos, A. K. Theophilou, M. J. Lea, and W. Sung. The statistical distribution function for an anyon liquid. *Physics and*

Chemistry of Liquids, 26(2):135–141, ???? 1993. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1993:STL

[708] N. H. March. Structural theory of the liquid-gas critical-point. *Physics and Chemistry of Liquids*, 25(4):269–272, ???? 1993. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Nagy:1993:MDC

[709] A. Nagy and N. H. March. Molecular dissociation-energies characterized by number of electrons and equilibrium bond length. *Journal of Molecular Structure. Theochem*, 100(1):53–60, ???? 1993. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Pfalzner:1993:TFT

[710] S. Pfalzner and N. H. March. Thomas–Fermi theory in magnetic fields of arbitrary strength. *Journal of Mathematical Physics*, 34(2):549–557, February 1993. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL `http://jmp.aip.org/resource/1/jmapaq/v34/i2/p549_s1; http://link.aip.org/link/?JMP/34/549/1`.

Pfalzner:1993:TTM

[711] S. Pfalzner and N. H. March. Thomas–Fermi theory in magnetic-fields of arbitrary strength. *Journal of Mathematical Physics*, 34(2):549–557, ???? 1993. CODEN JMAPAQ. ISSN 0022-2488.

Theophilou:1993:OCD

[712] A. K. Theophilou and N. H. March. Optimally convergent determinantal expansion of many-electron wave functions. *International Journal of Quantum Chemistry*, 46(6):735–743, ???? 1993. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Blazej:1994:INM

[713] M. Blazej and N. H. March. The interaction of the n2o molecule with metal atoms — especially beryllium. *Journal of Molecular Structure. Theochem*, 118(2):127–129, ???? 1994. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Clark:1994:UFF

[714] John W. Clark, Charles E. Campbell, George A. Baker, João Da Providéncia, Norman March, and J. L. Ozbun. An unfair firing in Fargo? *Physics Today*, 47(10):90–91, October 1994. CODEN PHTOAD. ISSN

0031-9228 (print), 1945-0699 (electronic). URL `http://link.aip.org/link/?PTO/47/90/1`.

Egorov:1994:TEH

[715] S. A. Egorov and N. H. March. Transport-properties of electron or hole liquids in normal-state of high-T_c copper oxides. *Physics and Chemistry of Liquids*, 27(3):195–198, ???? 1994. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1994:MTC

[716] Gordon R. Freeman and N. H. March. Molecular topology, charge-transfer and x-ray-scattering from polyatomic gases. *Journal of Molecular Structure. Theochem*, 111(??):13–17, March 10, 1994. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0166128094801371`.

Freeman:1994:NCB

[717] G. R. Freeman and N. H. March. Nature of chemical bonding in highly expanded heavy alkalis: Especially Cs and Rb. *Journal of Physical Chemistry*, 98(38):9486–9487, ???? 1994. CODEN JPCHAX. ISSN 0022-3654 (print), 1541-5740 (electronic). URL `http://pubs.acs.org/doi/abs/10.1021/j100089a021`.

Freeman:1994:PRO

[718] Gordon R. Freeman and N. H. March. Positron-annihilation rates on organic-molecules in dense liquids and in gases. *Physics and Chemistry of Liquids*, 28(4):211–219, ???? 1994. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1994:SCR

[719] Gordon R. Freeman and N. H. March. Steady-state current-density represented by a velocity vector potential in an inhomogeneous electron fluid in a magnetic-field. *Physics and Chemistry of Liquids*, 26(4):281–284, ???? 1994. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1994:SSC

[720] Gordon R. Freeman and Norman H. March. Steady-state current density represented by a velocity vector potential in an inhomogeneous electron fluid in a magnetic field. *Physics and Chemistry of Liquids*, 26(4):281–284, January 1994. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451. URL `http://www.tandfonline.com/doi/full/10.1080/00319109408029501`.

Golden:1994:LST

[721] K. I. Golden and N. H. March. Liquid structural theories of 2-dimensional and 3-dimensional plasmas. *Physics and Chemistry of Liquids*, 27(3): 187–193, ???? 1994. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Grassi:1994:CDV

[722] A. Grassi, G. M. Lombardo, N. H. March, and R. Pucci. Correlation-energy of diatomic-molecules versus number of electrons. *Molecular Physics*, 81(5):1265–1268, ???? 1994. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Heyes:1994:MLN

[723] D. M. Heyes and N. H. March. Mechanical-properties of liquids — Newtonian and beyond. *Physics and Chemistry of Liquids*, 28(1):1–27, ???? 1994. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Holas:1994:CDF

[724] A. Holas and N. H. March. Canonical density-matrix for free-electrons moving on a spherical surface. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 49(5):3432–3438, ???? 1994. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519.

Holas:1994:CDM

[725] A. Holas and N. H. March. Canonical density matrix for free electrons moving on a spherical surface. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 49(??):3432–??, May 1, 1994. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.49.3432`.

Holas:1994:DFH

[726] A. Holas and N. H. March. Density-functional form of the Hiller-Sucher-Feinberg identity in relation to the single-particle kinetic-energy tensor. *Journal of Molecular Structure. Theochem*, 121(??):239–244, ???? 1994. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Holas:1994:HMV

[727] A. Holas and N. H. March. How many vector constants of motion exist for a particle moving in a central potential? *Journal of Physics A (Mathematical and General)*, 27(7):2615–2617, ????

1994. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL http://stacks.iop.org/0305-4470/27/2615; http://stacks.iop.org/0305-4470/27/i=7/a=036.

Holas:1994:PDE

[728] A. Holas and N. H. March. Perturbation and density-gradient expansions in D-dimensions. *Philosophical Magazine B: Physics of Condensed Matter: Statistical Mechanics, Electronic, Optical and Magnetic Properties*, 69(5):787–798, ???? 1994. CODEN PMABDJ. ISSN 1364-2812 (print), 1463-6417 (electronic).

Holas:1994:RDF

[729] A. Holas and N. H. March. Relativistic density-functional theory of a single-electron problem. *Journal of Mathematical Physics*, 35(2):577–586, February 1994. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL http://jmp.aip.org/resource/1/jmapaq/v35/i2/p577_s1; http://link.aip.org/link/?JMP/35/577/1.

Holas:1994:RDT

[730] A. Holas and N. H. March. Relativistic density-functional theory of a single-electron problem. *Journal of Mathematical Physics*, 35(2):577–586, ???? 1994. CODEN JMAPAQ. ISSN 0022-2488.

Johnson:1994:DSS

[731] M. W. Johnson, N. H. March, F. Perrot, and A. K. Ray. A diffraction study of the structure of liquid potassium near freezing and density-functional theory of pair potentials. *Philosophical Magazine B: Physics of Condensed Matter: Statistical Mechanics, Electronic, Optical and Magnetic Properties*, 69(5):965–977, ???? 1994. CODEN PMABDJ. ISSN 1364-2812 (print), 1463-6417 (electronic).

Klein:1994:SRC

[732] D. J. Klein and N. H. March. Similarity relations and critical constants of heavy fluid alkali-metals. *Physics and Chemistry of Liquids*, 28(3):207–209, ???? 1994. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Laming:1994:SPI

[733] Gregory J. Laming, Agnes Nagy, and Norman H. March. Scaling properties of inhomogeneity kinetic-energy in some diatomic-molecules, in relation to dissociation-energies. *Molecular Physics*, 81(6):1497–1500, April 1994. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028

(electronic). URL http://www.tandfonline.com/doi/full/10.1080/00268979400101031.

Lehmann:1994:DSS

[734] H. Lehmann and N. H. March. Differential-equation for Slater sum in an inhomogeneous electron liquid. *Physics and Chemistry of Liquids*, 27 (1):65–67, ???? 1994. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Lopez:1994:BRX

[735] J. M. López, J. A. Alonso, N. H. March, F. Garcias, and M. Barranco. Barrier for the reaction $X_{20}^+ + X_{20}^+ \rightarrow X_{40}^{2+}$ in alkali-metal clusters related to electron density at the bond midpoint of the supermolecule $(X_{20}^+)_2$. *Physical Review B: Condensed Matter and Materials Physics*, 49(8): 5565–5569, February 15, 1994. CODEN PRBMDO. ISSN 1098-0121. URL http://link.aps.org/doi/10.1103/PhysRevB.49.5565.

March:1994:BBE

[736] N. H. March. Building blocks for electron density in free molecules and in condensed matter phases. *International Journal of Quantum Chemistry*, 49(3):321–342, January 20, 1994. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:1994:DFF

[737] N. H. March. Density-functional form of the Hiller–Sucher–Feinberg identity in relation to the single-particle kinetic-energy tensor. *Physics Letters*, 3(7):239–244, December 10, 1994. CODEN PYLBAJ. ISSN 0031-9163 (print), 1873-2410 (electronic). URL http://www.sciencedirect.com/science/article/pii/016612809403776H.

March:1994:IMM

[738] N. H. March. The interaction of the N_2O molecule with metal atoms: especially beryllium. *Journal of Molecular Structure. Theochem*, 312 (2):127–129, August 20, 1994. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0166128009800249.

March:1994:LFR

[739] N. H. March, R. Pucci, and S. A. Egorov. Limit of Fermi-liquid regime and binding-energy of charged (2e) boson in high T_c cuprates. *Physics and Chemistry of Liquids*, 28(2):141–144, ???? 1994. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1994:LS

[740] N. H. March. The liquid state. *Contemporary physics*, 35(6):407–408, 1994. CODEN CTPHAF. ISSN 0010-7514 (print), 1366-5812 (electronic).

March:1994:MGB

[741] N. H. March and B. V. Paranjape. A microscopic generalization of Bernoulli's equation to include low-order density gradients. *Physics and Chemistry of Liquids*, 28(3):201–206, ???? 1994. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1994:PSE

[742] N. H. March, A. Zecca, and G. P. Karwasz. Phenomenology and scaling of electron-scattering cross-sections from almost spherical molecules over a wide energy-range. *ZEITSCHRIFT FUR PHYSIK D-ATOMS MOLECULES AND CLUSTERS*, 32(1–2):93–100, ???? 1994. ISSN 0178-7683 (print), 1431-5866 (electronic).

March:1994:RBMa

[743] N. H. March. The role of the bond midpoint electron density in homonuclear molecular binding. *International Journal of Quantum Chemistry*, 52(1):247–265, September 15, 1994. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:1994:RBMb

[744] N. H. March. The relation between magnetism and electronic transport properties in strongly correlated electron liquids, including high T_c materials. *International Journal of Quantum Chemistry*, 52(S28):421–432, February 12–19, 1994. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular, and Condensed Matter Theory and Computational Methods.

Pfalzner:1994:BSP

[745] S. Pfalzner, H. Lehmann, and N. H. March. Bound-state plus continuum electron-densities, and Slater sum, in a bare Coulomb field. *Journal of Mathematical Chemistry*, 16(1–2):9–18, ???? 1994. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/BF01169191`.

Pfalzner:1994:IEL

[746] S. Pfalzner and N. H. March. Inhomogeneous electron liquid in intense electric-fields. *Physics and Chemistry of Liquids*, 27(2):77–82, ???? 1994. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Robson:1994:HEB

[747] R. E. Robson, B. V. Paranjape, and N. H. March. Haeffner effect in a binary isotopic dilute plasma. *Plasma Physics and Controlled Fusion*, 36(4):635–640, ???? 1994. CODEN PPCFET. ISSN 0741-3335 (print), 1361-6587 (electronic). URL `http://stacks.iop.org/0741-3335/36/i=4/a=005`.

Senatore:1994:RPF

[748] G. Senatore and N. H. March. Recent progress in the field of electron correlation. *Reviews of Modern Physics*, 66(2):445–479, April 1, 1994. CODEN RMPHAT. ISSN 0034-6861 (print), 1538-4527 (electronic), 1539-0756. URL `http://link.aps.org/doi/10.1103/RevModPhys.66.445; http://rmp.aps.org/abstract/RMP/v66/i2/p445_1`.

Solomatin:1994:EPF

[749] Alexander Solomatin, Viraht Sahni, and N. H. March. Exchange potential from functional-differentiation in self-consistent-field theory of a jellium-type metal-surface. *Physical Review B: Condensed Matter and Materials Physics*, 49(23):16856–16859, June 15, 1994. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.49.16856`.

Sparta:1994:RBM

[750] N. Sparta, A. Grassi, G. M. Lombardo, G. Piccitto, R. Pucci, and N. H. March. Relation between molecular and atomic correlation energies via overlap population. *Molecular Physics*, 83(6):1047–1056, ???? 1994. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Amovilli:1995:QCM

[751] C. Amovilli, M. Blazej, and N. H. March. Quantum-chemical modeling of Co physisorbed and chemisorbed on a beryllium metal-surface. *Journal of Molecular Structure. Theochem*, 342(??):87–92, ???? 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Amovilli:1995:SSK

[752] C. Amovilli and N. H. March. Slater sum and kinetic energy tensor in some simple inhomogeneous electron liquids. *Physics and Chemistry of*

Liquids, 30(3):135–139, ???? 1995. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Bisi:1995:CBP

[753] O. Bisi and N. H. March. Chemical bonding and properties of condensed phases of carbon and silicon. *Journal of Molecular Structure. Theochem*, 338(??):175–189, ???? 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Blazej:1995:PIR

[754] M. Blazej, N. H. March, and F. Flores. Polarization interaction in relation to structure of liquid-metals. *Molecular Physics*, 86(4):951–958, ???? 1995. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Egorov:1995:DTT

[755] S. A. Egorov and N. H. March. Dependence of transition temperature T_c of cuprates on interlayer interaction via (r)over-right-arrow space charged boson binding energy. *Physics and Chemistry of Liquids*, 30(1):59–62, ???? 1995. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1995:ERB

[756] Gordon R. Freeman and N. H. March. Empirical relation between inverse covalent bond-length and force-constant, and its consequences for potential-energy curves. *Journal of Molecular Structure. Theochem*, 333 (3):261–265, ???? 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Freeman:1995:MME

[757] Gordon R. Freeman and N. H. March. Maximum mobility of excess electrons in insulating molecular fluids, related to polarizability and shape. *Physics and Chemistry of Liquids*, 30(4):257–261, ???? 1995. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Grassi:1995:SPC

[758] A. Grassi, G. M. Lombardo, N. H. March, and R. Pucci. Scaling properties of correlation energies of homonuclear diatoms. *Molecular Physics*, 86 (5):1229–1231, ???? 1995. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Holas:1995:CSF

[759] A. Holas, N. H. March, and M. P. Tosi. Coordinate space form of interacting reference response function of jellium model of an electron liquid. *Physics and Chemistry of Liquids*, 30(2):103–111, ???? 1995. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Holas:1995:EAF

[760] A. Holas and N. H. March. Exact asymptotic form of kinetic-energy density of an atom or a molecule at large distances from its center. *Journal of Molecular Structure. Theochem*, 357(1–2):193–195, ???? 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Holas:1995:EEC

[761] A. Holas and N. H. March. Exact exchange-correlation potential and approximate exchange potential in terms of density-matrices. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 51(3):2040–2048, March 1, 1995. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.51.2040`.

Holas:1995:ETC

[762] A. Holas and N. H. March. Exact theorems concerning noninteracting kinetic energy density functional in D dimensions and their implications for gradient expansions. *International Journal of Quantum Chemistry*, 56(4):371–383, November 15, 1995. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Klein:1995:EDC

[763] D. J. Klein and N. H. March. Electron-density in chemically bonded materials and the chemical network model. *Journal of Molecular Structure. Theochem*, 337(3):257–264, ???? 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Klein:1995:PPN

[764] D. J. Klein and N. H. March. Perfect pairing, natural orbitals and relation between first-and second-order density matrices. *Journal of Molecular Structure. Theochem*, 358(??):151–158, ???? 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Lehmann:1995:HAI

[765] H. Lehmann and N. H. March. The hydrogen-atom in intense magnetic-fields — excitons in 2-dimensions and 3-dimensions. *Pure and Applied*

Chemistry, 67(3):457–462, ???? 1995. CODEN PACHAS. ISSN 0033-4545 (print), 1365-3075 (electronic).

March:1995:CBP

[766] N. H. March. Chemical bonding and properties of condensed phases of carbon and silicon. *Journal of Molecular Structure. Theochem*, 338 (1-3):175–189, August 28, 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/016612809404057Y`.

March:1995:CDEa

[767] N. H. March and M. P. Tosi. Coordination-dependent equation of state of expanded liquid alkali metals and critical point properties. *Physics and Chemistry of Liquids*, 29(3):197–199, ???? 1995. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1995:CDEb

[768] N. H. March, M. P. Tosi, and D. J. Klein. Coordination-dependent equations of state and pair potentials for cold metal crystals. *Physical Review B: Condensed Matter and Materials Physics*, 52(13):9115–9116, October 1, 1995. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.52.9115`.

March:1995:CEC

[769] N. H. March and M. P. Tosi. Collective effects in condensed conducting phases including low-dimensional systems. *Advances in physics*, 44(4): 299–386, ???? 1995. CODEN ADPHAH. ISSN 0001-8732 (print), 1460-6976 (electronic).

March:1995:DFT

[770] N. H. March. Density functional theory via density matrices. *International Journal of Quantum Chemistry*, 56(S29):137–144, February 25, 1995. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). Supplement: Proceedings of the International Symposium on Atomic, Molecular, and Condensed Matter Theory and Computational Methods.

March:1995:EAF

[771] N. H. March. Exact asymptotic form of kinetic-energy density of an atom or a molecule at large distances from its centre. *Journal of Molecular Structure. Theochem*, 357(1–2):193–195, November 20, 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/016612809504269C`.

March:1995:ECM

[772] Norman H. (Norman Henry) March. *Electron Correlation in Molecules and Condensed Phases*. Physics of Solids and Liquids. Plenum Press, New York, NY, USA; London, UK, 1995. ISBN 0-306-44844-0. 394 pp. LCCN ????

March:1995:EDC

[773] N. H. March. Electron density in chemically bonded materials and the chemical network model. *Journal of Molecular Structure. Theochem*, 337(3):257–264, August 10, 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/016612809404032N`.

March:1995:EDP

[774] N. H. March. Electron distribution, phonon states and short-range order. In Srivastava and March [1537], pages 95–121. ISBN 981-02-1924-5. LCCN QC173.4.C65 C655 1995. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812831576_0002`.

March:1995:ERB

[775] N. H. March. Empirical relation between inverse covalent bond length and force constant, and its consequences for potential energy curves. *Journal of Molecular Structure. Theochem*, 333(3):261–265, April 10, 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/016612809403936F`.

March:1995:IRBa

[776] N. H. March and M. P. Tosi. Inverse relation between polarizability and valence-electron density at the nucleus. *Chemical Physics Letters*, 423 (1-3):199–201, November 10, 1995. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0166128095905596`.

March:1995:IRBb

[777] N. H. March and M. P. Tosi. Inverse relation between polarizability and valence-electron density at the nucleus. *Journal of Molecular Structure. Theochem*, 343(??):199–201, ???? 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

March:1995:MBP

[778] Norman H. (Norman Henry) March, W. H. Young, and S. Sampanthar. *The Many-Body Problem in Quantum Mechanics*. Dover Publications,

Inc., New York, NY, USA, 1995. ISBN 0-486-68754-6. ix + 459 pp. LCCN ????

March:1995:MIH

[779] N. H. March. Molecular-interactions in homogeneous and heterogeneous conducting phases. *Journal of Molecular Structure. Theochem*, 341(1-3):261–269, October 10, 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/016612809504122M`.

March:1995:PPN

[780] N. H. March. Perfect pairing, natural orbitals and relation between first- and second-order density matrices. *Journal of Molecular Structure. Theochem*, 358(1-3):151–158, December 14, 1995. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0166128095042679`.

March:1995:QCM

[781] N. H. March. Quantum-chemical modelling of CO physisorbed and chemisorbed on a beryllium metal surface. *Physics Letters A*, 96 (9):87–92, October 20, 1995. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0166128095900896`.

March:1995:RBT

[782] N. H. March and B. V. Paranjape. Relation between thermoelectric power and Hall coefficient with application to the normal state of high T_c superconductors. *The Journal of Physics and Chemistry of Solids*, 56(1):65–68, January 10, 1995. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369794001375`.

March:1995:SDE

[783] N. H. March and M. P. Tosi. Small-distance expansion of the interacting linear-response function of the homogeneous phase of the jellium model, and the local-field factor. *Philosophical Magazine B: Physics of Condensed Matter: Statistical Mechanics, Electronic, Optical and Magnetic Properties*, 72(3):295–299, ???? 1995. CODEN PMABDJ. ISSN 1364-2812 (print), 1463-6417 (electronic).

March:1995:SEC

[784] N. H. March and M. P. Tosi. Scaling of electrical conductivity in strongly coupled plasmas, with reference to expanded liquid alkali metals. *Physics*

and Chemistry of Liquids, 29(4):273–275, ???? 1995. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1995:SED

[785] N. H. March. Subtle energies in density-functional theory — correlation and molecular dissociation. *International Journal of Quantum Chemistry*, 56(4):257–264, November 15, 1995. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:1995:TPM

[786] N. H. March. Transport properties : Mainly in liquid metals and amorphous silicon. In Srivastava and March [1537], pages 317–360. ISBN 981-02-1924-5. LCCN QC173.4.C65 C655 1995. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812831576_0005`.

March:1995:UCP

[787] N. H. March. Utility of coupling parameter gamma in characterizing electrical conductivity of plasmas: Especially hydrogen and copper. *Physics and Chemistry of Liquids*, 30(1):1–7, ???? 1995. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Srivastava:1995:FM

[788] S. K. Srivastava and N. H. March. Front matter. In Srivastava and March [1537], pages i–vii. ISBN 981-02-1924-5. LCCN QC173.4.C65 C655 1995. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812831576_fmatter`.

Zhu:1995:BAB

[789] H. Y. Zhu, D. J. Klein, W. A. Seitz, and N. H. March. Bn alternants — boron-nitride cages and polymers. *Inorganic Chemistry*, 34(6):1377–1383, ???? 1995. CODEN INOCAJ. ISSN 0020-1669. URL `http://pubs.acs.org/doi/abs/10.1021/ic00110a015`.

Alonso:1996:EPN

[790] J. A. Alonso, N. A. Cordero, and N. H. March. Electrostatic potential at the nucleus of a neutral atom related to electronic correlation energies of atomic ions. *Molecular Physics*, 88(5):1365–1371, ???? 1996. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Amato:1996:SES

[791] M. A. Amato and N. H. March. Structure and equation of state of metallic plasmas. *Laser and Particle Beams*, 14(4):685–697, ???? 1996. CODEN LPBEDA. ISSN 0263-0346 (print), 1469-803x (electronic).

Freeman:1996:AFD

[792] Gordon R. Freeman and Norman H. March. Asymptotic field dependence of approach to saturation of drift velocity of electrons in liquid xenon. *Physics and Chemistry of Liquids*, 33(3):145–150, December 1996. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451. URL `http://www.tandfonline.com/doi/full/10.1080/00319109608039815`.

Freeman:1996:ASD

[793] Gordon R. Freeman and N. H. March. Approach to saturation of drift velocity of electrons in liquid xenon. *Physics and Chemistry of Liquids*, 33(3):145–150, ???? 1996. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1996:CMC

[794] Gordon R. Freeman and Norman H. March. Chemistry of multiply charged negative molecular ions and clusters in the gas phase: Terrestrial and in intense galactic magnetic fields. *Journal of Physical Chemistry*, 100(11):4331–4338, ???? 1996. CODEN JPCHAX. ISSN 0022-3654 (print), 1541-5740 (electronic). URL `http://pubs.acs.org/doi/abs/10.1021/jp951483%2B`.

Freeman:1996:EAC

[795] Gordon R. Freeman and N. H. March. Electron attachment cross-sections to protons and positrons incident on the fluids He and H_2. *Physics and Chemistry of Liquids*, 31(3):169–174, ???? 1996. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1996:EEB

[796] Gordon R. Freeman and N. H. March. Excess electrons bound in clusters related to hydrogen-bonded condensed phases. *Physics and Chemistry of Liquids*, 33(3):133–143, ???? 1996. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1996:SPE

[797] Gordon R. Freeman and N. H. March. Scaling properties of electronic kinetic energy. indicator of the nature of covalent bonds. *Journal of Molecular Structure. Theochem*, 363(2):211–216, ???? 1996. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

Grassi:1996:CEP

[798] Antonio Grassi, Giuseppe M. Lombardo, Norman H. March, and Renato Pucci. Correlation energies in polyatomic molecules modelled in terms of

bond order. *Molecular Physics*, 87(3):553–567, February 1996. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic). URL `http://www.tandfonline.com/doi/full/10.1080/00268979600100381`.

Heyes:1996:TAT

[799] D. M. Heyes and N. H. March. Theoretical approaches to thermal conductivity in liquids. *Physics and Chemistry of Liquids*, 33(2):65–83, ???? 1996. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Holas:1996:DAE

[800] A. Holas and N. H. March. Density amplitude equation of inhomogeneous electron liquid: a route via Hartree–Fock density matrix. *Physics and Chemistry of Liquids*, 31(1):15–20, ???? 1996. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Holas:1996:ECD

[801] A. Holas and N. H. March. Exchange and correlation in density functional theory of atoms and molecules. In R. F. Nalewajski, editor, *Density Functional Theory I: Functionals and Effective Potentials*, volume 180 of *Topics in Current Chemistry*, pages 57–106. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1996. CODEN ???? ISBN 3-540-61091-X (print), 3-540-49945-8 (electronic). URL `http://link.springer.com/chapter/10.1007/3-540-61091-X_3`.

Holas:1996:FOD

[802] A. Holas and N. H. March. First-order density matrix, pair-distribution function and structure factor of a Fermi liquid. *Physics and Chemistry of Liquids*, 32(4):245–249, ???? 1996. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Levy:1996:ACM

[803] Mel Levy, Norman H. March, and Nicholas C. Handy. On the adiabatic connection method, and scaling of electron–electron interactions in the Thomas–Fermi limit. *Journal of Chemical Physics*, 104(5):1989–1992, ???? 1996. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/104/1989/1`.

March:1996:BSP

[804] N. H. March. Bound-state position and momentum densities and Slater sum for closed shells in a bare Coulomb field. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 54(6):5415–5417, December 1, 1996. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.54.5415`.

March:1996:CHA

[805] N. H. March and M. P. Tosi. Caged H atom and H_2 molecule in relation to Monte Carlo study of molecular dissociation at constant volume. *Nuovo Cimento della Societa Italiana di Fisica, D: Condensed Matter, Atomic, Molecular and Chemical Physics, Fluids, Plasmas, Biophysics*, 18(9): 1061–1067, September 1996. CODEN ???? ISSN 0392-6737 (print), 1826-9893 (electronic). URL `http://link.springer.com/article/10.1007/BF02457672`.

March:1996:ECM

[806] Norman H. (Norman Henry) March. *Electron Correlation in Molecules and Condensed Phases*. The Language of Science; Physics of solids and liquids. Plenum Press, New York, NY, USA; London, UK, 1996. ISBN 0-306-44844-0. xiv + 395 pp. LCCN QC176.8.E4 M36 1996.

March:1996:EHL

[807] N. H. March. Electron or hole liquids flowing through antiferromagnetic assemblies: Proposed test of t-J model for high T_c materials. *Physics and Chemistry of Liquids*, 31(4):265–266, ???? 1996. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1996:EPB

[808] N. H. March. Electrostatic potential, bond density and bond order in molecules and clusters. *Physics Letters A*, 373(35):619–647, August 2, 1996. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S1380732396800550`.

March:1996:FERa

[809] N. H. March, A. M. L. Nip, and J. A. Tuszyński. Free energy in relation to order parameter in magnets and pyroelectrics. *International Journal of Quantum Chemistry*, 60(7):1549–1558, ???? 1996. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=60714`. 1996 Sanibel Symposia.

March:1996:FERb

[810] N. H. March, A. M. L. Nip, and J. A. Tuszyński. Free energy in relation to order parameter in magnets and pyroelectrics. *International Journal of Quantum Chemistry. Quantum Chemistry Symposium*, 30(??):337–??, ???? 1996. CODEN IJQSDI. ISSN 0161-3642.

March:1996:IEG

[811] N. H. March. Inhomogeneous electron gas: Transcending semiclassical Thomas–Fermi–Dirac method. *Physics Letters A*, 338(3–5):67–97, May 2, 1996. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S1380732396800859`.

March:1996:LEC

[812] N. H. March. Local energy and chemical potential equations and the exchange-correlation potential. *Canadian Journal of Chemistry == Journal canadien de chimie*, 74(6):969–975, ???? 1996. CODEN CJCHAG. ISSN 0008-4042 (print), 1480-3291 (electronic). URL `http://www.nrcresearchpress.com/doi/abs/10.1139/v96-107`.

March:1996:MPS

[813] N. H. March. Momentum and position space densities in many-electron systems. *International Journal of Quantum Chemistry*, 60(1):307–320, October 5, 1996. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=60594`.

March:1996:MTC

[814] N. H. March and D. I. Pushkarov. Mass transport by crowdions: a simple model appropriate to body-centred-cubic Na and K. *The Journal of Physics and Chemistry of Solids*, 57(1):139–140, January 30, 1996. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022369795001980`.

March:1996:RBE

[815] N. H. March. Relation between electrical resistivity and nuclear relaxation rate in metallic states for both Fermi- and non-Fermi-liquid phases. *Physics and Chemistry of Liquids*, 33(4):261–264, ???? 1996. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1996:VCC

[816] N. H. March. The virial of Clausius in condensed phases and in free molecules. *Molecular Physics*, 88(4):1039–1054, ???? 1996. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Nagy:1996:KEI

[817] A. Nagy and N. H. March. Kinetic energy of an inhomogeneous electron liquid: Form for atom with on p plus s shells. *Physics and Chemistry of*

Liquids, 32(4):219–223, ???? 1996. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Razavy:1996:SDF

[818] M. Razavy, N. H. March, and B. V. Paranjape. Size dependence of force between parallel planar jellium metal surfaces at small separation. *Physical Review B: Condensed Matter and Materials Physics*, 54(7):4492–4495, August 15, 1996. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.54.4492`.

Tankeshwar:1996:RBE

[819] K. Tankeshwar and N. H. March. Relation between electrical and thermal conductivities in charged condensed phases. *Physics and Chemistry of Liquids*, 31(1):39–47, ???? 1996. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amato:1997:SES

[820] M. A. Amato and N. H. March. Structure and equation of state of metallic plasmas (vol 14, pg 685, 1996). *Laser and Particle Beams*, 15 (1):215, ???? 1997. CODEN LPBEDA. ISSN 0263-0346 (print), 1469-803x (electronic).

Amovilli:1997:IEL

[821] C. Amovilli and N. H. March. Inhomogeneous electron liquid: H atom Dirac density matrix in limit of infinite number of closed shells. *Physics and Chemistry of Liquids*, 35(3):191–199, ???? 1997. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1997:URB

[822] Gordon R. Freeman, N. H. March, and L. von Szentpály. Universal relation between spectroscopic constants: a chaotic/fractal regime in anharmonicities. *Journal of Molecular Structure. Theochem*, 394(1):11–13, April 28, 1997. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0166128096048798`.

Holas:1997:CSEa

[823] A. Holas and N. H. March. Calculational scheme for exact exchange and correlation potentials based on the equation of motion for density matrix plus the perturbation theory. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 56(5):3597–3613, November 1, 1997. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.56.3597`.

Holas:1997:CSEb

[824] A. Holas and N. H. March. Correction to Slater exchange potential to yield exact Kohn–Sham potential generating the Hartree–Fock density. *Physical Review B: Condensed Matter and Materials Physics*, 55 (3):1295–1298, January 15, 1997. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.55.1295`.

Holas:1997:DMD

[825] A. Holas and N. H. March. Density matrices and density functionals in strong magnetic fields. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 56(6):4595–4605, December 1, 1997. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.56.4595`.

Holas:1997:EEC

[826] A. Holas and N. H. March. Exact exchange — correlation potential from low-order density matrices. *International Journal of Quantum Chemistry*, 61(2):263–272, ???? 1997. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=42407; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=42407&PLACEBO=IE.pdf`.

Holas:1997:FBE

[827] A. Holas and N. H. March. Force balance equations in inhomogeneous classical and quantal liquids. *International Journal of Quantum Chemistry*, 64(1):21–29, ???? 1997. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=42661; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=42661&PLACEBO=IE.pdf`. Special Issue: *Second Triennial Congress of the International Society for Theoretical Chemical Physics*. Issue Edited by Seán P. McGlynn, Kresimir Rupnik, Janos Ladik.

Holas:1997:PLC

[828] A. Holas and N. H. March. Potential-locality constraint in determining an idempotent density matrix from diffraction experiment. *Physical Review B: Condensed Matter and Materials Physics*, 55(15):9422–9431, April 15, 1997. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.55.9422`.

Klein:1997:FSF

[829] D. J. Klein, N. H. March, and A. K. Theophilou. Form of spinless first- and second-order density matrices in atoms and molecules, derived from eigenfunctions of S^2 and S_z. *Journal of Mathematical Chemistry*, 21 (3):261–272, October 1997. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1023/A%3A1019178504363`.

Levy:1997:LIF

[830] Mel Levy and Norman H. March. Line-integral formulas for exchange and correlation potentials separately. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 55(3):1885–1889, March 1, 1997. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.55.1885`.

March:1997:CCM

[831] N. H. March. Chemical collision model and statistical distribution function for an anyon liquid. *Physics and Chemistry of Liquids*, 34(1):61–64, ???? 1997. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1997:CCP

[832] N. H. March. Cluster and condensed phase properties of light elements (especially B, C, N, Na and Si). *Journal of Materials Science & Technology*, 13(4):241–244, ???? 1997. ISSN 1005-0302.

March:1997:CFF

[833] N. H. March. Cleavage force as a function of separation in a finite model of silicon with a chemically bonded force field. *The Journal of Physics and Chemistry of Solids*, 58(5):765–767, May 21, 1997. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022369796001977`.

March:1997:DEG

[834] N. H. March. Differential equation for ground-state electron density in an inhomogeneous relativistic electron liquid. *Physics and Chemistry of Liquids*, 35(1):59–65, ???? 1997. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1997:DFA

[835] N. H. March. Density-functional approach to relativistic charge expansion theory. *Physical Review A (Atomic, Molecular, and Optical Physics)*,

55(5):3935–3936, May 1, 1997. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL http://link.aps.org/doi/10.1103/PhysRevA.55.3935.

March:1997:DFC

[836] N. H. March and Angel Rubio. Density-functional calculation for K lattices in condensed phase and quantum-chemical model for the cohesive energy of heavy alkali metals. *Physical Review B: Condensed Matter and Materials Physics*, 56(21):13865–13871, December 1, 1997. CODEN PRBMDO. ISSN 1098-0121. URL http://link.aps.org/doi/10.1103/PhysRevB.56.13865.

March:1997:DMI

[837] N. H. March. Density matrices for itinerant and localized electrons with and without external fields. Quantum problems in condensed matter physics. *Journal of Mathematical Physics*, 38(4):2037–2052, April 1997. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL http://link.aip.org/link/?JMP/38/2037/1. Quantum problems in condensed matter physics.

March:1997:EPP

[838] N. H. March and M. P. Tosi. Electrostatic potentials and plasmons in lattices built from rods and from layers. *European Journal of Physics*, 18(1):46–51, ???? 1997. CODEN EJPHD4. ISSN 0143-0807 (print), 1361-6404 (electronic). URL http://stacks.iop.org/0143-0807/18/i=1/a=011.

March:1997:FBA

[839] N. H. March. Forces between atoms and atomic planes in condensed metallic phases and in semiconducting silicon. *International Journal of Quantum Chemistry*, 65(5):907–917, December 5, 1997. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL http://www3.interscience.wiley.com/cgi-bin/abstract?ID=42822; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=42822&PLACEBO=IE.pdf. Special Issue: *Proceedings of the International Symposium on Atomic, Molecular, and Condensed Matter Theory and Computational Methods*. Issue Edited by Per-Olov Löwdin, Yngve Öhrn, John R. Sabin, Michael C. Zerner.

March:1997:IHH

[840] N. H. March and D. J. Klein. Ising, Heisenberg and Hubbard models in relation to insulating and metallic ferro- and antiferro-magnets. In *Theory of Spin Lattices and Lattice Gauge Models: Proceedings of the*

165th WE-Heraeus-Seminar Held at Physikzentrum Bad Honnef, Germany, 14–16 October 1996, volume 494 of *Lecture Notes in Physics*, pages 1–13. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1997. CODEN ???? ISSN ???? URL `http://link.springer.com/chapter/10.1007/BFb0104299`.

March:1997:KEF

[841] Norman H. March and Sabre Kais. Kinetic energy functional derivative for the Thomas–Fermi atom in D dimensions. *International Journal of Quantum Chemistry*, 65(5):411–413, December 5, 1997. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=42817; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=42817&PLACEBO=IE.pdf`. Special Issue: *Proceedings of the International Symposium on Atomic, Molecular, and Condensed Matter Theory and Computational Methods*. Issue Edited by Per-Olov Löwdin, Yngve Öhrn, John R. Sabin, Michael C. Zerner.

March:1997:LCR

[842] N. H. March. Local coordination in relation to electronic structure of condensed conducting phases. *Molecular Physics*, 92(3):489–496, ???? 1997. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

March:1997:MPS

[843] N. H. March. Mechanical properties of simple s-p metals, and defect energies from electron theory and from interatomic force laws. *Journal of Materials Science & Technology*, 13(2):81–85, ???? 1997. ISSN 1005-0302.

March:1997:NER

[844] N. H. March and M. P. Tosi. Nernst–Einstein relation and effective valence in a strongly coupled tungsten plasma. *Physics and Chemistry of Liquids*, 35(2):127–130, ???? 1997. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1997:NFD

[845] N. H. March. Nonlocal functional derivative of kinetic energy for the self-consistent Thomas–Fermi atom. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 56(1):1025–1026, July 1, 1997. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.56.1025`.

March:1997:PMR

[846] N. H. March, J. A. Alonso, and A. Rubio. Phenomenology of metallic resistivity observed in single-wall nanotube ropes as a strongly coupled pi-electron C ion plasma. *Physica Status Solidi. B, Basic Research*, 203 (1):179–182, ???? 1997. CODEN PSSBBD. ISSN 0370-1972 (print), 1521-3951 (electronic).

March:1997:SAP

[847] N. H. March and M. P. Tosi. Some aspects of phase diagrams of homonuclear diatomic assemblies, including melting and critical point properties. *Physics and Chemistry of Liquids*, 35(3):131–151, ???? 1997. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1997:SCC

[848] N. H. March. Some cluster and condensed-phase properties of light elements: B to P. *International Journal of Quantum Chemistry*, 63(3):695–707, June 5, 1997. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=42613; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=42613&PLACEBO=IE.pdf`.

March:1997:STA

[849] N. H. March. Semiclassical theory of atoms and molecules in intense fields. In Cederbaum et al. [1538], pages 69–96. ISBN 3-540-49812-5 (print), 3-540-61015-4 (e-book). ISSN 0081-5993 (print), 1616-8550 (electronic). LCCN QD461 .S92 v. 86. URL `http://link.springer.com/chapter/10.1007/BFb0111349`.

March:1997:TCS

[850] N. H. March and M. P. Tosi. Thermal conduction in strongly coupled plasmas: Especially liquid alkali metals. *Journal of Plasma Physics*, 57 (??):121–127, ???? 1997. CODEN JPLPBZ. ISSN 0022-3778 (print), 1469-7807 (electronic).

Matthai:1997:CFF

[851] C. C. Matthai and N. H. March. Cleavage force as a function of separation in a finite model of silicon with a chemically bonded force field. *The Journal of Physics and Chemistry of Solids*, 58(5):765–767, ???? 1997. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Nagy:1997:DLV

[852] A. Nagy and N. H. March. Differential and local virial theorem. *Molecular Physics*, 91(4):597–602, ???? 1997. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Nagy:1997:RDG

[853] A. Nagy and N. H. March. Ratio of density gradient to electron density as a local wavenumber to characterize the ground state of spherical atoms. *Molecular Physics*, 90(2):271–276, ???? 1997. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Amovilli:1998:KED

[854] C. Amovilli and N. H. March. Kinetic energy density in terms of electron density for closed-shell atoms in a bare Coulomb field. *International Journal of Quantum Chemistry*, 66(4):281–283, ???? 1998. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=29863; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=29863&PLACEBO=IE.pdf`.

Amovilli:1998:SSM

[855] C. Amovilli and N. H. March. Slater sum and modification of two-dimensional free-electron density of states from the canonical density matrix describing the Aharonov–Bohm effect. *Nuovo Cimento della Societa Italiana di Fisica B — General Physics*, 113(4):481–487, ???? 1998. ISSN 0369-3554 (print), 1826-9877 (electronic).

Amovilli:1998:TFT

[856] C. Amovilli, N. H. March, T. G. Schmalz, and D. J. Klein. Thomas–Fermi theory of an inhomogeneous electron liquid generalized to incorporate density gradients. *Physics and Chemistry of Liquids*, 36(2):91–103, ???? 1998. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Dixon:1998:NFT

[857] J. M. Dixon, J. A. Tuszyński, and N. H. March. Nonlinear field theoretical approaches to the electron density amplitude equation in many-electron atoms and molecules. *International Journal of Modern Physics. B, Condensed Matter Physics, Statistical Physics, Applied Physics*, 12 (16–17):1693–1707, ???? 1998. CODEN IJPBEV. ISSN 0217-9792 (print), 1793-6578 (electronic).

Freeman:1998:ESA

[858] G. R. Freeman, L. D. Coulson, and N. H. March. On the Ehrenberg–Siday–Aharonov–Bohm (ESAB) and Aharonov–Casher (AC) effects. *Modern Physics Letters B*, 12(22):933–942, September 20, 1998. ISSN 0217-9849 (print), 1793-6640 (electronic).

Freeman:1998:FPO

[859] Gordon R. Freeman and N. H. March. Fragmentation patterns of organic molecules by low energy positrons: positrolysis. *Molecular Physics*, 93 (5):847–850, ???? 1998. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Freeman:1998:PUF

[860] Gordon R. Freeman and N. H. March. Proposed universal form for position in energy of maximum of the optical absorption of solvated electrons in a variety of dipolar solvents. *Physics and Chemistry of Liquids*, 36(3): 159–162, ???? 1998. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1998:RBS

[861] Gordon R. Freeman and Norman H. March. Relationships between surface tension and bulk properties of liquids: Organic liquids near 298 K. *Journal of Chemical Physics*, 109(23):10521–10522, ???? 1998. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/109/10521/1`.

Freeman:1998:RNF

[862] Gordon R. Freeman and Norman H. March. Research note: Fragmentation patterns of organic molecules by low energy positrons: positrolysis. *Molecular Physics*, 93(5):847–850, ???? 1998. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic). URL `http://www.tandfonline.com/doi/full/10.1080/002689798168853`.

Grassi:1998:ECE

[863] A. Grassi, G. M. Lombardo, N. H. March, and R. Pucci. $1/Z$ expansion, correlation energy, and Shannon entropy of heavy atoms in nonrelativistic limit. *International Journal of Quantum Chemistry*, 69(6):721–726, ???? 1998. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=74989; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=74989&PLACEBO=IE.pdf`.

March:1998:DEGa

[864] N. H. March, T. Gál, and Á. Nagy. Differential equation for the ground-state electron density in a Hookean atom with two electrons repelling Coulombically. *Chemical Physics Letters*, 292(4–6):384–386, August 14, 1998. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S000926149800726X`.

March:1998:DEGb

[865] N. H. March. Differential equations for ground-state electron density and Slater sum in atoms and molecules with and without external fields. *International Journal of Quantum Chemistry*, 70(4–5):779–788, ???? 1998. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=75056; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=75056&PLACEBO=IE.pdf`.

March:1998:DFT

[866] N. H. March. Density functional theory in relation to X-ray and neutron scattering experiments. *International Journal of Quantum Chemistry*, 69(4):551–557, ???? 1998. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=30009; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=30009&PLACEBO=IE.pdf`. Special Issue: *Symposium on Density Functional Theory and Applications (Part II of II)*. Issue Edited by Sam Trickey, Weitao Yang, Mel Levy.

March:1998:DTD

[867] N. H. March and M. P. Tosi. Diffraction and transport in dense plasmas: Especially liquid metals. *Laser and Particle Beams*, 16(1):71–81, ???? 1998. CODEN LPBEDA. ISSN 0263-0346 (print), 1469-803x (electronic).

March:1998:EBL

[868] N. H. March and A. Rubio. Equilibrium bond lengths in monoatomic lattices of metal atoms as function of coordination number. *Physica Status Solidi. B, Basic Research*, 207(2):311–316, ???? 1998. CODEN PSSBBD. ISSN 0370-1972 (print), 1521-3951 (electronic).

March:1998:FFL

[869] N. H. March and A. K. Ray. Force fields in liquid and solid Cu metal: Relation between quantum chemical and density functional treatments. *Physics and Chemistry of Liquids*, 36(4):207–214, ???? 1998. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1998:FSE

[870] N. H. March. Forces, structure and electronic correlation functions in liquid metals. *Current Science*, 75(11):1246–1254, ???? 1998. CODEN CUSCAM. ISSN 0011-3891.

March:1998:PCE

[871] N. H. March and M. P. Tosi. Pair correlations and electrical transport in classical ionic assemblies and metallic plasmas including H and D. *Plasmas & Ions*, 1(1):13–22, September 26, 1998. CODEN PLIOFP. ISSN 1288-3255 (print), 1879-3436 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S1288325599800021`.

March:1998:SCT

[872] N. H. March, A. Holas, and Á. Nagy. Self-consistent Thomas–Fermi–Dirac theory, extended by Gell-Mann and Brueckner correlation, in terms of density n and its two reduced gradients $\nabla^2 n/n$ and $\nabla n/n$. *International Journal of Quantum Chemistry*, 69(2):145–149, ???? 1998. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=29976; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=29976&PLACEBO=IE.pdf`.

March:1998:SPL

[873] N. H. March, F. Perrot, and M. P. Tosi. Structural properties at liquid-gas critical point of classical condensed rare gases. *Molecular Physics*, 93 (2):355–359, ???? 1998. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

March:1998:SPP

[874] N. H. March and M. P. Tosi. Structure and physical properties of Li–H plasma. *Physics and Chemistry of Liquids*, 37(1):83–88, ???? 1998. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1998:SSC

[875] N. H. March. The shape of the self-consistent field form of the differential equation for the ground-state electron density of a weakly inhomogeneous

but fully interacting electron liquid. *Physics and Chemistry of Liquids*, 36 (2):129–132, ???? 1998. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1998:STM

[876] N. H. March. Semiclassical theory of multielectron atoms and the H_2^+ molecular ion in intense external fields. In P. Schmelcher and W. Schweizer, editors, *Atoms and Molecules in Strong External Fields*, page 255. Plenum Press, New York, NY, USA; London, UK, 1998. URL `http://adsabs.harvard.edu/abs/1998amse.conf..255M`.

March:1998:STS

[877] N. H. March and J. A. Alonso. Structure, transport and surface properties of dense fluids, especially liquid metals. *Molecular Physics*, 95 (2):353–361, ???? 1998. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

March:1998:SWE

[878] N. H. March, M. Razavy, and B. V. Paranjape. Solitary wave equation for steady-state propagation of an extended defect in a solid. *Journal of Applied Physics*, 84(1):209–212, ???? 1998. CODEN JAPIAU. ISSN 0021-8979 (print), 1089-7550 (electronic), 1520-8850. URL `http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5021154; http://link.aip.org/link/?JAP/84/209/1`.

Tankeshwar:1998:ISV

[879] K. Tankeshwar and N. H. March. Inverse shear viscosity (fluidity) scaled with melting point properties: Almost 'universal' behaviour of heavier alkalis. *Physics and Chemistry of Liquids*, 37(1):39–49, ???? 1998. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Tuszynski:1998:SNF

[880] J. A. Tuszyński, J. M. Dixon, and N. H. March. Scaling and nonlinear field studies of the jellium model for Wigner electron systems in d dimensions. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 58(1):318–326, July 1, 1998. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRevE.58.318`.

Zhu:1998:GBE

[881] H Y. Zhu, D. J. Klein, T. G. Schmalz, A. Rubio, and N. H. March. Geometric boundary effects on the electronic properties of finite carbon nanotubes. *The Journal of Physics and Chemistry of Solids*, 59

(3):417–423, March 12, 1998. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022369797001881`.

Zhu:1998:SBG

[882] H.-Y. Zhu, D. J. Klein, N. H. March, and Angel Rubio. Small band-gap graphitic CBN layers. *The Journal of Physics and Chemistry of Solids*, 59(8):1303–1308, August 11, 1998. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022369798000316`.

Alonso:1999:RBT

[883] J. A. Alonso and N. H. March. Relation between transport and thermodynamic properties in liquid *sp*-electron metals near freezing. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 60(4 (part A)):4125–4129, October 1, 1999. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRevE.60.4125`.

Amovilli:1999:IEL

[884] C. Amovilli, N. H. March, T. G. Schmalz, G. Hite, and D. J. Klein. Inhomogeneous electron liquid: Differential equation satisfied by diagonal element of Coulomb bound *s*-state Green function. *Physics and Chemistry of Liquids*, 37(4):475–478, ???? 1999. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:1999:SSC

[885] C. Amovilli and N. H. March. Slater sum in cylindrically symmetric inhomogeneous electron liquids: Towards a differential equation for the Stark effect in hydrogen atom. *Physics and Chemistry of Liquids*, 37(5): 529–545, ???? 1999. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Chiofalo:1999:MSB

[886] M. L. Chiofalo, M. P. Tosi, and N. H. March. Model of r space boson–fermion mixture and its relevance to high-T_c cuprates. *Physics and Chemistry of Liquids*, 37(5):547–564, ???? 1999. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1999:ARO

[887] Gordon R. Freeman and N. H. March. Annihilation rates of orthopositronium in organic liquids: correlation with liquid compressibility

and polarization ratio. *Molecular Physics*, 96(8):1189–1191, ???? 1999. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Freeman:1999:HMC

[888] Gordon R. Freeman and N. H. March. How might chemical reaction rates in solution be affected by intense density fluctuations of the solvent? *Physics and Chemistry of Liquids*, 37(5):627–631, ???? 1999. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Freeman:1999:TSA

[889] Gordon R. Freeman and N. H. March. Triboelectricity and some associated phenomena. *MATERIALS SCIENCE AND TECHNOLOGY*, 15 (12):1454–1458, ???? 1999. ISSN 0267-0836.

Gal:1999:DEG

[890] T. Gal, N. H. March, and A. Nagy. Differential equation for ground-state electron density of He-like ions for large atomic number. *Chemical Physics Letters*, 305(5–6):429–432, ???? 1999. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Gal:1999:GLD

[891] T. Gal, A. Nagy, and N. H. March. Generalized local density approximation in an inhomogeneous electron liquid. *Physics and Chemistry of Liquids*, 37(6):641–648, ???? 1999. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Heyes:1999:RBT

[892] D. M. Heyes and N. H. March. Relations between transport coefficients in Lennard-Jones fluids and in liquid metals. *International Journal of Thermophysics*, 20(1):267–277, January 1999. CODEN IJTHDY. ISSN 0195-928X (print), 1572-9567 (electronic). URL `http://link.springer.com/article/10.1023/A%3A1021411104695`.

Holas:1999:FDE

[893] A. Holas and N. H. March. Field dependence of the energy of a molecule in a magnetic field. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 60(4):2853–2866, October 1, 1999. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://labs.adsabs.harvard.edu/ui/abs/1999PhRvA..60.2853H; http://link.aps.org/doi/10.1103/PhysRevA.60.2853`.

Lung:1999:BM

[894] C. W. Lung and N. H. March. Back matter. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages 351–398. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_bmatter`.

Lung:1999:BSC

[895] C. W. Lung and N. H. March. Background and some concepts. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages 1–17. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_0001`.

Lung:1999:EES

[896] C. W. Lung and N. H. March. Elements of electronic structure theory. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages 203–229. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_0006`.

Lung:1999:EMM

[897] C. W. Lung and N. H. March. Elastic moduli and more general phonon properties. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages 193–201. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_0005`.

Lung:1999:FM

[898] C. W. Lung and N. H. March. Front matter. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages i–xv. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_fmatter`.

Lung:1999:IED

[899] C. W. Lung and N. H. March. Introduction to extended defects and mechanical strength. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages 43–111. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_0003`.

Lung:1999:PAE

[900] C. W. Lung and N. H. March. Positron annihilation: Experiment and theory. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages 269–317. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_0009`.

Lung:1999:PE

[901] C. W. Lung and N. H. March. Phenomenology and experiments. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages 19–41. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_0002`.

Lung:1999:SCB

[902] C. W. Lung and N. H. March. Stretched chemical bonds, electron correlation and extended defect propagation. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages 319–350. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_0010`.

Lung:1999:SCF

[903] C. W. Lung and N. H. March. Some characteristic features of fractals. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages 113–192. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_0004`.

Lung:1999:TPPa

[904] C. W. Lung and N. H. March. Theory of pair potentials in simple s–p metals. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages 231–250. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_0007`.

Lung:1999:TPPb

[905] C. W. Lung and N. H. March. Transcending pair potentials: Glue models of interatomic forces. In *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches* [1539], pages 251–267. ISBN 981-02-2622-5, 981-02-4858-X (e-book). LCCN TA460 .L86 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9789810248581_0008`.

March:1999:DEG

[906] N. H. March and Á. Nagy. Differential equation for ground-state electron density of He-like ions for large atomic number. *Chemical Physics Letters*, 305(5–6):429–432, May 28, 1999. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S000926149900384X`.

March:1999:DES

[907] N. H. March and M. P. Tosi. Dieterici's equation of state: An almost quantitative modelling of some critical point properties of heavy rare gases. *Physics and Chemistry of Liquids*, 37(4):463–467, ???? 1999. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1999:DMD

[908] N. H. March. Density matrices, density functional theory and quantum Monte Carlo calculations. In March [1540], pages 371–436. ISBN 1-86094-200-8. LCCN QC176.8.E4 E33 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9781860944079_0006`.

March:1999:ECF

[909] N. H. March. Electronic correlation functions in liquid metals. *Physics and Chemistry of Liquids*, 37(5):479–492, ???? 1999. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1999:FM

[910] N. H. March. Front matter. In March [1540], pages i–xv. ISBN 1-86094-200-8. LCCN QC176.8.E4 E33 1999. URL `http://www.worldscientific.com/doi/abs/10.1142/9781860944079_fmatter`.

March:1999:FST

[911] N. H. March and M. P. Tosi. Free surface thickness of liquid He^4 at zero temperature related to surface energy times bulk compressibility. *Physics and Chemistry of Liquids*, 37(4):469–473, ???? 1999. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:1999:GSE

[912] N. H. March and M. P. Tosi. Generalized Stokes–Einstein relation for liquid metals near freezing. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 60(2 (part B)):2402–2403, August 1, 1999. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRevE.60.2402`.

March:1999:LCEa

[913] N. H. March. Local coordination, electronic correlations and relation between thermodynamic and transport properties of *sp* liquid metals. *Physics Letters A*, 373(35):1–8, August 2, 1999. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022309399003361`.

March:1999:LCEb

[914] N. H. March. Local coordination, electronic correlations and relation between thermodynamic and transport properties of *sp* liquid metals. *Journal of Non-Crystalline Solids*, 250(??):1–8, ???? 1999. CODEN JNCSBJ. ISSN 0022-3093 (print), 1873-4812 (electronic).

March:1999:LDF

[915] N. H. March. Localization via density functionals. In Surján et al. [1541], pages 201–230. ISBN 3-540-65754-1 (print), 3-540-48972-X (e-book). URL `http://link.springer.com/chapter/10.1007/3-540-48972-X_11`.

March:1999:LEE

[916] N. H. March, A. Rubio, and J. A. Alonso. Lowest excitation energy in atoms in the adiabatic approximation related to the single-particle kinetic energy functional. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 32(9):2173–2179, ???? 1999. CODEN JPAPEH. ISSN 0953-4075 (print), 1361-6455 (electronic).

March:1999:MET

[917] N. H. March. Many-electron theory: Density functional approach generalized to treat spin eigenfunctions and relation to spinless low-order density matrices. *International Journal of Quantum Chemistry*, 74(2): 163–176, ???? 1999. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract?ID=62003362; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=62003362&PLACEBO=IE.pdf`. Special Issue: *Quantum Theory of Chemical Bonding: Special Issue in Memory of Joseph Gerratt*. Issue Edited by S. Wilson, M. Raimondi, D. L. Cooper.

March:1999:MPS

[918] N. H. March. Mechanical properties of si and some d-electron metals: Force laws, electron correlation and bond-breaking. *Journal of Materials Science & Technology*, 15(4):289–295, ???? 1999. ISSN 1005-0302.

March:1999:PSR

[919] N. H. March and R. Pucci. Phenomenology of scaling regularities at $T = 0$ in solid halogens under pressure. *Physica. B, Condensed matter*, 265(1–4):79–82, April 2, 1999. CODEN PHYBE3. ISSN 0921-4526 (print), 1873-2135 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S092145269801326X`.

March:1999:RPT

[920] N. H. March. Regularities at phase transitions in molecular assemblies. *Physica. B, Condensed matter*, 265(1–4):24–30, April 2, 1999. CODEN PHYBE3. ISSN 0921-4526 (print), 1873-2135 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0921452698013118`.

March:1999:SCS

[921] N. H. March, D. J. Klein, A. K. Ray, and X. Wu. Si_n clusters: Surface energy considerations for large n and all-electron Hartree–Fock calculations for $n = 45$. *International Journal of Quantum Chemistry*, 75(4–5):829–838, November 15, 1999. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract/66004979/START; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=66004979&PLACEBO=IE.pdf`.

March:1999:SSC

[922] N. H. March, L. M. Nieto, C. Amovilli, L. C. Balbás, and M. L. Glasser. Slater sum for central field problems characterized by its s-wave component alone. *Journal of Mathematical Physics*, 40(6):2671–2679, June 1999. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL `http://jmp.aip.org/resource/1/jmapaq/v40/i6/p2671_s1; http://link.aip.org/link/?JMP/40/2671/1`.

March:1999:STT

[923] N. H. March and M. P. Tosi. Surface tension in terms of direct correlation function $c(r, r')$: Proposed modelling of $c(r, r')$ through liquid-vapor interface. *Journal of Chemical Physics*, 111(4):1786–1787, ???? 1999. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/111/1786/1`.

March:1999:UTM

[924] N. H. March, M. Razavy, and B. V. Paranjape. Unified treatment of motion of an extended defect and a crack via Legendre's equation. *The Journal of Physics and Chemistry of Solids*, 60(2):285–287,

February 23, 1999. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0022369798002777.

Rowlands:1999:PB

[925] George Rowlands. Paul Butcher 1929–1999. *Physics World*, 12(11): 48–49, November 1999. CODEN PHWOEW. ISSN 0953-8585 (print), 2058-7058 (electronic). URL http://physicsworldarchive.iop.org/full/pwa-pdf/12/11/phwv12i11a36.pdf.

Siringo:1999:PSR

[926] F. Siringo, N. H. March, and R. Pucci. Phenomenology of scaling regularities at $T = 0$ in solid halogens under pressure. *Physica. B, Condensed matter*, 265(1–4):79–82, ???? 1999. CODEN PHYBE3. ISSN 0921-4526 (print), 1873-2135 (electronic).

Tozzini:1999:ODM

[927] V. Tozzini, N. H. March, and M. P. Tosi. Orientational disorder and melting transition: Phenomenology and modelling with relevance to solid halogens and h-2. *Physics and Chemistry of Liquids*, 37(2):185–191, ???? 1999. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:2000:FBD

[928] C. Amovilli, N. H. March, T. Gál, and Á. Nagy. Force-balance and differential equation for the ground-state electron density in atoms and molecules. *International Journal of Quantum Chemistry*, 77(4):716–720, ???? 2000. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL http://www3.interscience.wiley.com/cgi-bin/abstract/70500247/START; http://www3.interscience.wiley.com/cgi-bin/fulltext/70500247/FILE?TPL=ftx_start; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=70500247&PLACEBO=IE.pdf.

Amovilli:2000:NDB

[929] C. Amovilli and N. H. March. Near-diagonal behaviour of first-order density matrix for N closed shells in a bare Coulomb field. *Physics and Chemistry of Liquids*, 38(4):505–507, ???? 2000. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Angilella:2000:ASP

[930] G. G. N. Angilella, N. H. March, and R. Pucci. Is the asymptotic scenario of precursor r space bosons consistent with observation for electron

(hole) liquids in underdoped high-T_c cuprates? *Physics and Chemistry of Liquids*, 38(5):615–622, ???? 2000. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Angilella:2000:CNW

[931] G. G. N. Angilella, N. H. March, and R. Pucci. T-c for non-s-wave pairing superconductors correlated with coherence length and effective mass. *Physical Review B: Condensed Matter and Materials Physics*, 62 (21):13919–13921, ???? 2000. CODEN PRBMDO. ISSN 1098-0121.

Angilella:2000:NWP

[932] G. G. N. Angilella, N. H. March, and R. Pucci. T_c for non-s-wave pairing superconductors correlated with coherence length and effective mass. *Physical Review B: Condensed Matter and Materials Physics*, 62(??): 13919, December 1, 2000. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.62.13919`.

Farid:2000:MBP

[933] B. Farid, N. H. March, and A. K. Theophilou. Many-body partition function and thermal Hartree–Fock approximations. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 62(1):134–140, July 1, 2000. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRevE.62.134`.

Holas:2000:VEE

[934] A. Holas, N. H. March, J. M. Dixon, and J. A. Tuszyński. Virial equations for extended electron systems in a homogeneous magnetic field: a jellium model and a periodic solid. *Journal of Physics: Condensed Matter*, 12 (28):6191–6197, ???? 2000. CODEN JCOMEL. ISSN 0953-8984 (print), 1361-648X (electronic). URL `http://stacks.iop.org/0953-8984/12/i=28/a=315`.

Howard:2000:NEE

[935] I. A. Howard, N. H. March, P. Senet, and V. E. Van Doren. Nonrelativistic exchange-energy density and exchange potential in the lowest order of the $1/Z$ expansion for ten-electron atomic ions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 62(6):062512, November 15, 2000. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.62.062512`.

Lamoen:2000:GEB

[936] D. Lamoen and N. H. March. Gradient expansions and beyond for stress tensor and tangential pressure deficit through a planar liquid-vapour interface. *Physics and Chemistry of Liquids*, 38(4):495–504, ???? 2000. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Leys:2000:EVB

[937] F. E. Leys, N. H. March, V. E. Van Doren, and G. Straub. Equilibrium volumes of body-centered cubic alkali metals related to critical constants. *Solid State Communications*, 113(8):479–482, ???? 2000. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic).

Lung:2000:TDF

[938] C. W. Lung and N. H. March. Transcending dissipative force proportional to velocity in internal friction and in crack propagation: the role of phonon emission. *The Journal of Physics and Chemistry of Solids*, 61 (8):1231–1235, ???? 2000. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

March:2000:BSE

[939] N. H. March. Bond stretching and electronic correlation in relation to mechanical and tribological properties of solids. *International Journal of Quantum Chemistry*, 80(2):193–200, ???? 2000. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract/73001278/START; http://www3.interscience.wiley.com/cgi-bin/fulltext/73001278/FILE?TPL=ftx_start; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=73001278&PLACEBO=IE.pdf`.

March:2000:CEF

[940] N. H. March. Collective excitation frequencies of bosons in a parabolic potential with interparticle harmonic interactions. *Physics Letters A*, 267(5–6):416–419, March 27, 2000. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960100001237`.

March:2000:EIDa

[941] N. H. March. Exchange, idempotent density matrices and beyond. *Journal of Molecular Structure. Theochem*, 501(??):17–27, ???? 2000. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic).

March:2000:EIDb

[942] N. H. March. Exchange, idempotent density matrices and beyond. *Physics Letters B*, 723(1-3):17–27, April 28, 2000. CODEN PYLBAJ. ISSN 0370-2693 (print), 1873-2445 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0166128099004091.

March:2000:ETR

[943] N. H. March. Electron theory related to mechanical properties of condensed phases. *International Journal of Quantum Chemistry*, 77(6): 1049–1059, ???? 2000. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL http://www3.interscience.wiley.com/cgi-bin/abstract/71000975/START; http://www3.interscience.wiley.com/cgi-bin/fulltext/71000975/FILE?TPL=ftx_start; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=71000975&PLACEBO=IE.pdf.

March:2000:EVB

[944] N. H. March, V. E. Van Doren, and G. Straub. Equilibrium volumes of body-centered cubic alkali metals related to critical constants. *Solid State Communications*, 113(8):479–482, January 25, 2000. CODEN SSCOA4. ISSN 0038-1098 (print), 1879-2766 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0038109899004949.

March:2000:FFC

[945] N. H. March. Force fields in close-packed crystals and their melts in relation to defects, surface energies and mechanical properties. *PHILOSOPHICAL MAGAZINE A-PHYSICS OF CONDENSED MATTER STRUCTURE DEFECTS*, 80(6):1335–1348, ???? 2000. ISSN 0141-8610 (print), 1460-6992 (electronic).

March:2000:NCC

[946] N. H. March, I. A. Howard, A. Holas, P. Senet, and V. E. Van Doren. Nuclear cusp conditions for components of the molecular energy density relevant for density-functional theory. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 63(??):012520, December 14, 2000. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL http://link.aps.org/doi/10.1103/PhysRevA.63.012520.

March:2000:NLK

[947] N. H. March, P. Senet, and V. E. Van Doren. Non-local kinetic energy functional for an arbitrary number of fermions moving independently in one-dimensional harmonic oscillator potential. *Physics Letters*

A, 270(1–2):88–92, May 22, 2000. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0375960100002887.

March:2000:NRB

[948] N. H. March. Nonlocal relation between kinetic and exchange energy densities in the Bardeen model of a planar metal surface. *Physical Review B: Condensed Matter and Materials Physics*, 61(7):5011–5012, February 15, 2000. CODEN PRBMDO. ISSN 1098-0121. URL http://link.aps.org/doi/10.1103/PhysRevB.61.5011.

March:2000:PTI

[949] N. H. March. Phase transitions in insulating molecular fluids and in assemblies of charged particles. *International Journal of Quantum Chemistry*, 80(4–5):692–700, ???? 2000. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL http://www3.interscience.wiley.com/cgi-bin/abstract/73505387/START; http://www3.interscience.wiley.com/cgi-bin/fulltext/73505387/FILE?TPL=ftx_start; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=73505387&PLACEBO=IE.pdf.

March:2000:RBV

[950] N. H. March. Relation between vacancy properties and surface energies in three noble or transition metals. *The Journal of Physics and Chemistry of Solids*, 61(5):827–828, May 14, 2000. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002236979900308X.

March:2000:TDF

[951] N. H. March. Transcending dissipative force proportional to velocity in internal friction and in crack propagation: the role of phonon emission. *The Journal of Physics and Chemistry of Solids*, 61(8):1231–1235, August 1, 2000. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0022369799004096.

March:2000:TEB

[952] N. H. March. Thermodynamics of the equilibrium between a fractional quantum Hall liquid and a Wigner electron solid. *Physics and Chemistry of Liquids*, 38(1):151–154, ???? 2000. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2000:WWA

[953] N. H. March, C. Amovilli, and D. J. Klein. The wavefunction when antiparallel spin electrons coincide and its relation to the ground-state electron density in the Hookean atom. *Chemical Physics Letters*, 325 (5–6):645–647, August 4, 2000. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0009261400006965`.

Minguzzi:2000:CEF

[954] A. Minguzzi, M. P. Tosi, and N. H. March. Collective excitation frequencies of bosons in a parabolic potential with interparticle harmonic interactions. *Physics Letters A*, 267(5–6):416–419, ???? 2000. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Nagy:2000:HPK

[955] A. Nagy and N. H. March. Homogeneity properties of kinetic energy in density functional theory of an inhomogeneous electron liquid. *Physics and Chemistry of Liquids*, 38(3):345–352, ???? 2000. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Nagy:2000:HPP

[956] A. Nagy and N. H. March. Homogeneity properties of Pauli energy in density functional theory of an electron liquid. *Physics and Chemistry of Liquids*, 38(6):759–763, ???? 2000. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Osetsky:2000:CFT

[957] Y. N. Osetsky, D. J. Bacon, C. C. Matthai, and N. H. March. Cleavage force, tribology and bond breaking in some transition metals. *The Journal of Physics and Chemistry of Solids*, 61(12):2055–2060, December 10, 2000. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022369700002080`.

Ray:2000:RBV

[958] A. K. Ray and N. H. March. Relation between vacancy properties and surface energies in three noble or transition metals. *The Journal of Physics and Chemistry of Solids*, 61(5):827–828, ???? 2000. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Amovilli:2001:MMA

[959] C. Amovilli and N. H. March. The March model applied to boron cages. *Chemical Physics Letters*, 347(4–6):459–464, ???? 2001. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Angilella:2001:EHL

[960] G. G. N. Angilella, N. H. March, and R. Pucci. Electron (hole) liquids flowing through both heavy fermion and cuprate materials in superconducting and normal states. *Physics and Chemistry of Liquids*, 39(4): 405–427, ???? 2001. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Holas:2001:CKE

[961] A. Holas and N. H. March. Comment on "Kinetic energy in density-functional theory". *Physical Review A (Atomic, Molecular, and Optical Physics)*, 64(1):016501, June 7, 2001. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.64.016501`.

Holas:2001:IEL

[962] A. Holas and N. H. March. Inhomogeneous electron liquid in a homogeneous magnetic field of arbitrary strength. *Physics and Chemistry of Liquids*, 39(3):401–404, ???? 2001. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Howard:2001:DND

[963] I. A. Howard and N. H. March. Density and near-diagonal Dirac density matrix for closed shells of isotropic harmonically confined fermions in three dimensions. *Journal of Physics A (Mathematical and General)*, 34 (36):L491–L494, ???? 2001. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/34/i=36/a=101`.

Howard:2001:EED

[964] I. A. Howard, N. H. March, J. A. Alonso, N. A. Cordero, and V. E. Van Doren. Exchange energy density and some approximate exchange potentials obtained from Hartree–Fock theory of the ground state of the Be atom. *Chemical Physics Letters*, 343(1–2):166–170, ???? 2001. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Howard:2001:MDF

[965] I. A. Howard, N. H. March, and V. E. Van Doren. Momentum density and its Fourier transform: Relation to the first-order density matrix and

some scaling properties. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 64(4):042509, September 17, 2001. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.64.042509`.

Howard:2001:RPS

[966] I. A. Howard, N. H. March, and V. E. Van Doren. r- and p-space electron densities and related kinetic and exchange energies in terms of s states alone for the leading term in the $1/Z$ expansion for nonrelativistic closed-shell atomic ions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 63(6):??, ???? 2001. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519.

Howard:2001:SED

[967] I. A. Howard, N. H. March, and V. E. Van Doren. r- and p-space electron densities and related kinetic and exchange energies in terms of s states alone for the leading term in the $1/Z$ expansion for nonrelativistic closed-shell atomic ions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 63(??):062501, May 4, 2001. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.63.062501`.

Klein:2001:MMR

[968] D. J. Klein and N. H. March. Molecular magnetism via resonating valence bonds for conjugated radicals and selected transition metal complexes. *International Journal of Quantum Chemistry*, 85(4–5):327–344, ???? 2001. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Leys:2001:QDD

[969] F. E. Leys, N. H. March, V. E. Van Doren, and G. Straub. Quantitative description of departures from the law of rectilinear diameters in the liquid-vapour coexistence curves of Rb and Cs. *Physics and Chemistry of Liquids*, 39(2):133–140, ???? 2001. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2001:ARB

[970] N. H. March and L. M. Nieto. Analytical relations between kinetic-energy and particle densities for one-dimensional harmonically confined Fermi vapors. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 63 (4):044502, March 16, 2001. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.63.044502`.

March:2001:ECM

[971] N. H. March. Electron confinement: Models of kinetic and exchange energy functionals. *AIP Conference Proceedings*, 577(1):70–83, ???? 2001. CODEN APCPCS. ISSN 0094-243X (print), 1551-7616 (electronic), 1935-0465. URL `http://link.aip.org/link/?APC/577/70/1`.

March:2001:EED

[972] N. H. March, J. A. Alonso, N. A. Cordero, and V. E. Van Doren. Exchange energy density and some approximate exchange potentials obtained from Hartree–Fock theory of the ground state of the be atom. *Chemical Physics Letters*, 343(1–2):166–170, July 27, 2001. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0009261401005619`.

March:2001:FDL

[973] N. H. March and L. M. Nieto. Functional differentiation, line integration, and departures from homogeneity of the single-particle kinetic energy functional for one-dimensional systems of N fermions. *Journal of Mathematical Physics*, 42(8):3361–3371, August 2001. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL `http://link.aip.org/link/?JMP/42/3361/1`.

March:2001:KEF

[974] N. H. March and M. P. Tosi. Kinetic energy functional for Fermi vapors in spherical harmonic confinement. *Physics Letters A*, 281(2–3):192–196, March 19, 2001. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960101001256`.

March:2001:MDH

[975] N. H. March, L. M. Nieto, and M. P. Tosi. Momentum distribution of harmonically confined fermions. *Physica. B, Condensed matter*, 293 (3–4):308–316, January 2, 2001. CODEN PHYBE3. ISSN 0921-4526 (print), 1873-2135 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0921452600005500`.

March:2001:MDI

[976] N. H. March and M. P. Tosi. Momentum distribution for an inhomogeneous Bose fluid at $T = 0$ with both confinement and particle interactions modelled as harmonic. *Physics and Chemistry of Liquids*, 39(2):183–187, ???? 2001. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2001:MMAa

[977] N. H. March. The March model applied to boron cages. *Chemical Physics Letters*, 347(4–6):459–464, October 26, 2001. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0009261401010715`.

March:2001:MMAv

[978] N. H. March. Magnetism of metals, alloys and of clusters of transition metal atoms. *Journal of Materials Science & Technology*, 17(6):581–589, ???? 2001. ISSN 1005-0302.

March:2001:NCC

[979] N. H. March, I. A. Howard, A. Holas, P. Senet, and V. E. Van Doren. Nuclear cusp conditions for components of the molecular energy density relevant for density-functional theory. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 63(1):??, ???? 2001. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519.

March:2001:PFC

[980] N. H. March, I. A. Howard, I. Nagy, and A. Rubio. Pair function at coincidence and ground-state energy for interacting systems of two fermions with isotropic harmonic confinement and antiparallel spins. *Physics Letters A*, 288(2):101–104, September 17, 2001. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960101004790`.

March:2001:SBM

[981] N. H. March. Square barrier model of a one-dimensional inhomogeneous electron liquid in relation to relativistic density functional theory. *Physics and Chemistry of Liquids*, 39(1):31–41, ???? 2001. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2001:SSS

[982] N. H. March and L. M. Nieto. Some specific solutions of a generalized Emden equation, embracing Thomas–Fermi-like theories. *Journal of Physics A (Mathematical and General)*, 34(23):L341–L345, ???? 2001. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/34/i=23/a=101`.

Minguzzi:2001:KEF

[983] A. Minguzzi, N. H. March, and M. P. Tosi. Kinetic energy functional for Fermi vapors in spherical harmonic confinement. *Physics Letters A*, 281

(2–3):192–196, ???? 2001. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Minguzzi:2001:PDN

[984] A. Minguzzi, N. H. March, and M. P. Tosi. Particle density and non-local kinetic energy density functional for two-dimensional harmonically confined Fermi vapors. *The European Physical Journal D — Atomic, Molecular, Optical and Plasma Physics*, 15(3):315–320, ???? 2001. CODEN EPJDF6. ISSN 1434-6060 (print), 1434-6079 (electronic). URL `http://link.springer.com/article/10.1007/s100530170146; http://link.springer.com/content/pdf/10.1007/s100530170146.pdf`.

Nagy:2001:LTN

[985] Á. Nagy and N. H. March. Legendre transform of the noninteracting kinetic energy: Especially from March–Murray perturbation theory based on plane waves. *International Journal of Quantum Chemistry*, 82(3):138–142, ???? 2001. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). URL `http://www3.interscience.wiley.com/cgi-bin/abstract/77004283/START; http://www3.interscience.wiley.com/cgi-bin/fulltext/77004283/FILE?TPL=ftx_start; http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=77004283&PLACEBO=IE.pdf`.

Peeters:2001:BBC

[986] Anik Peeters, C. Van Alsenoy, N. H. March, D. J. Klein, and V. E. Van Doren. Boron B_{12} cluster embedded in graphitic fragments. *Journal of Physical Chemistry. B. Condensed matter, materials, surfaces, interfaces & biophysical*, 105(43):10546–10553, ???? 2001. CODEN JPCBFK. ISSN 1089-5647 (print), 1520-6106 (electronic). URL `http://pubs.acs.org/doi/abs/10.1021/jp011762z`.

Zhang:2001:EPT

[987] M. L. Zhang, N. H. March, A. Peeters, C. Van Alsenoy, and V. E. Van Doren. Effect of plasticizer on thermodynamic properties of nylons: Model, phenomenology, and proposed experiments. *Journal of Applied Physics*, 89(7):3627–3630, ???? 2001. CODEN JAPIAU. ISSN 0021-8979 (print), 1089-7550 (electronic), 1520-8850. URL `http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5029424; http://link.aip.org/link/?JAP/89/3627/1`.

Alonso:2002:BST

[988] J. A. Alonso and N. H. March. Behavior of the surface tension and the viscosity in the eutectic region of the liquid FeB alloy. *Physics and*

Chemistry of Liquids, 40(1):57–65, ???? 2002. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Alonso:2002:SPM

[989] J. A. Alonso, M. J. Lopez, N. H. March, and D. Lamoen. Some properties of a model liquid of C-60 buckyballs. *Physics and Chemistry of Liquids*, 40(4):457–467, ???? 2002. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:2002:DEE

[990] C. Amovilli, I. A. Howard, D. J. Klein, and N. H. March. Dependence of the π-electron eigenvalue sum on the number of atoms in almost spherical C cages. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 66 (??):013210, July 30, 2002. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.66.013210`.

Amovilli:2002:DPE

[991] C. Amovilli, I. A. Howard, D. J. Klein, and N. H. March. Dependence of the pi-electron eigenvalue sum on the number of atoms in almost spherical C cages. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 66(1):??, ???? 2002. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519.

Amovilli:2002:SST

[992] C. Amovilli and N. H. March. Slater sum for a three-dimensional inhomogeneous Fermi fluid with one-dimensional harmonic confinement. *Physics and Chemistry of Liquids*, 40(2):173–179, ???? 2002. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Angilella:2002:LFL

[993] G. G. N. Angilella, N. H. March, R. Pucci, and R. H. Squire. Luttinger or Fermi liquids versus topological superconductivity. *Physics and Chemistry of Liquids*, 40(4):353–394, ???? 2002. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Angilella:2002:STT

[994] G. G. N. Angilella, N. H. March, and R. Pucci. Superconducting transition temperatures and coherence length in non-s-wave pairing materials correlated with spin-fluctuation mediated interaction. *Physical Review B: Condensed Matter and Materials Physics*, 65(9):092509, February 13, 2002. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.65.092509`.

Gal:2002:DED

[995] T. Gal, N. H. March, and A. Nagy. Differential equation for the determination of a first-degree homogeneous noninteracting kinetic-energy density functional for two-level systems. *Physics Letters A*, 302(2–3):55–58, ???? 2002. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Holas:2002:CKE

[996] A. Holas and N. H. March. Comment on "Kinetic energy as a density functional". *Physical Review A (Atomic, Molecular, and Optical Physics)*, 66(6):066501, December 20, 2002. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.66.066501`.

Howard:2002:CFT

[997] I. A. Howard, N. H. March, and L. M. Nieto. Complete functional theory for the fermion density of independent particles subject to harmonic confinement in d dimensions for an arbitrary number of closed shells. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 66(5):054501, November 22, 2002. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.66.054501`.

Howard:2002:DDD

[998] I. A. Howard, N. H. March, and L. M. Nieto. The determination of the Dirac density matrix of the d-dimensional harmonic oscillator for an arbitrary number of closed shells. *Journal of Physics A (Mathematical and General)*, 35(24):4985–4997, ???? 2002. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/35/i=24/a=302`.

Howard:2002:DVR

[999] I. A. Howard and N. H. March. Differential virial relations in quantum theory and statistical mechanics of some inhomogeneous electron assemblies. *Physics Letters A*, 301(3–4):220–223, ???? 2002. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Howard:2002:ECT

[1000] I. A. Howard, N. H. March, and D. J. Klein. Edge confinement of a two-dimensional electron gas and its relevance to the electron density near a vacancy defect in graphite. *Journal of Mathematical Chemistry*, 32(1):31–37, July 2002. CODEN JMCHEG. ISSN 0259-9791 (print),

1572-8897 (electronic). URL http://link.springer.com/article/10.1023/A%3A1021263223403.

Howard:2002:MBT

[1001] I. A. Howard and N. H. March. Many-body theory of highly inhomogeneous fermion assemblies. In Parr and Sen [1543], pages 444–492. ISBN 981-02-4889-X, 981-277-570-6 (e-book). LCCN QD462. URL http://www.worldscientific.com/doi/abs/10.1142/9789812775702_0017.

Howard:2002:SGH

[1002] I. A. Howard and N. H. March. Spatial generalization of the H atom nuclear cusp condition for kinetic energy density for closed shells in a bare Coulomb field. *Physics Letters A*, 296(4–5):214–216, ???? 2002. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Howard:2002:TEC

[1003] I. A. Howard, N. H. March, A. Nagy, and V. E. Van Doren. Ten-electron central field problem: An inhomogeneous electron liquid. *Physics and Chemistry of Liquids*, 40(1):47–56, ???? 2002. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Howard:2002:TKE

[1004] I. A. Howard and N. H. March. Total kinetic energy density for closed shells in a bare Coulomb field solely in terms of s-state information. *Journal of Physics A (Mathematical and General)*, 35(45):L635–L639, ???? 2002. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL http://stacks.iop.org/0305-4470/35/i=45/a=102.

Howard:2002:WLS

[1005] I. A. Howard, N. H. March, and V. E Van Doren. WKB level spectra in two inhomogeneous electron liquids: Na clusters and C cages. *Physics and Chemistry of Liquids*, 40(2):123–133, ???? 2002. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Klein:2002:QMM

[1006] D. J. Klein, R. P. Hurst, and N. H. March. Quantum-mechanical model relating negative-ion polarizabilities in free space and in an ionic crystal. *The Journal of Physics and Chemistry of Solids*, 63(2):287–294, ???? 2002. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Leys:2002:CPA

[1007] F. E. Leys, N. H. March, and V. E Van Doren. Critical properties of n-alkanes and the relevance of polymer models to the heavy fluid metals

Rb and Cs. *Physics and Chemistry of Liquids*, 40(2):143–157, ???? 2002. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Leys:2002:EST

[1008] F. E. Leys, N. H. March, D. Lamoen, and V. E. Van Doren. Equation of state of tantalum and plutonium in a spherical cell approximation and at extremely high pressures. *High Pressure Research*, 22(1):217–220, ???? 2002. CODEN HPRSEL. ISSN 0895-7959 (print), 1477-2299 (electronic).

Leys:2002:SCB

[1009] F. E. Leys, N. H. March, G. G. N. Angilella, and M.-L. Zhang. Similarity and contrasts between thermodynamic properties at the critical point of liquid alkali metals and of electron-hole droplets. *Physical Review B: Condensed Matter and Materials Physics*, 66(7):073314, August 30, 2002. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.66.073314`.

Leys:2002:TCI

[1010] F. E. Leys, N. H. March, and D. Lamoen. Thermodynamic consistency and integral equations for the liquid structure. *Journal of Chemical Physics*, 117(23):10726–10729, ???? 2002. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/117/10726/1`.

March:2002:BM

[1011] N. H. March and M. P. Tosi. Back matter. In *Introduction to Liquid State Physics* [1542], pages 399–431. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_bmatter`.

March:2002:BRC

[1012] N. H. March and M. P. Tosi. Bonds, rings and chains. In *Introduction to Liquid State Physics* [1542], pages 227–254. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0009`.

March:2002:CSR

[1013] N. H. March and M. P. Tosi. Chemical short-range order: Molten salts and some metal alloys. In *Introduction to Liquid State Physics* [1542], pages 201–226. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0008`.

March:2002:D

[1014] N. H. March and M. P. Tosi. Diffusion. In *Introduction to Liquid State Physics* [1542], pages 111–136. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0005`.

March:2002:DED

[1015] N. H. March and Á. Nagy. Differential equation for the determination of a first-degree homogeneous noninteracting kinetic-energy density functional for two-level systems. *Physics Letters A*, 302(2–3): 55–58, September 16, 2002. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960102011416`.

March:2002:DVR

[1016] N. H. March. Differential virial relations in quantum theory and statistical mechanics of some inhomogeneous electron assemblies. *Physics Letters A*, 301(3–4):220–223, August 26, 2002. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960102009027`.

March:2002:EIE

[1017] N. H. March. Electrostatic interpretation of an electron density associated with the spherical exchange-correlation potential $V_{xc}(r)$ in atoms: Application to Be. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 65(3):034501, January 30, 2002. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.65.034501`.

March:2002:EVF

[1018] N. H. March and M. P. Tosi. Excluded volume, free volume and hard sphere packing. In *Introduction to Liquid State Physics* [1542], pages 29–50. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0002`.

March:2002:FM

[1019] N. H. March and M. P. Tosi. Front matter. In *Introduction to Liquid State Physics* [1542], pages i–xvii. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_fmatter`.

March:2002:FOD

[1020] N. H. March. First-order density matrix as a functional of the ground-state electron density for harmonic confinement of two electrons which also interact harmonically. *Physics Letters A*, 306(2–3):63–65, December 30, 2002. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960102015980`.

March:2002:HT

[1021] N. H. March and M. P. Tosi. Heat transport. In *Introduction to Liquid State Physics* [1542], pages 171–200. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0007`.

March:2002:LVI

[1022] N. H. March and M. P. Tosi. Liquid-vapour interface. In *Introduction to Liquid State Physics* [1542], pages 339–363. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0013`.

March:2002:NNF

[1023] N. H. March and M. P. Tosi. Non-Newtonian fluids. In *Introduction to Liquid State Physics* [1542], pages 283–307. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0011`.

March:2002:QDL

[1024] N. H. March and M. P. Tosi. Qualitative description of liquid properties. In *Introduction to Liquid State Physics* [1542], pages 1–28. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0001`.

March:2002:QF

[1025] N. H. March and M. P. Tosi. Quantum fluids. In *Introduction to Liquid State Physics* [1542], pages 365–398. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0014`.

March:2002:QMM

[1026] N. H. March. Quantum-mechanical model relating negative-ion polarizabilities in free space and in an ionic crystal. *The Journal of Physics and Chemistry of Solids*, 63(2):287–294, February 2, 2002. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022369701001421`.

March:2002:SFT

[1027] N. H. March and M. P. Tosi. Structure, forces and thermodynamics. In *Introduction to Liquid State Physics* [1542], pages 75–110. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0004`.

March:2002:SGH

[1028] N. H. March. Spatial generalization of the H atom nuclear cusp condition for kinetic energy density for closed shells in a bare Coulomb field. *Physics Letters A*, 296(4-5):214–216, April 22, 2002. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S037596010200186X`.

March:2002:SGS

[1029] N. H. March and M. P. Tosi. Supercooling and the glassy state. In *Introduction to Liquid State Physics* [1542], pages 255–281. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0010`.

March:2002:STM

[1030] N. H. March. Semiclassical theory of multielectron atoms and the H_2^+ molecular ion in intense external field. In P. Schmelcher and W. Schweizer, editors, *Atoms and Molecules in Strong External Fields*, pages 255–263. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2002. ISBN 0-306-45811-X (print), 0-306-47074-8 (e-book). URL `http://link.springer.com/chapter/10.1007/0-306-47074-8_31; http://link.springer.com/content/pdf/10.1007/0-306-47074-8_31.pdf`.

March:2002:T

[1031] N. H. March and M. P. Tosi. Turbulence. In *Introduction to Liquid State Physics* [1542], pages 309–338. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42

2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0012`.

March:2002:TCE

[1032] N. H. March, V. E. Van Doren, and C. C. Matthai. Trends of combinations of elastic constants of covalent semiconductors with mean inter-electronic separation. *Philosophical Magazine A: Physics of Condensed Matter: Structure, Defects and Mechanical Properties*, 82(12):2475–2481, ???? 2002. CODEN PMAADG. ISSN 0141-8610 (print), 1460-6992 (electronic).

March:2002:TEE

[1033] N. H. March and M. P. Tosi. Thermodynamics, equipartition of energy and some scaling properties. In *Introduction to Liquid State Physics* [1542], pages 51–74. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0003`.

March:2002:V

[1034] N. H. March and M. P. Tosi. Viscosity. In *Introduction to Liquid State Physics* [1542], pages 137–169. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). LCCN QC145.2 .M42 2002eb. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812778482_0006`.

Zhang:2002:SVD

[1035] M. L. Zhang, N. H. March, and V. E. Van Doren. Shear viscosity of dilute polymer solutions compared and contrasted with mechanical properties of nylon plus plasticizer. *Physics and Chemistry of Liquids*, 40(1):101–113, ???? 2002. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Zhang:2002:TPM

[1036] M. L. Zhang, N. H. March, and V. E. Van Doren. Transport properties of monatomic insulating liquids and liquid alkali metals from a cage model. *Physics and Chemistry of Liquids*, 40(3):295–316, ???? 2002. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Alonso:2003:CEL

[1037] J. A. Alonso, N. H. March, N. A. Cordero, and A. Rubio. Correlation energies of light atoms related to pairing between antiparallel spin electrons. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 36 (13):2695–2705, ???? 2003. CODEN JPAPEH. ISSN 0953-4075 (print),

1361-6455 (electronic). URL `http://stacks.iop.org/0953-4075/36/i=13/a=301`.

Amovilli:2003:AAE

[1038] C. Amovilli, Á. Nagy, and N. H. March. Approximate ansatz for the expansion of the spherically averaged wave function in terms of inter-electronic separation r_{12} for the Hookean atom, atomic ions, and the H_2 molecule. *International Journal of Quantum Chemistry*, 95(1):21–29, ???? 2003. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Amovilli:2003:ECC

[1039] C. Amovilli and N. H. March. An exact coupled cluster theory for Moshinsky and Hookean two-electron model atoms with spin-compensated ground states. *Chemical Physics Letters*, 378(1–2):167–171, ???? 2003. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Amovilli:2003:EDM

[1040] C. Amovilli and N. H. March. Exact density matrix for a two-electron model atom and approximate proposals for realistic two-electron systems. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 67 (2):022509, February 28, 2003. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.67.022509`.

Angilella:2003:EHL

[1041] G. G. N. Angilella, F. E. Leys, N. H. March, and R. Pucci. Electron or hole liquids in high-t-c cuprates: Evidence for d-wave order parameter. *Physics and Chemistry of Liquids*, 41(6):559–566, ???? 2003. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Angilella:2003:LRFa

[1042] G. G. N. Angilella, F. E. Leys, N. H. March, and R. Pucci. Linear response function around a localized impurity in a superconductor. *The Journal of Physics and Chemistry of Solids*, 64(3):413–418, March 2, 2003. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022369702003013`.

Angilella:2003:LRFb

[1043] G. G. N. Angilella, F. E. Leys, N. H. March, and R. Pucci. Linear response function around a localized impurity in a superconductor (vol

64, pg 413, 2003). *The Journal of Physics and Chemistry of Solids*, 64(8): 1431, ???? 2003. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Angilella:2003:PTW

[1044] G. G. N. Angilella, F. E. Leys, N. H. March, and R. Pucci. Phase transitions wholly within the liquid state. *Physics and Chemistry of Liquids*, 41(3):211–226, ???? 2003. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Holas:2003:WFL

[1045] A. Holas, I. A. Howard, and N. H. March. Wave functions and low-order density matrices for a class of two-electron 'artificial atoms' embracing Hookean and Moshinsky models. *Physics Letters A*, 310(5–6):451–456, ???? 2003. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Howard:2003:CEA

[1046] I. A. Howard and N. H. March. Confined electron assembly in a quartic potential plus electric field, and its relevance to scaling properties in the classical theory of turbulence. *Physics Letters A*, 319(1–2):188–190, ???? 2003. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Howard:2003:CED

[1047] I. A. Howard, J. A. Alonso, N. H. March, A. Rubio, and C. Van Alsenoy. Coulomb explosion of deuterium cationic clusters. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 68(6):065201, December 16, 2003. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.68.065201`.

Howard:2003:CSE

[1048] I. A. Howard and N. H. March. Corrections to Slater exchange potential in terms of Dirac idempotent density matrix: With an approximate application to Be-like positive atomic ions for large atomic number. *Journal of Chemical Physics*, 119(12):5789–5794, ???? 2003. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/119/5789/1`.

Howard:2003:ESM

[1049] I. A. Howard, I. V. Komarov, N. H. March, and L. M. Nieto. An exactly solvable model where properties of a fermion assembly are dom-

inated by the highest occupied level: case of harmonic confinement in d dimensions. *Journal of Physics A (Mathematical and General)*, 36 (17):4757–4762, ???? 2003. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/36/i=17/a=303`.

Howard:2003:LDS

[1050] I. A. Howard, N. H. March, and Á. Nagy. Local density of states $N(r, E)$ for central fields, with energy E in the continuum: especially the Coulomb potential. *Journal of Physics A (Mathematical and General)*, 36(23):6473–6481, ???? 2003. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/36/i=23/a=312`.

Howard:2003:MFS

[1051] I. A. Howard and N. H. March. Many-fermion systems: Differential equations and kinetic energy functionals for different confining potentials. *International Journal of Quantum Chemistry*, 91(2):119–125, ???? 2003. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). See also [513, 512, 922, 1092].

Howard:2003:NTS

[1052] I. A. Howard, N. H. March, and P. M. Echenique. Nonlinear theory of scattering by localized potentials in metals. *Journal of Physics A (Mathematical and General)*, 36(45):11451–11463, ???? 2003. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/36/i=45/a=007`.

Howard:2003:NVO

[1053] I. A. Howard, N. H. March, and J. D. Talman. Nonrelativistic variationally optimized exchange potentials for Ne-like atomic ions having large atomic number. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 68(4):044502, October 20, 2003. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.68.044502`.

Howard:2003:PPO

[1054] I. A. Howard and N. H. March. The Pauli potential in one-dimensional density functional theory: general result for two-level systems and specific example for N harmonically confined fermions. *Journal of Physics A (Mathematical and General)*, 36(24):L393–L398, ???? 2003. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/36/i=24/a=103`.

Leys:2003:EEC

[1055] F. E. Leys and N. H. March. Electron-electron correlations in liquid s–p metals. *Journal of Physics A (Mathematical and General)*, 36(22): 5893–5898, ???? 2003. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/36/i=22/a=309`.

Leys:2003:HPL

[1056] F. E. Leys, N. H. March, and D. Lamoen. High pressure limiting forms of the zero-temperature equations of state of Ta and Pu from relativistic Thomas–Fermi theory. *Physical Review B: Condensed Matter and Materials Physics*, 67(6):064109, February 28, 2003. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.67.064109`.

Leys:2003:SCM

[1057] F. E. Leys, C. Amovilli, I. A. Howard, N. H. March, and A. Rubio. Surface charge model of a carbon nanotube: self-consistent field from Thomas–Fermi theory. *The Journal of Physics and Chemistry of Solids*, 64(8):1285–1288, ???? 2003. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Leys:2003:SCN

[1058] F. E. Leys, N. H. March, G. G. N. Angilella, and D. Lamoen. Self-consistent nonlocal linear-response theory of a relativistic electron gas. *Physical Review B: Condensed Matter and Materials Physics*, 67(11): 113105, March 31, 2003. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.67.113105`.

March:2003:CEA

[1059] N. H. March. Confined electron assembly in a quartic potential plus electric field, and its relevance to scaling properties in the classical theory of turbulence. *Physics Letters A*, 319(1–2):188–190, December 1, 2003. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960103015159`.

March:2003:CIC

[1060] N. H. March. Classic ionic crystals and quantal Wigner electron solids: Role of electron correlation. *International Journal of Quantum Chemistry*, 92(1):11–21, March 5, 2003. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:2003:CTI

[1061] N. H. March, M. P. Tosi, and A. Minguzzi. Can trimers influence the free surface density profile of liquid ^{4}He at zero temperature? *Journal of Chemical Physics*, 119(8):4597–4598, ???? 2003. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/119/4597/1`.

March:2003:ECC

[1062] N. H. March. An exact coupled cluster theory for Moshinsky and Hookean two-electron model atoms with spin-compensated ground states. *Chemical Physics Letters*, 378(1–2):167–171, August 29, 2003. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0009261403012557`.

March:2003:KED

[1063] N. H. March and A. Holas. Kinetic energy density of the two-electron Hookean atom in terms of the ground-state electron density. *Journal of Mathematical Chemistry*, 33(2):163–170, February 2003. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1023/A%3A1023256000287`.

March:2003:LEE

[1064] N. H. March. Local energy equation for two-electron atoms and relation between kinetic energy and electron densities. *Journal of Chemical Physics*, 118(15):6846–6851, ???? 2003. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/118/6846/1`.

March:2003:MMC

[1065] Norman H. March and R. H. Squire. Microscopic mechanism for C_{60} superconductivity. *International Journal of Quantum Chemistry*, 92(3):261–275, April 5, 2003. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:2003:NED

[1066] N. H. March. Nonlocal energy density functionals: Models plus some exact general results. *International Journal of Quantum Chemistry*, 92(1):1–10, March 5, 2003. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:2003:PSS

[1067] N. H. March and I. A. Howard. Propagator and Slater sum in one-body potential theory. *Physica Status Solidi. B, Basic Research*, 237(1):265–273, ???? 2003. CODEN PSSBBD. ISSN 0370-1972 (print), 1521-3951 (electronic).

March:2003:RMP

[1068] N. H. March, A. T. Balaban, F. E. Leys, D. J. Klein, and W. A. Seitz. Regularities in melting points of lithium halides: Is LiH anomalous? *Physics and Chemistry of Liquids*, 41(3):303–308, ???? 2003. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2003:RPC

[1069] N. H. March, I. A. Howard, and V. E. Van Doren. Recent progress in constructing nonlocal energy density functionals. *International Journal of Quantum Chemistry*, 92(2):192–204, ???? 2003. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:2003:SCM

[1070] N. H. March and A. Rubio. Surface charge model of a carbon nanotube: self-consistent field from Thomas–Fermi theory. *The Journal of Physics and Chemistry of Solids*, 64(8):1285–1288, August 19, 2003. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022369703001331`.

March:2003:WFL

[1071] N. H. March. Wave functions and low-order density matrices for a class of two-electron 'artificial atoms' embracing Hookean and Moshinsky models. *Physics Letters A*, 310(5–6):451–456, April 28, 2003. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960103004080`.

Minguzzi:2003:SCI

[1072] A. Minguzzi, N. H. March, and M. P. Tosi. Superfluidity with and without a condensate in interacting Bose fluids. *Physics and Chemistry of Liquids*, 41(4):323–335, ???? 2003. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Misra:2003:IEM

[1073] Anirban Misra, D. J. Klein, Sambhu N. Datta, and N. H. March. Internal energy and magnetic moment of three-dimensional ferromagnets. *International Journal of Quantum Chemistry*, 95(4–5):451–454, ???? 2003. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Popov:2003:ECF

[1074] V. N. Popov, N. H. March, and V. E. Van Doren. Estimation of the cleavage force of crystalline semiconductors with diamond and zinc-blende structure. *The Journal of Physics and Chemistry of Solids*, 64 (1):159–160, January 14, 2003. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022369702002032`.

Zhang:2003:LRP

[1075] M. L. Zhang, N. H. March, A. Peeters, C. Van Alsenoy, I. Howard, D. Lamoen, and F. Leys. Loss rate of a plasticizer in a nylon matrix calculated using macroscopic reaction–diffusion kinetics. *Journal of Applied Physics*, 93(3):1525–1532, ???? 2003. CODEN JAPIAU. ISSN 0021-8979 (print), 1089-7550 (electronic), 1520-8850. URL `http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5035908; http://link.aip.org/link/?JAP/93/1525/1`.

Amovilli:2004:EES

[1076] Claudio Amovilli, Frederik E. Leys, and Norman H. March. Electronic energy spectrum of two-dimensional solids and a chain of C atoms from a quantum network model. *Journal of Mathematical Chemistry*, 36(2):93–112, ???? 2004. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic).

Amovilli:2004:QIJ

[1077] Claudio Amovilli and Norman H. March. Quantum information: Jaynes and Shannon entropies in a two-electron entangled artificial atom. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 69(5):054302, May 12, 2004. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.69.054302`.

Amovilli:2004:TDW

[1078] C. Amovilli and N. H. March. Three-dimensional Wigner molecules formed from an assembly of confined but Coulombically repelling electrons. *Physics Letters A*, 324(1):46–50, ???? 2004. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Angilella:2004:CBC

[1079] G. G. N. Angilella, F. E. Leys, N. H. March, and R. Pucci. Correlation between characteristic energies in non- s-wave pairing superconductors. *Physics Letters A*, 322(5–6):375–383, March 8, 2004. CODEN

PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0375960104000659.

Angilella:2004:IEI

[1080] G. G. N. Angilella, N. H. March, and R. Pucci. Integral equation for inhomogeneous condensed bosons generalizing the Gross–Pitaevskii differential equation. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 69(5):055601, May 10, 2004. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL http://link.aps.org/doi/10.1103/PhysRevA.69.055601.

Angilella:2004:SCB

[1081] N. Angilella, F. Bartha, and N. H. March. Stretched chemical bonds in Si_6H_6: a transition from ring currents to localized π-electrons? *Chemical Physics*, 297(1-3):13–19, February 16, 2004. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0301010403005202.

Angilella:2004:STT

[1082] G. G. N. Angilella, N. H. March, and R. Pucci. Superconducting transition temperatures of the elements related to elastic constants. *European Physical Journal B: Condensed Matter and Complex Systems*, 39(4):427–431, June 2004. CODEN EPJBFY. ISSN 1434-6028 (print), 1434-6036 (electronic). URL http://link.springer.com/article/10.1140/epjb/e2004-00213-y; http://link.springer.com/content/pdf/10.1140/epjb/e2004-00213-y.pdf.

Balawender:2004:CBH

[1083] R. Balawender, A. Holas, and N. H. March. Comment on "Breakdown of the Hellmann–Feynman theorem: Degeneracy is the key". *Physical Review B: Condensed Matter and Materials Physics*, 69(3):037103, January 14, 2004. CODEN PRBMDO. ISSN 1098-0121. URL http://link.aps.org/doi/10.1103/PhysRevB.69.037103.

Cordero:2004:RTI

[1084] N. A. Cordero, J. A. Alonso, and N. H. March. Relativistic theory of an inhomogeneous electron liquid in relation to atomic binding energies. *Physics and Chemistry of Liquids*, 42(6):589–595, ???? 2004. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Grassi:2004:EGL

[1085] A. Grassi, G. M. Lombardo, G. G. N. Angilella, N. H. March, and R. Pucci. Equilibrium geometries of low-lying isomers of some Li clusters,

within Hartree–Fock theory plus bond order or MP2 correlation corrections. *Journal of Chemical Physics*, 120(24):11615–11620, June 22, 2004. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/120/11615/1`.

Grassi:2004:SCB

[1086] A. Grassi, G. M. Lombardo, R. Pucci, Ggn Angilella, F. Bartha, and N. H. March. Stretched chemical bonds in si6h6: a transition from ring currents to localized pi-electrons? *Chemical Physics*, 297(1–3):13–19, ???? 2004. CODEN CMPHC2. ISSN 0301-0104 (print), 1873-4421 (electronic).

Howard:2004:CES

[1087] I. A. Howard, D. J. Klein, N. H. March, C. Van Alsenoy, S. Suhai, Z. Jánosfalvi, and Á. Nagy. Change in electronic structure of polyenes due to interaction with polyacenes and with graphitic strips. *Journal of Physical Chemistry. B. Condensed matter, materials, surfaces, interfaces & biophysical*, 108(39):14870–14875, ???? 2004. CODEN JPCBFK. ISSN 1089-5647 (print), 1520-6106 (electronic)f. URL `http://pubs.acs.org/doi/abs/10.1021/jp040079k`.

Howard:2004:DMF

[1088] I. A. Howard, N. H. March, F. Bartha, A. K. Ray, and M.-L. Zhang. Density matrix force-balance equation applied to He, Be, and Ne atoms and to almost-spherical methane-like molecules. *International Journal of Quantum Chemistry*, 100(2):155–165, ???? 2004. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Howard:2004:DPF

[1089] I. A. Howard and N. H. March. Off-diagonal properties of the Feynman propagator and the Green function for a bare Coulomb field. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 69(4):044703, April 13, 2004. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.69.044703`.

Howard:2004:IDM

[1090] I. A. Howard, N. H. March, and P. W. Ayers. Idempotent density matrix derived from a local potential $V(r)$ in terms of HOMO and LUMO properties. *Chemical Physics Letters*, 385(3–4):231–232, ???? 2004. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Howard:2004:REW

[1091] I. A. Howard and N. H. March. Relativistic effects when many independent fermions are confined in d dimensions. *Journal of Physics A (Mathematical and General)*, 37(3):965–971, ???? 2004. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/37/i=3/a=028`.

Howard:2004:SSO

[1092] I. A. Howard, A. Minguzzi, N. H. March, and M. P. Tosi. Slater sum for the one-dimensional sech^2 potential in relation to the kinetic energy density. *Journal of Mathematical Physics*, 45(6):2411–2419, June 2004. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL `http://jmp.aip.org/resource/1/jmapaq/v45/i6/p2411_s1; http://link.aip.org/link/?JMP/45/2411/1`.

Howard:2004:VFH

[1093] I. A. Howard, G. G. N. Angilella, N. H. March, and C. Van Alsenoy. Vibrational frequencies of (h2o)(n) and (d2o)(n) clusters for n=2 and 8: Possible relevance to inelastic neutron scattering of ice. *Physics and Chemistry of Liquids*, 42(4):403–410, ???? 2004. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Klein:2004:RDT

[1094] D. J. Klein and N. H. March. The role of disclinations in two phase changes induced by temperature and pressure in crystalline solids: Melting and the brittle-ductile transition. *Physics and Chemistry of Liquids*, 42(5):545–550, ???? 2004. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Leys:2004:CLA

[1095] F. E. Leys, N. H. March, and M. L. Zhang. Coulomb liquids along phase boundaries. *Physics and Chemistry of Liquids*, 42(3):217–228, ???? 2004. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Leys:2004:RVR

[1096] F. E. Leys, N. H. March, and D. Lamoen. Relativistic virial relations for both homogeneous and spatially varying electron liquids. *Physics and Chemistry of Liquids*, 42(4):423–431, ???? 2004. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Leys:2004:TCE

[1097] F. E. Leys, C. Amovilli, and N. H. March. Topology, connectivity, and electronic structure of C and B cages and the corresponding nan-

otubes. *Journal of Chemical Information and Computer Sciences*, 44 (1):122–135, January 2004. CODEN JCISD8. ISSN 0095-2338 (print), 1520-5142 (electronic). URL `http://pubs.acs.org/doi/abs/10.1021/ci0200624`.

March:2004:CAS

[1098] N. H. March and A. Rubio. Change in analytic structure of first-order density matrix as a functional of electron density due to inter-particle correlation: a two-electron model example. *Chemical Physics Letters*, 398 (4–6):445–448, ???? 2004. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

March:2004:CEA

[1099] N. H. March. Confined electron assemblies in intense electric and magnetic fields and a generalization of Emden's equation. In Rahman et al. [1544], pages 108–116. ISBN 981-256-026-2. LCCN QC776 .U694 2004. URL `http://www.worldscientific.com/doi/abs/10.1142/9789812794697_0010`.

March:2004:CME

[1100] N. H. March, P. Capuzzi, and M. P. Tosi. Changes of magnetization and entropy across the melting curve for a classical two-dimensional plasma in a magnetic field. *Physics Letters A*, 327(2–3):226–229, June 28, 2004. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960104006589`.

March:2004:CSH

[1101] N. H. March. Compressibility and specific heats of heavier condensed rare gases near the liquid-vapor critical point. *Journal of Chemical Physics*, 121(6):2715–2717, August 8, 2004. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/121/2715/1`.

March:2004:EIF

[1102] N. H. March, P. Geerlings, and K. D. Sen. Electrostatic interpretation of the force $-\partial V_{xc}/\partial r$ connected with the exchange-correlation potential: direct relation to single-particle kinetic energy density in Be-atom. *Physics Letters A*, 324(1):42–45, April 5, 2004. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960104002488`.

March:2004:EOB

[1103] N. H. March and Eduardo V. Ludeña. Effective one-body potential of DFT plus correlated kinetic energy density for two-electron spherical model atoms. *Physics Letters A*, 330(1–2):16–21, September 13, 2004. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960104010631`.

March:2004:EPF

[1104] N. H. March and I. A. Howard. Exchange potential via functional differentiation of the Dirac idempotent density matrix. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 69(6):064101, June 2, 2004. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.69.064101`.

March:2004:GSG

[1105] N. H. March. Ground-state geometry and electronic structure of light atom clusters, especially H isotopes, Li, B, and C. *International Journal of Quantum Chemistry*, 100(6):877–886, ???? 2004. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:2004:IDM

[1106] N. H. March and P. W. Ayers. Idempotent density matrix derived from a local potential V(r) in terms of HOMO and LUMO properties. *Chemical Physics Letters*, 385(3–4):231–232, February 9, 2004. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0009261403022255`.

March:2004:MOM

[1107] N. H. March. Magnetically ordered materials: relation between internal energy, magnetization and applied field. *Physics Letters A*, 329 (4-5):396–401, August 30, 2004. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960104009685`.

March:2004:RDF

[1108] N. H. March and I. A. Howard. Relativistic density functional theory of the H atom in terms of a difference equation. *Physics Letters A*, 331(1–2):8–11, October 11, 2004. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960104011806`.

March:2004:REG

[1109] N. H. March and C. C. Matthai. A representation of the energy gap in diamond-structure semiconductors. *Philosophical Magazine Letters*, 84 (5):335–340, ???? 2004. CODEN PMLEEG. ISSN 0950-0839 (print), 1362-3036 (electronic).

March:2004:SCI

[1110] N. H. March and M. P. Tosi. Some current issues concerning statics and dynamics of inhomogeneous superfluid gases. *Physics and Chemistry of Liquids*, 42(5):433–445, ???? 2004. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2004:TDW

[1111] N. H. March. Three-dimensional Wigner molecules formed from an assembly of confined but Coulombically repelling electrons. *Physics Letters A*, 324(1):46–50, April 5, 2004. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S037596010400249X`.

Minguzzi:2004:FOQ

[1112] A. Minguzzi, N. H. March, and M. P. Tosi. First-order quantum phase transition driven by rotons in a gaseous Bose–Einstein condensate irradiated by a laser. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 70(2):025601, August 13, 2004. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.70.025601`.

Misra:2004:MOM

[1113] A. Misra, A. Ayuela, D. J. Klein, and N. H. March. Magnetically ordered materials: relation between internal energy, magnetization and applied field. *Physics Letters A*, 329(4–5):396–401, ???? 2004. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Squire:2004:FSC

[1114] Richard H. Squire and Norman H. March. Fulleride superconductivity compared and contrasted with RVB theory of high T_c cuprates. *International Journal of Quantum Chemistry*, 100(6):1092–1103, ???? 2004. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Amovilli:2005:DMD

[1115] Claudio Amovilli and Norman H. March. Density matrices in direct and momentum space for a model of the He-like sequence of atomic

ions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 72(4): 042504, October 18, 2005. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.72.042504`.

Amovilli:2005:LRF

[1116] C. Amovilli and N. H. March. Long-range forces between C nanotubes and between C cages: Some polarizability bounds and scaling approximations yielding interaction energies at intermediate separations. *Carbon*, 43(8):1634–1642, ???? 2005. CODEN CRBNAH. ISSN 0008-6223 (print), 1873-3891 (electronic).

Amovilli:2005:PDR

[1117] C. Amovilli and N. H. March. Pair density related to one-electron information for the ground state of spin-compensated two-electron systems. *International Journal of Quantum Chemistry*, 102(2):132–138, ???? 2005. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Angilella:2005:CEC

[1118] G. G. N. Angilella, N. H. March, and R. Pucci. Collective excitations in a confined, interacting dilute Bose-condensed fluid. *Physics and Chemistry of Liquids*, 43(2):157–165, ???? 2005. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Angilella:2005:CHF

[1119] G. G. N. Angilella, N. H. March, and R. Pucci. T-c for heavy fermion superconductors linked with other physical properties at zero and applied pressure. *Superconductor Science and Technology*, 18(4):557–560, ???? 2005. CODEN SUSTEF. ISSN 0953-2048 (print), 1361-6668 (electronic).

Angilella:2005:ESC

[1120] N. Angilella, R. Pucci, and N. H. March. Electronic structure of clusters n (LiBC): $n = 1, 2$ and 4. *Physics Letters A*, 338(3–5):303–308, May 2, 2005. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960105003099`.

Angilella:2005:HFS

[1121] G. G. N. Angilella, N. H. March, and R. Pucci. T_c for heavy fermion superconductors linked with other physical properties at zero and applied pressure. *Superconductor Science and Technology*, 18(4):557–560, ????

2005. CODEN SUSTEF. ISSN 0953-2048 (print), 1361-6668 (electronic). URL `http://stacks.iop.org/0953-2048/18/i=4/a=028`.

Angilella:2005:LDO

[1122] G. G. N. Angilella, N. H. March, and R. Pucci. Low density observations of Rb and Cs chains along the liquid-vapour coexistence curves to the critical point in relation to quantum-chemical predictions on the metal-insulator transitions in Li and Na rings. *Physics and Chemistry of Liquids*, 43(1):111–114, ???? 2005. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Balaban:2005:PTR

[1123] Alexandru T. Balaban, Douglas J. Klein, Norman H. March, Mario P. Tosi, and M. Ausloos. Phase-transition regularities in critical constants, fusion temperatures and enthalpies of chemically similar chainlike structures. *ChemPhysChem*, 6(9):1741–1745, ???? 2005. CODEN CPCHFT. ISSN 1439-4235 (print), 1439-7641 (electronic).

Balaban:2005:TTP

[1124] A. T. Balaban, D. J. Klein, N. H. March, and C. C. Matthai. Transport and thermodynamic properties in low melting point ionic liquids related to n-alkyl chain length. *Physics and Chemistry of Liquids*, 43(4):403–407, ???? 2005. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Capuzzi:2005:DEG

[1125] P. Capuzzi, N. H. March, and M. P. Tosi. Differential equation for the ground-state density of artificial two-electron atoms with harmonic confinement. *Journal of Physics A (Mathematical and General)*, 38(24): L439–L442, ???? 2005. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/38/i=24/a=L01`.

Capuzzi:2005:WBM

[1126] P. Capuzzi, N. H. March, and M. P. Tosi. Wigner bosonic molecules with repulsive interactions and harmonic confinement. *Physics Letters A*, 339 (3–5):207–211, ???? 2005. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Claro:2005:PDT

[1127] Francisco Claro, Alejandro Cabo, and Norman H. March. On the phase diagram of a two-dimensional electron gas near integer fillings and fractions such as 1/5 and 1/7. *Physica Status Solidi. B, Basic Research*, 242

(9):1817–1819, ???? 2005. CODEN PSSBBD. ISSN 0370-1972 (print), 1521-3951 (electronic).

Holas:2005:DVT

[1128] A. Holas, N. H. March, and Angel Rubio. Differential virial theorem in relation to a sum rule for the exchange-correlation force in density-functional theory. *Journal of Chemical Physics*, 123(19):194104, ???? 2005. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://link.aip.org/link/?JCP/123/194104/1`.

Howard:2005:CEC

[1129] I. A. Howard and N. H. March. Can the exchange-correlation potential of density functional theory be expressed solely in terms of HOMO and LUMO properties? *Chemical Physics Letters*, 402(1–3):1–3, ???? 2005. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Howard:2005:FAE

[1130] I. A. Howard, K. D. Sen, P. Geerlings, and N. H. March. Force $-\partial V_{xc}/\partial r$ associated with the exchange-correlation potential $V_{xc}(r)$ in the neutral Ne atom. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 38(11):1705–1717, ???? 2005. CODEN JPAPEH. ISSN 0953-4075 (print), 1361-6455 (electronic). URL `http://stacks.iop.org/0953-4075/38/i=11/a=012`.

Howard:2005:FPDb

[1131] I. A. Howard and N. H. March. Fermion particle density equations in relation to relativistic density functional theory. *International Journal of Quantum Chemistry*, 101(6):651–657, ???? 2005. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Howard:2005:IET

[1132] I. A. Howard and N. H. March. Integral equation theory of the exchange potential, HOMO-LUMO properties, and sum rules for the exchange-correlation force. *Molecular Physics*, 103(9):1261–1270, ???? 2005. CODEN MOPHAM. ISSN 0026-8976 (print), 1362-3028 (electronic).

Howard:2005:IHM

[1133] I. A. Howard, G. G. N. Angilella, N. H. March, and C. Van Alsenoy. Interaction of a hydrogen molecule with a water cage (h2o)(8). *Physics and Chemistry of Liquids*, 43(5):441–448, ???? 2005. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Howard:2005:IIE

[1134] I. A. Howard and N. H. March. Interacting inhomogeneous electron liquids with harmonic confinement: s-wave model. *Physics and Chemistry of Liquids*, 43(6):559–565, ???? 2005. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Howard:2005:SNE

[1135] I. A. Howard and N. H. March. Slater's nonlocal exchange potential and beyond. *International Journal of Quantum Chemistry*, 102(1):64–71, ???? 2005. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Howard:2005:TDE

[1136] I. A. Howard and N. H. March. Towards a differential equation for the nonrelativistic ground-state electron density of the He-like sequence of atomic ions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 71(4):042501, April 1, 2005. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.71.042501`.

Howard:2005:WCG

[1137] I. A. Howard and N. H. March. s-wave component of the ground-state electron density in the Hookean model compared with the helium atom. *Chemical Physics Letters*, 413(1–3):168–170, ???? 2005. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Lombardo:2005:ESC

[1138] G. M. Lombardo, A. Grassi, G. Forte, G. G. N. Angilella, R. Pucci, and N. H. March. Electronic structure of clusters $(\mathrm{LiBC})_n$: $n = 1, 2$ and 4. *Physics Letters A*, 338(3–5):303–308, ???? 2005. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Lopez:2005:STS

[1139] M. J. Lopez, I. Cabria, N. H. March, and J. A. Alonso. Structural and thermal stability of narrow and short carbon nanotubes and nanostrips. *Carbon*, 43(7):1371–1377, ???? 2005. CODEN CRBNAH. ISSN 0008-6223 (print), 1873-3891 (electronic).

March:2005:CEC

[1140] N. H. March. Can the exchange-correlation potential of density functional theory be expressed solely in terms of HOMO and LUMO properties? *Chemical Physics Letters*, 402(1-3):1–3, January 24, 2005. CODEN

CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0009261404019372.

March:2005:CNP

[1141] N. H. March, I. A. Howard, I. Nagy, and P. M. Echenique. Changes in nonlinear potential scattering theory in electron gases brought about by reducing dimensionality. *Journal of Mathematical Physics*, 46(7): 072104:1–072104:16, July 2005. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL http://jmp.aip.org/resource/1/jmapaq/v46/i7/p072104_s1; http://link.aip.org/link/?JMP/46/072104/1.

March:2005:FQWa

[1142] N. H. March and R. H. Squire. Fingerprints of quantal Wigner solid-like correlations in D-dimensional assemblies. *Physics Letters A*, 344(5):383–386, ???? 2005. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

March:2005:FQWb

[1143] N. H. March and R. H. Squire. Fingerprints of quantal Wigner solid-like correlations in D-dimensional assemblies. *Physics Letters A*, 346 (5–6):355–358, ???? 2005. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). See erratum [1171].

March:2005:LRF

[1144] N. H. March. Long-range forces between C nanotubes and between C cages: Some polarizability bounds and scaling approximations yielding interaction energies at intermediate separations. *Carbon*, 43(8):1634–1642, July 1, 2005. CODEN CRBNAH. ISSN 0008-6223 (print), 1873-3891 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0008622305000722.

March:2005:NGI

[1145] N. H. March. Next generation of ab initio energy density functionals: Thoughts and facts from solvable models. *International Journal of Quantum Chemistry*, 101(5):494–505, ???? 2005. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:2005:NRB

[1146] N. H. March and Á. Nagy. Non-relativistic binding energies of heavy neutral atoms: Dependence of correlation energy on atomic number. *Chemical Physics Letters*, 416(1–3):104–106, November 29, 2005. CODEN

CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL http://www.sciencedirect.com/science/article/pii/S000926140501434X.

March:2005:NRR

[1147] N. H. March and L. M. Nieto. Non-relativistic and relativistic electron liquids confined by a linear potential. *Physics and Chemistry of Liquids*, 43(3):225–237, ???? 2005. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2005:RDF

[1148] N. H. March. Relativistic density functional theory posed in terms of difference equations. *International Journal of Quantum Chemistry*, 105 (6):701–708, ???? 2005. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:2005:REB

[1149] N. H. March and M. P. Tosi. Roton excitations in Bose–Einstein condensates and a fluid-solid transition. *Physics and Chemistry of Liquids*, 43 (5):423–427, ???? 2005. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2005:SDF

[1150] N. H. March and Zs. Jánosfalvi. Subspace density of the first excited state for two harmonically interacting electrons with isotropic harmonic confinement. *Physics Letters A*, 335(5–6):347–350, February 21, 2005. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0375960104017803.

March:2005:STS

[1151] N. H. March and J. A. Alonso. Structural and thermal stability of narrow and short carbon nanotubes and nanostrips. *Carbon*, 43 (7):1371–1377, June 16, 2005. CODEN CRBNAH. ISSN 0008-6223 (print), 1873-3891 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0008622305000515.

March:2005:WBM

[1152] N. H. March and M. P. Tosi. Wigner bosonic molecules with repulsive interactions and harmonic confinement. *Physics Letters A*, 339 (3–5):207–211, May 23, 2005. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0375960105004056.

March:2005:WCG

[1153] N. H. March. s-wave component of the ground-state electron density in the Hookean model compared with the helium atom. *Chemical Physics Letters*, 413(1-3):168–170, September 15, 2005. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0009261405011140`.

Molina:2005:BND

[1154] L. M. Molina, M. J. López, I. Cabria, J. A. Alonso, and N. H. March. BeB_2 nanostructures: a density functional study. *Physical Review B: Condensed Matter and Materials Physics*, 72(11):113414, September 27, 2005. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.72.113414`.

Nagy:2005:SDF

[1155] Á. Nagy, I. A. Howard, N. H. March, and Zs. Jánosfalvi. Subspace density of the first excited state for two harmonically interacting electrons with isotropic harmonic confinement. *Physics Letters A*, 335(5–6):347–350, ???? 2005. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Squire:2005:QPT

[1156] Richard H. Squire and Norman H. March. Quantum phase transitions and superconductivity: Proposal for the phase diagram of alkali-doped fullerides and by universality HTSC including Wigner solids. *International Journal of Quantum Chemistry*, 105(6):883–897, ???? 2005. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Amovilli:2006:FPS

[1157] Claudio Amovilli and Norman H. March. Feynman propagator and Slater sum for a model Hamiltonian motivated by H in an intense magnetic field. *International Journal of Quantum Chemistry*, 106(2):533–541, ???? 2006. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Amovilli:2006:LRA

[1158] Claudio Amovilli and Norman H. March. Long-range asymptotic behaviour of the ground-state electron density in He-like ions as a function of atomic number. *Journal of Physics A (Mathematical and General)*, 39 (23):7349–7357, ???? 2006. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic).

Amovilli:2006:TDE

[1159] Claudio Amovilli and Norman H. March. Two-dimensional electrostatic analog of the March model of C_{60} with a semiquantitative application to planar ring clusters. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 73(??):063205, June 22, 2006. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.73.063205`.

Angilella:2006:GEA

[1160] G. G. N. Angilella, N. H. March, F. Siringo, and R. Pucci. Gap equation for anyon superfluids. *Physics and Chemistry of Liquids*, 44(4):343–351, August 2006. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Cabria:2006:EDS

[1161] I. Cabria, C. Amovilli, M. J. López, N. H. March, and J. A. Alonso. Electrostrictive deformations in small carbon clusters, hydrocarbon molecules, and carbon nanotubes. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 74(6):063201, December 6, 2006. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.74.063201`.

Holas:2006:GHD

[1162] A. Holas and N. H. March. Generalization to higher dimensions of one-dimensional differential equation for Slater sum of an inhomogeneous electron liquid for a given local potential. *Physics and Chemistry of Liquids*, 44(4):465–475, August 2006. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Howard:2006:DDM

[1163] I. A. Howard and N. H. March. Dirac density matrix and the Legendre transform of the kinetic energy generated by one-dimensional model potentials. *Journal of Physics A (Mathematical and General)*, 39(3):565–576, ???? 2006. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/39/i=3/a=009`.

Howard:2006:DPR

[1164] I. A. Howard and N. H. March. Density-potential relation via the single-particle kinetic energy density for one-dimensional two-level fermion systems with application to Be-like atomic ions in the $(1s)^2(2s)^2$ configuration. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 74 (5):054503, November 27, 2006. CODEN PLRAAN. ISSN 1050-2947

(print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.74.054503`.

Howard:2006:EFT

[1165] I. A. Howard, K. D. Sen, N. H. March, F. de Proft, and P. Geerlings. Exchange force for two-level systems such as LiH and H-3(-). *Chemical Physics Letters*, 430(1-3):156–159, October 19, 2006. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Howard:2006:QTR

[1166] I. A. Howard and N. H. March. Quantum tomograms related to momentum density. *Physics Letters A*, 352(1–2):1–2, March 20, 2006. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960105016853`.

Klein:2006:SPE

[1167] D. J. Klein and N. H. March. Spin-polarized electron (hole) liquids: are pi-electrons in metal-benzene sandwiches or injected carriers in C-doped BN nanotube candidates? *Physics and Chemistry of Liquids*, 44(4): 337–341, August 2006. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2006:ECP

[1168] N. H. March. Exchange-correlation potential in terms of the idempotent Dirac density matrix of DFT. *Chemical Physics Letters*, 423 (1-3):94–97, May 20, 2006. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0009261406003915`.

March:2006:EDL

[1169] N. H. March and Á. Nagy. Electron densities of the He-like sequence of atomic ions, and associated physical properties. *Physics Letters A*, 350 (3–4):236–240, February 6, 2006. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960105015847`.

March:2006:EFT

[1170] N. H. March, F. de Proft, and P. Geerlings. Exchange force for two-level systems such as LiH and H_3^-. *Chemical Physics Letters*, 430(1-3):156–159, October 19, 2006. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0009261406012590`.

March:2006:EFQ

[1171] Norman H. March and Richard H. Squire. Erratum to: Fingerprints of quantal Wigner solid-like correlations in D-dimensional assemblies [Phys. Lett. A **346** (2005) 355]. *Physics Letters A*, 355(6):494, 2006. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960106002763`.

March:2006:EKE

[1172] Norman H. March and Angel Rubio. Electronic kinetic energy decrease as two metallic parallel C nanotubes are brought together from infinity. *Physics Letters A*, 358(5–6):334–335, October 30, 2006. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

March:2006:FEI

[1173] N. H. March and Á. Nagy. Formally exact integral equation theory of the exchange-only potential in density functional theory: Refined closure approximation. *Physics Letters A*, 348(3-6):374–378, January 2, 2006. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960105012788`.

March:2006:IND

[1174] N. H. March, T. A. Niehaus, and S. Suhai. Influence of the noninteracting density response function on the exchange-only kernel in time-dependent density-functional theory. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 74(4):044502, October 6, 2006. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.74.044502`.

March:2006:KEE

[1175] N. H. March, Zs. Jánosfalvi, A. Nagy, and S. Suhai. Kinetic and exchange energy related non-locally in Hartree–Fock theory of an inhomogeneous electron liquid. *Physics and Chemistry of Liquids*, 44(5):493–499, October 2006. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2006:KEG

[1176] N. H. March, J. Negro, and L. M. Nieto. Kinetic energy and ground-state electron densities as fingerprints of wavefunction entanglement in two-electron spin-compensated atomic models. *Journal of Physics A (Mathematical and General)*, 39(14):3741–3751, ???? 2006. CODEN JPHAC5. ISSN 0305-4470 (print), 1361-6447 (electronic). URL `http://stacks.iop.org/0305-4470/39/i=14/a=016`.

March:2006:MRP

[1177] N. H. March. Melting and related precursor cooperative phenomena in chemically bonded assemblies. *Physics and Chemistry of Liquids*, 44(5): 477–492, October 2006. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2006:QSC

[1178] N. H. March. Quantum statistics of charged particles and fingerprints of Wigner crystallization in D dimensions. *International Journal of Quantum Chemistry*, 106(15):3032–3042, December 2006. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). 46th Annual Sanibel Symposium, St Simons Isl, GA, FEB 26-MAR 03, 2006.

March:2006:SCS

[1179] N. H. March and J. A. Alonso. Structural corrections to Stokes-Einstein relation for liquid metals near freezing. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 73(3 (part 1)):032201, March 1, 2006. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRevE.73.032201`.

March:2006:SPK

[1180] N. H. March. Single-particle kinetic energy in density-functional theory: Harmonic confinement in two and three dimensions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 73(??):044501, April 20, 2006. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.73.044501`.

Nagy:2006:HFL

[1181] I. Nagy, N. H. March, and P. M. Echenique. Homogeneous Fermi liquid with 'artificial' repulsive inverse square law interparticle potential energy. *Physics and Chemistry of Liquids*, 44(5):571–578, October 2006. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Squire:2006:CIS

[1182] Richard H. Squire and Norman H. March. Changing an insulating state with Wigner-like correlations into a superconductor with applications to doped fullerides. *International Journal of Quantum Chemistry*, 106(15): 3343–3363, December 2006. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). 46th Annual Sanibel Symposium, St Simons Isl, GA, FEB 26-MAR 03, 2006.

Akbari:2007:MDS

[1183] Ali Akbari, Norman H. March, and Angel Rubio. Momentum density and spatial form of correlated density matrix in model two-electron atoms with harmonic confinement. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 76(3):032510, September 27, 2007. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.76.032510`.

Amovilli:2007:IEB

[1184] C. Amovilli and N. H. March. Interaction energy between fullerene molecules when immersed in nondipolar solvents. *Physics and Chemistry of Liquids*, 45(1):1–6, February 2007. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:2007:MED

[1185] C. Amovilli, N. H. March, and P. Schmelcher. Modeling of electron density in linear configurations of h-3(2+) and h-4(3+) stabilized by an intense magnetic field along the chain axis. *Physics Letters A*, 362(5–6): 449–452, March 12, 2007. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Amovilli:2007:OZF

[1186] Claudio Amovilli and Norman H. March. Ornstein–Zernike function and Coulombic correlation in the homogeneous electron liquid. *Physical Review B: Condensed Matter and Materials Physics*, 76(19):195104, November 2, 2007. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.76.195104`.

Angilella:2007:SPE

[1187] G. G. N. Angilella, N. H. March, and R. Pucci. Spin-polarized electron liquid in CrO_2 under high pressure. *Physics and Chemistry of Liquids*, 45(1):113–116, February 2007. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Angilella:2007:TQC

[1188] G. G. N. Angilella, N. H. March, and R. Pucci. Is there a quantum critical point controlled by pressure in the superconducting borocarbides $R\mathrm{Ni}_2\mathrm{B}_2\mathrm{C}$ (R = Y, Ho, Er, Tm)? *Phase Transitions*, 80(8):851–854, August 2007. CODEN PHTRDP. ISSN 0141-1594.

Ayuela:2007:OGC

[1189] A. Ayuela, N. H. March, and D. J. Klein. Optimized geometry of the cluster Gd_2O_3 and proposed antiferromagnetic alignment of f-electron

magnetic moment. *Journal of Physical Chemistry A*, 111(40):10162–10165, October 11, 2007. CODEN JPCAFH. ISSN 1089-5639 (print), 1520-5215 (electronic). URL `http://pubs.acs.org/doi/abs/10.1021/jp0745790`.

Ayuela:2007:SMN

[1190] A. Ayuela, D. J. Klein, and N. H. March. Sublattice magnetizations in non-zero magnetic field in an antiferromagnetic infinite-range Ising model. *Physics Letters A*, 362(5–6):468–470, March 12, 2007. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Balaban:2007:ASG

[1191] Alexandru T. Balaban, Douglas J. Klein, and Norman H. March. Aqueous solutions of a "green" ionic liquid and of lithium chloride compared and contrasted. *Physics and Chemistry of Liquids*, 45(5):597–600, October 2007. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451. URL `http://www.tandfonline.com/doi/full/10.1080/00319100701374179`.

Capuzzi:2007:FOD

[1192] P. Capuzzi, I. A. Howard, N. H. March, and M. P. Tosi. First-order density matrices in one dimension for independent fermions and impenetrable bosons in harmonic traps. *Physics Letters A*, 361(3):261–264, January 29, 2007. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Cordero:2007:IPN

[1193] Nicolás A. Cordero, Norman H. March, and Julio A. Alonso. Ionization potentials of neutral atoms and positive ions in the limit of large atomic number. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 75(1):012505, January 9, 2007. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.75.012505`.

Cordero:2007:TPP

[1194] Nicolás A. Cordero, Norman H. March, and Julio A. Alonso. Two-parameter partially correlated ground-state electron density of some light spherical atoms from Hartree–Fock theory with nonintegral nuclear charge. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 75(5):052502, May 7, 2007. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.75.052502`.

Howard:2007:CAG

[1195] I. A. Howard and N. H. March. Correlated analytic ground-state densities for two-electron atomic ions from Be to Ne. *Physics Letters A*, 366(4-5):451–453, July 2, 2007. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960107002903`.

Howard:2007:ESM

[1196] I. A. Howard, C. Amovilli, N. Gidopoulos, and N. H. March. Exactly solvable model mimicking the H_2 molecule in the limit of large nuclear masses. *Journal of Mathematical Chemistry*, 42(3):603–615, October 2007. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-006-9136-3`.

Klein:2007:BDT

[1197] D. J. Klein and N. H. March. Is the brittle-ductile transition preceding melting related to 5-and 7-membered ring defects in graphite? *Physics and Chemistry of Liquids*, 45(6):609–613, ???? 2007. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2007:ACP

[1198] N. H. March. Aharonov–Casher phase shift and the change in velocity of a moving magnet traversing an electric field. *Physics Letters A*, 362 (5–6):337–339, March 12, 2007. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960106016197`.

March:2007:CDF

[1199] N. H. March and S. Suhai. Can density functional theory make use of experimentally determined ground-state electron densities via the Dirac density matrix for molecules of biological interest? *Physics Letters A*, 360(6):665–668, January 15, 2007. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S037596010601379X`.

March:2007:ECK

[1200] Norman H. March, Ali Akbari, and Angel Rubio. Exact correlated kinetic energy related to the electron density for two-electron model atoms with harmonic confinement. *Physics Letters A*, 370(5–6):509–511, October 29, 2007. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

March:2007:FOD

[1201] N. H. March and M. P. Tosi. First-order density matrices in one dimension for independent fermions and impenetrable bosons in harmonic traps. *Physics Letters A*, 361(3):261–264, January 29, 2007. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960106014666`.

March:2007:FPD

[1202] N. H. March and L. M. Nieto. Feynman propagator, density matrices and Green functions for the inhomogeneous electron liquid generated by a bare Coulomb potential in two dimensions. *Physics and Chemistry of Liquids*, 45(3):295–305, ???? 2007. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2007:IDDa

[1203] N. H. March. The idempotent Dirac density matrix as a functional of the diagonal ground-state electron density obtained from diffraction experiments. *International Journal of Quantum Chemistry*, 107(15):3266–3271, December 1, 2007. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). 47th Annual Sanibel Symposium, St Simons Isl, GA, FEB 22-27, 2007.

March:2007:IDDb

[1204] N. H. March. Idempotent Dirac density matrix for ten-electron central field inhomogeneous electron liquids in terms of electron- and kinetic energy-densities. *Physics Letters A*, 370(3–4):351–353, October 22, 2007. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960107008134`.

March:2007:MED

[1205] N. H. March and P. Schmelcher. Modeling of electron density in linear configurations of H_3^{2+} and H_4^{3+} stabilized by an intense magnetic field along the chain axis. *Physics Letters A*, 362(5–6):449–452, March 12, 2007. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960106016549`.

March:2007:PEE

[1206] N. H. March and C. Van Alsenoy. Proposal for extraction of the exchange correlation potential of DFT from X-ray scattering measurements on the 'almost spherical' inhomogeneous electron liquids in CH4 and NH4+.

Physics and Chemistry of Liquids, 45(4):409–417, August 2007. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2007:SMN

[1207] N. H. March. Sublattice magnetizations in non-zero magnetic field in an antiferromagnetic infinite-range Ising model. *Physics Letters A*, 362 (5–6):468–470, March 12, 2007. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960106009571`.

Matthai:2007:PDM

[1208] C. C. Matthai and N. H. March. On the pressure dependence of the melting temperature and the monovacancy formation energy in transition metals. *Philosophical Magazine Letters*, 87(7):475–482, ???? 2007. CODEN PMLEEG. ISSN 0950-0839 (print), 1362-3036 (electronic).

Pellegrino:2007:SCI

[1209] F. M. D. Pellegrino, G. G. N. Angilella, N. H. March, and R. Pucci. Statistical correlations in an ideal gas of particles obeying fractional exclusion statistics. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 76(6 (part 1)):061123, December 20, 2007. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL `http://link.aps.org/doi/10.1103/PhysRevE.76.061123`.

Squire:2007:ABB

[1210] Richard H. Squire and Norman H. March. Aspects of BCS to BEC "crossover" as illustrated by fulleride superconductivity. *International Journal of Quantum Chemistry*, 107(15):3013–3027, December 1, 2007. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). 47th Annual Sanibel Symposium, St Simons Isl, GA, FEB 22-27, 2007.

VanAlsenoy:2007:NLE

[1211] C. Van Alsenoy and N. H. March. Non-locality in the exchange energy density of the inhomogeneous electron liquids in (HO)-O-2, NH_3 and CH_4 treated by Hartree–Fock theory. *Physics and Chemistry of Liquids*, 45(1):15–24, February 2007. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:2008:AIE

[1212] C. Amovilli, I. A. Howard, and N. H. March. Analytic inhomogeneous electron liquid and its density for model spin-compensated two-electron

atomic ions with Coulomb confinement: an exact nonrelativistic Hamiltonian. *Physics and Chemistry of Liquids*, 46(3):238–241, ???? 2008. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:2008:EHA

[1213] C. Amovilli, N. H. March, I. A. Howard, and A. Nagy. Exact Hamiltonian for an analytic correlated ground-state wave function for He-like ions. *Physics Letters A*, 372(22):4053–4056, May 26, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Amovilli:2008:GHF

[1214] C. Amovilli, N. H. March, and J. D. Talman. Generalizing Hartree–Fock theory for nonrelativistic atomic ions to yield a ground-state electron density satisfying cusp and asymptotic conditions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 77(3):032503, March 7, 2008. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.77.032503`.

Angilella:2008:MCC

[1215] N. Angilella, N. H. March, and R. Pucci. Molecules in clusters: the case of planar LiBeBCNOF built from a triangular form LiOB and a linear four-center species FBeCN. *Physics Letters A*, 372(18):3253–3255, April 28, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960108001564`.

Angilella:2008:MCS

[1216] G. G. N. Angilella, N. H. March, and R. Pucci. Melting curve $T - m(p)$ of sodium under pressure p: transition from a Wigner-like nuclear BCC structure near 30 GPa to lower symmetry states with negative $dT(m)/dp$ at higher pressures. *Physics and Chemistry of Liquids*, 46(1): 86–89, February 2008. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Angilella:2008:PDE

[1217] G. G. N. Angilella, N. H. March, I. A. Howard, and R. Pucci. Pressure dependence of the energy gaps in diamond-type semiconductors, and their III–V analogues such as InSb. *Journal of Physics: Conference Series*, 121(3):032006, ???? 2008. CODEN JPCSDZ. ISSN 1742-6588 (print), 1742-6596 (electronic). URL `http://stacks.iop.org/1742-6596/121/i=3/a=032006`.

Angilella:2008:PML

[1218] G. G. N. Angilella and N. H. March. Polyatomic molecular liquids under extreme compression: facts, models, and a few predictions. *Physics and Chemistry of Liquids*, 46(5):491–494, ???? 2008. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Angilella:2008:PMX

[1219] G. G. N. Angilella, N. H. March, and R. Pucci. Proposed modelling of the X-ray intensities in high-pressure crystalline phases of methane and silane. *High Pressure Research*, 28(1):29–34, March 2008. CODEN HPRSEL. ISSN 0895-7959 (print), 1477-2299 (electronic).

Angilella:2008:RAV

[1220] G. G. N. Angilella, N. H. March, C. C. Matthai, and R. Pucci. The role of anharmonicity in a variety of phase transitions controlled by pressure, including melting, brittle-to-ductile transition, and the liquid-vapour critical point. *Journal of Physics: Conference Series*, 121(1):012001, ???? 2008. CODEN JPCSDZ. ISSN 1742-6588 (print), 1742-6596 (electronic). URL `http://stacks.iop.org/1742-6596/121/i=1/a=012001`.

Ayuela:2008:CTM

[1221] A. Ayuela and N. H. March. Curie temperature of metallic ferromagnets Gd and Ni as a function of number of layers compared and contrasted. *Phase Transitions*, 81(5):387–394, ???? 2008. CODEN PHTRDP. ISSN 0141-1594.

Ayuela:2008:SMR

[1222] A. Ayuela and N. H. March. Spontaneous magnetization related to internal energy in an assembly with long-range interaction: predicted universal features fingerprints in experimental data from Fe and Ni. *Physics Letters A*, 372(34):5617–5620, August 18, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Balaban:2008:MPO

[1223] Alexandru T. Balaban, Norman H. March, and Douglas J. Klein. Melting points and other properties of ionic liquids, with emphasis on the pressure dependence. *Physics and Chemistry of Liquids*, 46(6):682–686, December 2008. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451. URL `http://www.tandfonline.com/doi/full/10.1080/00319100802241665`.

Forte:2008:MCC

[1224] G. Forte, A. Grassi, G. M. Lombardo, G. G. N. Angilella, N. H. March, and R. Pucci. Molecules in clusters: The case of planar LiBeBCNOF built from a triangular form LiOB and a linear four-center species FBeCN. *Physics Letters A*, 372(18):3253–3255, April 28, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Grassi:2008:LCE

[1225] A. Grassi, G. M. Lombardo, G. G. N. Angilella, G. Forte, N. H. March, C. Van Alsenoy, and R. Pucci. Löwdin correlation energy density of the inhomogeneous electron liquid in some closed-shell molecules at equilibrium geometry. *Physics and Chemistry of Liquids*, 46(5):484–490, ???? 2008. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Holas:2008:CCF

[1226] A. Holas, M. Cinal, and N. H. March. Comment on "Critique of the foundations of time-dependent density-functional theory". *Physical Review A (Atomic, Molecular, and Optical Physics)*, 78(1):016501, July 15, 2008. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.78.016501`.

Howard:2008:EAS

[1227] I. A. Howard, N. H. March, and A. Nagy. Exact asymptotic solution of the Della Sala-Görling integral equation for the exchange-only potential for Be-like atomic ions at large Z. *Physics Letters A*, 372(18):3256–3258, April 28, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Howard:2008:MDX

[1228] I. A. Howard, N. H. March, and L. M. Nieto. Momentum distribution, X-ray scattering factor, and off-diagonal electron density generated by a bare Coulomb potential in the nonrelativistic limit of a large number of closed shells. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 77(3):032504, March 11, 2008. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.77.032504`.

Klein:2008:CED

[1229] D. J. Klein and N. H. March. Critical exponents in D dimensions for the Ising model, subsuming Zhang's proposals for $D = 3$. *Physics Letters A*, 372(30):5052–5053, July 21, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Knapp-Mohammady:2008:GGS

[1230] A. Knapp-Mohammady, N. H. March, and S. Suhai. Geometry and ground-state electronic structure of neutral ruthenium metal complexes of potential relevance to metal-based drugs for cancer control. *Physics Letters A*, 372(11):1881–1884, March 10, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

March:2008:AFL

[1231] N. H. March, Á. Nagy, and C. Amovilli. Asymptotic form at large r of a third-order linear homogeneous differential equation for the ground-state electron density of the He atom. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 77(3):034501, March 6, 2008. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.77.034501`.

March:2008:BFM

[1232] N. H. March. Boson and fermion many-body assemblies: fingerprints of excitations in the ground-state wave functions, with examples of superfluid $^{(4)}$He and the homogeneous correlated electron liquid. *Physics and Chemistry of Liquids*, 46(5):465–480, ???? 2008. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2008:CED

[1233] N. H. March. Critical exponents in D dimensions for the Ising model, subsuming Zhang's proposals for $D = 3$. *Physics Letters A*, 372 (30):5052–5053, July 21, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960108007330`.

March:2008:CPI

[1234] N. H. March and R. H. Squire. The chemical potential for the inhomogeneous electron liquid in terms of its kinetic and potential parts with special consideration of the surface potential step and BCS-BEC crossover. *Physics Letters A*, 372(10):1707–1711, March 3, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960107014570`.

March:2008:DLR

[1235] N. H. March. Departure from the law of rectilinear diameters for fluids Rb and Cs with delocalized electrons. *Physics Letters A*, 372 (19):3510–3511, May 5, 2008. CODEN PYLAAG. ISSN 0375-9601

(print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0375960108002193.

March:2008:DVT

[1236] N. H. March and Á. Nagy. Differential virial theorem in density-functional theory in terms of the Pauli potential for spherically symmetric electron densities: Illustrative example for the family of be-like atomic ions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 78(4): 044501, October 6, 2008. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL http://link.aps.org/doi/10.1103/PhysRevA.78.044501.

March:2008:EAS

[1237] N. H. March and Á. Nagy. Exact asymptotic solution of the Della Sala–Görling integral equation for the exchange-only potential for Be-like atomic ions at large Z. *Physics Letters A*, 372(18):3256–3258, April 28, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/S037596010800162X.

March:2008:EED

[1238] Norman H. March, Michaela Knapp-Mohammady, Christian Van Alsenoy, and Sándor Suhai. Exchange energy density and exchange potential via a Hartree–Fock plus MP2 study of the electron liquid in the ground-state conformer of glycine. *Physics and Chemistry of Liquids*, 46(3):242–254, June 2008. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451. URL http://www.tandfonline.com/doi/full/10.1080/00319100701713723.

March:2008:EHA

[1239] N. H. March, I. A. Howard, and Á. Nagy. Exact Hamiltonian for an analytic correlated ground-state wave function for He-like ions. *Physics Letters A*, 372(22):4053–4056, May 26, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0375960108004258.

March:2008:EIC

[1240] N. H. March and Á. Nagy. Exact integral constraint requiring only the ground-state electron density as input on the exchange-correlation force $\partial Vxc(r)/\partial r$ for spherical atoms. *Journal of Chemical Physics*, 129(19): 194114, November 21, 2008. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic).

March:2008:GGS

[1241] N. H. March and S. Suhai. Geometry and ground-state electronic structure of neutral ruthenium metal complexes of potential relevance to metal-based drugs for cancer control. *Physics Letters A*, 372(11): 1881–1884, March 10, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960107015411`.

March:2008:NMB

[1242] N. H. March and J. A. Alonso. Non-monotonic behaviour with concentration of the surface tension of certain binary liquid alloys. *Physics and Chemistry of Liquids*, 46(5):522–526, ???? 2008. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2008:NXR

[1243] N. H. March, I. Nagy, and P. M. Echenique. Neutron and X-ray diffraction from liquid Rb. *Physics and Chemistry of Liquids*, 46(5):481–483, ???? 2008. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2008:PDC

[1244] N. H. March, A. Cabo, F. Claro, and G. G. N. Angilella. Proposed definitions of the correlation energy density from a Hartree–Fock starting point: The two-electron Moshinsky model atom as an exactly solvable model. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 77 (4):042504, April 4, 2008. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.77.042504`.

March:2008:PPR

[1245] N. H. March. The Pauli potential in relation to the differential virial theorem with application to experiments on ultracold atomic gases of fermions. *Physics Letters A*, 372(44):6667–6669, October 27, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960108013145`.

March:2008:SMR

[1246] N. H. March. Spontaneous magnetization related to internal energy in an assembly with long-range interaction: Predicted universal features fingerprints in experimental data from Fe and Ni. *Physics Letters A*, 372 (34):5617–5620, August 18, 2008. CODEN PYLAAG. ISSN 0375-9601

(print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960108010049`.

Matthai:2008:VSB

[1247] C. C. Matthai and N. H. March. Velocity of sound and the BCS interaction parameter in five body-centred-cubic crystals. *Superconductor Science and Technology*, 21(1):015012, January 2008. CODEN SUSTEF. ISSN 0953-2048 (print), 1361-6668 (electronic). URL `http://stacks.iop.org/0953-2048/21/i=1/a=015012`.

Morawetz:2008:CPI

[1248] K. Morawetz, N. H. March, and R. H. Squire. The chemical potential for the inhomogeneous electron liquid in terms of its kinetic and potential parts with special consideration of the surface potential step and BCS–BEC crossover. *Physics Letters A*, 372(10):1707–1711, March 3, 2008. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Niehaus:2008:BRR

[1249] Thomas A. Niehaus and Norman H. March. Brief review related to the foundations of time-dependent density functional theory. *arxiv.org*, July 10, 2008. URL `http://arxiv.org/abs/0807.1643`. Published in [1414].

Niehaus:2008:DGS

[1250] T. A. Niehaus, S. Suhai, and N. H. March. Dynamical generalization of a solvable family of two-electron model atoms with general interparticle repulsion. *Journal of Physics A (Mathematical and General)*, 41 (8):085304:1–085304:8, February 29, 2008. CODEN JPHAC5. ISSN 1751-8113 (print), 1751-8121 (electronic). URL `http://stacks.iop.org/1751-8121/41/i=8/a=085304`.

Pellegrino:2008:SCA

[1251] F. M. D. Pellegrino, G. G. N. Angilella, N. H. March, and R. Pucci. Statistical correlations of an anyon liquid at low temperatures. *Physics and Chemistry of Liquids*, 46(3):342–348, ???? 2008. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Squire:2008:PPI

[1252] Richard H. Squire and Norman H. March. Preformed pair induced quantum phase transition in fulleride superconductivity. *International Journal of Quantum Chemistry*, 108(15):2819–2836, December 2008. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

VanAlsenoy:2008:AEX

[1253] C. Van Alsenoy and N. H. March. Analysis of experimental X-ray scattering from almost spherical molecules: Estimates of the influence of the force $-\partial V_{XC}/\partial r$, where V_{XC} is the exchange-correlation potential of DFT for CH_4 and NH_4^+. *Chemical Physics Letters*, 451(4–6):309–315, January 21, 2008. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0009261407016569`.

VanAlsenoy:2008:XRS

[1254] C. Van Alsenoy and N. H. March. X-ray scattering factor of the inhomogeneous electron liquid in the ground state of the Ne atom: contribution of the exchange-correlation potential. *Physics and Chemistry of Liquids*, 46(6):676–681, ???? 2008. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Akbari:2009:DMT

[1255] Ali Akbari, Norman H. March, and Angel Rubio. Density-matrix theory for the ground state of spin-compensated harmonically confined two-electron model atoms with general interparticle repulsion. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 80(3):032509, September 11, 2009. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.80.032509`.

Amovilli:2009:EIR

[1256] C. Amovilli, N. H. March, and A. Nagy. Exact integral relation between the triplet correlation function in the ground state of the completely polarised homogeneous electron fluid and the pair function: comparison with the classical liquid argon result. *Physics and Chemistry of Liquids*, 47(1):5–8, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:2009:IED

[1257] Claudio Amovilli and Norman H. March. Inequivalent electron densities derived from an approximate correlated ground-state wave function using the Hiller–Sucher–Feinberg identity: Comparisons with quantum Monte Carlo densities for He and Ne atoms. *International Journal of Quantum Chemistry*, 109(5):1024–1030, April 2009. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Amovilli:2009:IEL

[1258] C. Amovilli and N. H. March. Inhomogeneous electron liquid due to encapsulated atoms in C-60 compounds: dynamic polarisability induced in the outer C-60 shell. *Physics and Chemistry of Liquids*, 47(5):582–584, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:2009:UIM

[1259] C. Amovilli, N. H. March, F. Bogár, and T. Gál. Use of ab initio methods to classify four existing energy density functionals according to their possible variational validity. *Physics Letters A*, 373(35):3158–3160, August 24, 2009. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Angilella:2009:PLB

[1260] G. G. N. Angilella, N. H. March, F. M. D. Pellegrino, and R. Pucci. Proposed lower bound for the shear viscosity to entropy density ratio in some dense liquids. *Physics Letters A*, 373(10):992–998, March 2, 2009. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960109000796`.

Balaban:2009:MSW

[1261] Alexandru T. Balaban, Douglas J. Klein, and Norman H. March. Modelling the structure of the water molecule under both local environmental constraints and explosive conditions. *Physics and Chemistry of Liquids*, 47(4):471–473, August 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451. URL `http://www.tandfonline.com/doi/full/10.1080/00319100902962632`.

Balaban:2009:RST

[1262] Alexandru T. Balaban, Norman H. March, and Douglas J. Klein. Relation of surface tension to compressibility at room temperature and wetting index also involving viscosity for 22 organic liquids. *Physics and Chemistry of Liquids*, 47(1):1–4, February 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451. URL `http://www.tandfonline.com/doi/full/10.1080/00319100802241673`.

Bogar:2009:UDV

[1263] Ferenc Bogár, Ferenc Bartha, and Norman H. March. Use of the differential virial theorem to estimate the spatial variation of the exchange-correlation force $-\partial V_{XC}(r)/\partial r$ in the ground states of the spherical

atoms He and Be. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 79(1):014501, January 6, 2009. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.79.014501`.

Forte:2009:QCM

[1264] G. Forte, A. Grassi, G. M. Lombardo, G. G. N. Angilella, N. H. March, and R. Pucci. Quantum-chemical modelling of the structural change of water due to its interaction with nanographene. *Physics and Chemistry of Liquids*, 47(6):599–606, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Gal:2009:DFG

[1265] T. Gál and N. H. March. Density functional for the ground-state energy of artificial two-electron atoms with harmonic confinement. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 42(2):025001, January 28, 2009. CODEN JPAPEH. ISSN 0953-4075 (print), 1361-6455 (electronic). URL `http://stacks.iop.org/0953-4075/42/i=2/a=025001`.

Glasser:2009:EED

[1266] M. L. Glasser, N. H. March, and L. M. Nieto. Exchange energy density in density-functional theory via the Dirac density matrix for a nonrelativistic 10-electron atomic ion compared with Becke's proposal for a gradient-corrected local-density-approximation result. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 79(4):042506, April 13, 2009. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.79.042506`.

Klein:2009:FND

[1267] D. J. Klein, N. H. March, and J. A. Alonso. Fractal network dimension determining the relation between the strength of bulk metallic glasses and the glass transition temperature. *Applied Physics Letters*, 95(2):021909:1–021909:3, July 13, 2009. CODEN APPLAB. ISSN 0003-6951 (print), 1077-3118 (electronic), 1520-8842. URL `http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5167302; http://link.aip.org/link/?APL/95/021909/1`.

Lamoen:2009:ODS

[1268] D. Lamoen and N. H. March. Orientational disorder in some molecular solids in relation to the boson peak in glasses. *Physics Letters A*, 373 (7):799–800, February 16, 2009. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

March:2009:BEC

[1269] N. H. March and L. M. Nieto. Bloch equation for the canonical density matrix in terms of its diagonal element: The Slater sum. *Physics Letters A*, 373(18–19):1691–1692, April 20, 2009. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960109003259`.

March:2009:BTS

[1270] N. H. March and G. G. N. Angilella. Basic theory and some applications concerning the ratio of shear viscosity to entropy density in dense fluids. *Physics and Chemistry of Liquids*, 47(3):344–348, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2009:CSP

[1271] N. H. March. Critically shielded potential in a three-dimensional electron gas: the induced charge density at the origin. *Physics Letters A*, 373 (35):3182–3183, August 24, 2009. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960109007762`.

March:2009:EHL

[1272] N. H. March and C. C. Matthai. Electron/hole liquids in high T_c superconductors and easy paths for supercarriers through the vibrational lattice. *Physics and Chemistry of Liquids*, 47(4):467–470, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2009:ESO

[1273] N. H. March and G. G. N. Angilella. Electronic states in ordered and disordered quantum networks: with applications to graphene and to boron nanotubes. *Journal of Mathematical Chemistry*, 46(2):532–549, August 2009. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-008-9477-1`.

March:2009:HPB

[1274] N. H. March, D. J. Klein, G. G. N. Angilella, R. Pucci, and J. A. Alonso. High-pressure behaviour of crystalline silane compared with that for SnH_4. *Phase Transitions*, 82(3):247–250, ???? 2009. CODEN PHTRDP. ISSN 0141-1594.

March:2009:IEL

[1275] N. H. March. Inhomogeneous electron liquids generated by Coulomb confinement of electrons with and without interparticle repulsions. *Physics*

and Chemistry of Liquids, 47(1):45–60, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2009:IFQ

[1276] N. H. March and C. Van Alsenoy. The importance of fully quantitative non-local treatments of exchange energy in density functional theory of atoms, molecules and clusters, characterised by strongly inhomogeneous electron liquids. *Physics and Chemistry of Liquids*, 47(2):225–228, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2009:ITP

[1277] N. H. March and G. G. N. Angilella. The importance of the three-particle correlation function in the theory of monatomic classical liquids like argon. *Physics and Chemistry of Liquids*, 47(3):340–343, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2009:LCP

[1278] N. H. March and G. G. N. Angilella. Low-coordination phases of both crystalline and fluid states of alkali metals under extreme conditions of high and low densities, respectively. *Physics and Chemistry of Liquids*, 47 (6):698–700, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2009:LVC

[1279] N. H. March and Z. D. Zhang. Liquid-vapour critical point behaviour: especially crossover from two to three dimensions via a magnetic analogy. *Physics and Chemistry of Liquids*, 47(6):693–697, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2009:NTS

[1280] N. H. March and G. G. N. Angilella. The nature of the transition from supercooled liquid metal Si to the disordered solid phase, with possible implications for B. *Physics and Chemistry of Liquids*, 47(1):111–112, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2009:ODS

[1281] N. H. March. Orientational disorder in some molecular solids in relation to the boson peak in glasses. *Physics Letters A*, 373(7):799–800, February 16, 2009. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960109000218`.

March:2009:PGF

[1282] N. H. March and J. A. Alonso. Properties of glass-forming metallic liquids: when is there a hard-sphere-like behaviour? *Physics and Chemistry of Liquids*, 47(6):585–598, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2009:PME

[1283] N. H. March and Z. D. Zhang. Proposed magnetic equation of state for the three-dimensional Ising model near criticality: Is the insulating ferromagnet $CrBr_3$ a candidate? *Physics Letters A*, 373(23-24):2075–2076, May 25, 2009. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960109004587`.

March:2009:RBM

[1284] N. H. March. The relation between magnetization and internal energy for ferromagnets Fe, Ni, and electron-doped In_2O_3 : Cr, antiferromagnetically ordered $ZnCu_3$ $(OH)_6Cl_2$, and the layered material κ-(BEDT-TTF)$_2$Cu[N(CN)$_2$]Cl. *International Journal of Quantum Chemistry*, 109(15):3819–3826, December 2009. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). 49th Annual Sanibel Symposium, St Simons Isl, GA, FEB 26-MAR 03, 2009.

March:2009:TLP

[1285] N. H. March and J. A. Alonso. Transcending Lindemann's predictions for the melting temperatures of metals and for the long-wavelength limit of their liquid structure factors. *Philosophical Magazine Letters*, 89(4):300–305, ???? 2009. CODEN PMLEEG. ISSN 0950-0839 (print), 1362-3036 (electronic).

Matthai:2009:SML

[1286] C. C. Matthai, N. H. March, and D. Lamoen. Supercooled molecular liquids and the glassy phases of chemically bonded N, P, As, Si and Ge. *Physics and Chemistry of Liquids*, 47(6):607–613, ???? 2009. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Nagy:2009:CSP

[1287] I. Nagy, M. L. Glasser, and N. H. March. Critically shielded potential in a three-dimensional electron gas: The induced charge density at the origin. *Physics Letters A*, 373(35):3182–3183, August 24, 2009. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Squire:2009:HCP

[1288] Richard H. Squire, Norman H. March, and Michael L. Booth. HTSC cuprate phase diagram using a modified Boson–Fermion–Gossamer model describing competing orders, a quantum critical point and possible resonance complex. *International Journal of Quantum Chemistry*, 109(15):3516–3532, December 2009. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). 49th Annual Sanibel Symposium, St Simons Isl, GA, FEB 26-MAR 03, 2009.

Amovilli:2010:DEE

[1289] C. Amovilli, I. A. Howard, D. J. Klein, and N. H. March. Dependence of the π-electron eigenvalue sum on the number of atoms in almost spherical C cages. In March and Angilella [1545], pages 845–849. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0108`.

Amovilli:2010:ECP

[1290] C. Amovilli and N. H. March. Exchange-correlation potential in terms of the idempotent Dirac density matrix of DFT. In March and Angilella [1545], pages 706–709. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0094`.

Amovilli:2010:MMA

[1291] C. Amovilli and N. H. March. The March model applied to boron cages. In March and Angilella [1545], pages 839–844. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0107`.

Amovilli:2010:SSK

[1292] C. Amovilli and N. H. March. Slater sum and kinetic energy tensor in some simple inhomogeneous electron liquids. In March and Angilella [1545], pages 830–834. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0105`.

Amovilli:2010:TDEa

[1293] Claudio Amovilli and Norman H. March. Two-dimensional electrostatic analog of the March model of C_{60} with a semiquantitative application to planar ring clusters. In March and Angilella [1545], pages 546–551. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0112`.

Amovilli:2010:TDEb

[1294] Claudio Amovilli and Norman H. March. Two-dimensional electrostatic analog of the March model of C_{60} with a semiquantitative application to planar ring clusters. In March and Angilella [1545], pages 874–879. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0112`.

Angilella:2010:IQM

[1295] N. Angilella, N. H. March, and R. Pucci. Ab initio quantum mechanics of a cluster of SiH_4 and two H_2 molecules, together with its dimer and trimer. *Physics Letters A*, 374(4):580–583, January 11, 2010. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960109014728`.

Angilella:2010:LDO

[1296] G. G. N. Angilella, N. H. March, and R. Pucci. Low density observations of Rb and Cs chains along the liquid-vapour coexistence curves to the critical point in relation to quantum-chemical predictions on the metal-insulator transitions in Li and Na rings. In March and Angilella [1545], pages 475–478. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0058`.

Ascough:2010:SIP

[1297] J. A. Ascough and N. H. March. Structure inversion: Pair potentials with common characteristics from three theories at low density on liquid-vapour coexistence curve of Cs. In March and Angilella [1545], pages 285–289. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0037`.

Ayuela:2010:MMT

[1298] A. Ayuela and N. H. March. The magnetic moments and their long-range ordering for Fe atoms in a wide variety of metallic environments. *International Journal of Quantum Chemistry*, 110(15):2725–2733, December 2010. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Beattie:2010:EEF

[1299] A. M. Beattie, J. C. Stoddart, and N. H. March. Exchange energy as functional of electronic density from Hartree–Fock theory of inhomogeneous electron gas. In March and Angilella [1545], pages 801–820. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454

.M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0101.

Bhatia:2010:PLD

[1300] A. B. Bhatia and N. H. March. Properties of liquid direct correlation function at melting temperature related to vacancy formation energy in condensed phases of rare gases. In March and Angilella [1545], pages 270–272. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0033.

Bhatia:2010:RBP

[1301] A. B. Bhatia and N. H. March. Relation between principal peak height, position and width of structure factor in dense monatomic liquids. In March and Angilella [1545], pages 273–276. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0034.

Blazej:2010:LRP

[1302] M. Blazej and N. H. March. Long-range polarization interaction in simple liquid metals. In March and Angilella [1545], pages 335–339. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0043.

Bogar:2010:RBS

[1303] Ferenc Bogar, Ferenc Bartha, and N. H. March. Relation between single-particle kinetic energy and exchange energy in DFT for the inhomogeneous electron liquid in the Be atom. *Physics and Chemistry of Liquids*, 48(2):272–278, ???? 2010. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Brah:2010:ESM

[1304] A. S. Brah, L. Virdhee, and N. H. March. Electron scattering by molten aluminium. In March and Angilella [1545], pages 425–429. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0052.

Capuzzi:2010:WBM

[1305] P. Capuzzi, N. H. March, and M. P. Tosi. Wigner bosonic molecules with repulsive interactions and harmonic confinement. In March and Angilella [1545], pages 196–200. ISBN 981-4271-77-2, 981-4271-78-0 (e-book).

LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0024.

Care:2010:EC

[1306] C. M. Care and N. H. March. Electron crystallization. In March and Angilella [1545], pages 37–52. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0006.

Care:2010:ECW

[1307] C. M. Care and N. H. March. Electrical conduction in the Wigner lattice in n type InSb in a magnetic field. In March and Angilella [1545], pages 32–36. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0005.

Chapman:2010:MSE

[1308] R. G. Chapman and N. H. March. Magnetic susceptibility of expanded fluid alkali metals. In March and Angilella [1545], pages 282–284. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0036.

Claro:2010:PDT

[1309] Francisco Claro, Alejandro Cabo, and Norman H. March. On the phase diagram of a two-dimensional electron gas near integer fillings and fractions such as 1/5 and 1/7. In March and Angilella [1545], pages 193–195. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0023.

Corless:2010:ETI

[1310] G. K. Corless and N. H. March. Electron theory of interaction between point defects in metals. In March and Angilella [1545], pages 563–574. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0071.

Cusack:2010:EEP

[1311] S. Cusack, N. H. March, M. Parrinello, and M. P. Tosi. Electron-electron pair correlation function in solid and molten nearly-free electron metals. In March and Angilella [1545], pages 408–424. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0051.

Dawson:2010:DMD

[1312] K. A. Dawson and N. H. March. The density matrix, density, and Fermi hole in Hartree–Fock theory. In March and Angilella [1545], pages 823–827. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0103`.

Durkan:2010:LEI

[1313] J. Durkan, R. J. Elliott, and N. H. March. Localization of electrons in impure semiconductors by a magnetic field. In March and Angilella [1545], pages 28–31. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0004`.

Ebbsjo:2010:SFS

[1314] I. Ebbsjö, G. G. Robinson, and N. H. March. Structure and forces in simple liquid metals. In March and Angilella [1545], pages 261–269. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0032`.

Egelstaff:2010:ECF

[1315] P. A. Egelstaff, N. H. March, and N. C. Mcgill. Electron correlation functions in liquids from scattering data. In March and Angilella [1545], pages 399–407. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0050`.

Enderby:2010:IFS

[1316] J. E. Enderby and N. H. March. Interatomic forces and the structure of liquids. In March and Angilella [1545], pages 225–249. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0030`.

Forte:2010:IQM

[1317] G. Forte, G. G. N. Angilella, N. H. March, and R. Pucci. *Ab initio* quantum mechanics of a cluster of SiH_4 and two H_2 molecules, together with its dimer and trimer. *Physics Letters A*, 374(4):580–583, January 11, 2010. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Forte:2010:MCC

[1318] G. Forte, A. Grassi, G. M. Lombardo, G. G. N. Angilella, N. H. March, and R. Pucci. Molecules in clusters: The case of planar LiBeBCNOF built from a triangular form LiOB and a linear four-center species FBeCN. In March and Angilella [1545], pages 880–882. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0113`.

Freeman:2010:NCB

[1319] G. R. Freeman and N. H. March. Nature of chemical bonding in highly expanded heavy alkalis: Especially Cs and rb. In March and Angilella [1545], pages 347–348. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0045`.

Gaskell:2010:EMD

[1320] T. Gaskell and N. H. March. Electronic momentum distribution in liquid metals and long-range oscillatory interactions between ions. In March and Angilella [1545], pages 217–218. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0027`.

Glasser:2010:CFD

[1321] M. L. Glasser, N. H. March, and L. M. Nieto. Correlated fermionic densities for many harmonically trapped particles interacting with repulsive forces. *Physics Letters A*, 374(24):2480–2482, May 17, 2010. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Glasser:2010:EET

[1322] M. L. Glasser, N. H. March, and L. M. Nieto. Exchange energy for two closed shells generated by a bare Coulomb potential energy $-Ze^2/r$ in the limit of large Z, in two dimensions. *Journal of Mathematical Chemistry*, 47(4):1313–1322, May 2010. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-009-9656-8`.

Golden:2010:TPC

[1323] K. I. Golden, N. H. March, and A. K. Ray. Three-particle correlation function and structural theories of dense metallic liquids. In March and Angilella [1545], pages 325–334. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0042`.

Herman:2010:CMM

[1324] F. Herman and N. H. March. Cooperative magnetism in metallic jellium and in the insulating Wigner electron crystal. In March and Angilella [1545], pages 60–63. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0009`.

Holas:2010:CSE

[1325] A. Holas and N. H. March. Correction to Slater exchange potential to yield exact Kohn–Sham potential generating the Hartree–Fock density. In March and Angilella [1545], pages 835–838. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0106`.

Holas:2010:DVT

[1326] A. Holas, N. H. March, and Angel Rubio. Differential virial theorem in relation to a sum rule for the exchange-correlation force in density-functional theory. In March and Angilella [1545], pages 702–705. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0093`.

Holas:2010:EEC

[1327] A. Holas and N. H. March. Exact exchange-correlation potential and approximate exchange potential in terms of density matrices. In March and Angilella [1545], pages 604–612. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0078`.

Holas:2010:FDE

[1328] A. Holas and N. H. March. Field dependence of the energy of a molecule in a magnetic field. In March and Angilella [1545], pages 628–641. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0081`.

Holas:2010:PLC

[1329] A. Holas and N. H. March. Potential-locality constraint in determining an idempotent density matrix from diffraction experiment. In March and Angilella [1545], pages 618–627. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0080`.

Holas:2010:RFS

[1330] A. Holas and N. H. March. Remnants of the Fermi surface in the Wigner electron crystal phase of a strongly interacting one-dimensional system. In March and Angilella [1545], pages 117–119. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0016`.

Howard:2010:CEC

[1331] I. A. Howard and N. H. March. Can the exchange-correlation potential of density functional theory be expressed solely in terms of HOMO and LUMO properties? In March and Angilella [1545], pages 699–701. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0092`.

Howard:2010:CSE

[1332] I. A. Howard and N. H. March. Corrections to Slater exchange potential in terms of Dirac idempotent density matrix: With an approximate application to Be-like positive atomic ions for large atomic number. In March and Angilella [1545], pages 681–686. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0087`.

Howard:2010:IDMa

[1333] I. A. Howard, N. H. March, and P. W. Ayers. Idempotent density matrix derived from a local potential $V(\mathbf{r})$ in terms of HOMO and LUMO properties. In March and Angilella [1545], pages 687–688. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0088`.

Howard:2010:IDMb

[1334] I. A. Howard, N. H. March, and P. W. Ayers. Idempotent density matrix derived from a local potential $V(\mathbf{r})$ in terms of HOMO and LUMO properties. In March and Angilella [1545], pages 697–698. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0091`.

Howard:2010:IET

[1335] I. A. Howard and N. H. March. Integral equation theory of the exchange potential, HOMO-LUMO properties, and sum rules for the exchange-correlation force. In March and Angilella [1545], pages 710–719. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454

.M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0095.

Howard:2010:NEE

[1336] I. A. Howard, N. H. March, P. Senet, and V. E. Van Doren. Nonrelativistic exchange-energy density and exchange potential in the lowest order of the $1/Z$ expansion for ten-electron atomic ions. In March and Angilella [1545], pages 642–649. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0082.

Howard:2010:NVO

[1337] I. A. Howard, N. H. March, and J. D. Talman. Nonrelativistic variationally optimized exchange potentials for Ne-like atomic ions having large atomic number. In March and Angilella [1545], pages 655–658. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0084.

Howard:2010:RWK

[1338] I. A. Howard and N. H. March. The role of the von Weizsäcker kinetic energy gradient term in independent harmonically confined fermions for arbitrary two-dimensional closed-shell occupancy. *Journal of Physics A (Mathematical and General)*, 43(19):195301:1–195301:5, May 14, 2010. CODEN JPHAC5. ISSN 1751-8113 (print), 1751-8121 (electronic). URL http://stacks.iop.org/1751-8121/43/i=19/a=195301.

Johnson:2010:DSS

[1339] M. W. Johnson, N. H. March, F. Perrot, and A. K. Ray. A diffraction study of the structure of liquid potassium near freezing and density functional theory of pair potentials. In March and Angilella [1545], pages 430–442. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0053.

Johnson:2010:LRO

[1340] M. D. Johnson and N. H. March. Long-range oscillatory interaction between ions in liquid metals. In March and Angilella [1545], pages 219–220. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0028.

Jones:2010:LDX

[1341] W. Jones and N. H. March. Lattice dynamics, X-ray scattering and one-body potential theory. In March and Angilella [1545], pages 756–763. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0099`.

Knapp-Mohammady:2010:QCS

[1342] Michaela Knapp-Mohammady and Norman H. March. Quantum-chemical study of the potential anti-cancer drug Ru-NAMI-A in complex with estrogen and the simulated VA and VCD spectra of estrogen, the Ru-NAMI-A drug, and possible/proposed estrogen-Ru-NAMI-A complexes. *Theoretical Chemistry Accounts*, 125(3-6):293–303, March 2010. CODEN TCACFW. ISSN 1432-881x (print), 1432-2234 (electronic).

Lawes:2010:ELD

[1343] G. P. Lawes and N. H. March. Exact local density method for linear harmonic oscillator. In March and Angilella [1545], pages 529–531. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0064`.

Lea:2010:ELS

[1344] M. J. Lea and N. H. March. The electron liquid-solid phase transition in two dimensions in a magnetic field. In March and Angilella [1545], pages 77–87. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0011`.

Lea:2010:MWE

[1345] M. J. Lea, N. H. March, and W. Sung. Melting of Wigner electron crystals: phenomenology and anyon magnetism. In March and Angilella [1545], pages 120–129. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0017`.

Lea:2010:QMW

[1346] M. J. Lea and N. H. March. Quantum-mechanical Wigner electron crystallization with and without magnetic fields. In March and Angilella [1545], pages 64–76. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0010`.

Lea:2010:SMP

[1347] M. J. Lea and N. H. March. The shear modulus and the phase diagram for two-dimensional Wigner electron crystals. In March and Angilella [1545], pages 88–98. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0012`.

Lea:2010:TMT

[1348] M. J. Lea, N. H. March, and W. Sung. Thermodynamics of melting of a two-dimensional Wigner electron crystal. In March and Angilella [1545], pages 99–104. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0013`.

Lehmann:2010:DES

[1349] H. Lehmann and N. H. March. Differential equation for Slater sum in an inhomogeneous electron liquid. In March and Angilella [1545], pages 591–593. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0076`.

Levy:2010:ACM

[1350] Mel Levy, Norman H. March, and Nicholas C. Handy. On the adiabatic connection method, and scaling of electron-electron interactions in the Thomas–Fermi limit. In March and Angilella [1545], pages 542–545. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0067`.

Levy:2010:LIF

[1351] Mel Levy and Norman H. March. Line-integral formulas for exchange and correlation potentials separately. In March and Angilella [1545], pages 613–617. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0079`.

Leys:2010:EEC

[1352] F. E. Leys and N. H. March. Electron-electron correlations in liquid s–p metals. In March and Angilella [1545], pages 469–474. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0057`.

Leys:2010:TCI

[1353] F. E. Leys, N. H. March, and D. Lamoen. Thermodynamic consistency and integral equations for the liquid structure. In March and Angilella [1545], pages 465–468. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0056`.

March:2010:AFF

[1354] N. H. March. Asymptotic formula far from nucleus for exchange energy density in Hartree–Fock theory of closed-shell atoms. In March and Angilella [1545], pages 828–829. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0104`.

March:2010:AQC

[1355] N. H. March and Clarence C. Matthai. The application of quantum chemistry and condensed matter theory in studying amino-acids, protein folding and anticancer drug technology. *Theoretical Chemistry Accounts*, 125(3–6):193–201, March 2010. CODEN TCACFW. ISSN 1432-881X (print), 1432-2234 (electronic). URL `http://link.springer.com/article/10.1007/s00214-009-0558-4`.

March:2010:ASD

[1356] N. H. March and W. H. Young. Approximate solutions of the density matrix equation for a local average field. In March and Angilella [1545], pages 552–555. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0069`.

March:2010:CCM

[1357] N. H. March and G. G. N. Angilella. Coexistence curves in monatomic fluids: the contrast between insulating argon and metallic assemblies. *Physics and Chemistry of Liquids*, 48(5):561–563, ???? 2010. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2010:CFD

[1358] N. H. March and L. M. Nieto. Correlated fermionic densities for many harmonically trapped particles interacting with repulsive forces. *Physics Letters A*, 374(24):2480–2482, May 17, 2010. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960110002215`.

March:2010:CHL

[1359] N. H. March, B. V. Paranjape, and F. Siringo. Can the hole liquid undergo Wigner crystallization in high-T_c $La_{2-x}Sr_xCuO_4$ at low density? In March and Angilella [1545], pages 105–109. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0014`.

March:2010:CPP

[1360] N. H. March. Concept of the Pauli potential in density functional theory. *Journal of Molecular Structure. Theochem*, 943(1-3):77–82, March 15, 2010. CODEN THEODJ. ISSN 0166-1280 (print), 1872-7999 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0166128009007258`.

March:2010:CPT

[1361] Norman H. March and Robert G. Parr. Chemical potential, Teller's theorem, and the scaling of atomic and molecular energies. In March and Angilella [1545], pages 532–535. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0065`.

March:2010:DED

[1362] N. H. March, T. Gál, and I. A. Howard. Differential equation for the Dirac single-particle first-order density matrix in terms of the ground-state electron density. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 81(6):064503, June 22, 2010. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.81.064503`.

March:2010:DEG

[1363] N. H. March. Differential equation for the ground-state density in finite and extended inhomogeneous electron gases. In March and Angilella [1545], pages 583–585. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0073`.

March:2010:DTD

[1364] N. H. March and M. P. Tosi. Diffraction and transport in dense plasmas: Especially liquid metals. In March and Angilella [1545], pages 349–359. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0046`.

March:2010:ECC

[1365] N. H. March. Electron correlation, chemical bonding and the metal-insulator transition in expanded fluid alkalis. In March and Angilella [1545], pages 277–281. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0035`.

March:2010:ECF

[1366] N. H. March. Electronic correlation functions in liquid metals. In March and Angilella [1545], pages 443–456. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0054`.

March:2010:EIF

[1367] N. H. March, P. Geerlings, and K. D. Sen. Electrostatic interpretation of the force $-\partial V_{xc}/\partial r$ connected with the exchange-correlation potential: direct relation to single-particle kinetic energy density in Be-atom. In March and Angilella [1545], pages 689–692. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0089`.

March:2010:EPF

[1368] N. H. March and I. A. Howard. Exchange potential via functional differentiation of the Dirac idempotent density matrix. In March and Angilella [1545], pages 693–696. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0090`.

March:2010:EWF

[1369] N. H. March and A. M. Murray. Electronic wave functions round a vacancy in a metal. In March and Angilella [1545], pages 725–740. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0097`.

March:2010:FEI

[1370] N. H. March and Á. Nagy. Formally exact integral equation theory of the exchange-only potential in density functional theory: Refined closure approximation. In March and Angilella [1545], pages 720–724. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0096`.

March:2010:FM

[1371] N. H. March and G. G. N. Angilella. Front matter. In March and Angilella [1545], pages i–xxi. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_fmatter`.

March:2010:FQW

[1372] Norman H. March and Richard H. Squire. Fingerprints of quantal Wigner solid-like correlations in D-dimensional assemblies. In March and Angilella [1545], pages 189–192. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0022`.

March:2010:FWR

[1373] N. H. March. Foundations of Walsh's rules for molecular shape. In March and Angilella [1545], pages 821–822. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0102`.

March:2010:GSG

[1374] N. H. March. Ground-state geometry and electronic structure of light atom clusters, especially H isotopes, Li, B, and C. In March and Angilella [1545], pages 860–869. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0110`.

March:2010:HTT

[1375] N. H. March and Z. D. Zhang. Heuristic treatments of tricritical behaviour as observed in 4he-3he mixtures and in polymeric assemblies. *Physics and Chemistry of Liquids*, 48(2):279–284, ???? 2010. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2010:ICD

[1376] N. H. March. Information content of diffraction experiments on liquids and amorphous solids. In March and Angilella [1545], pages 293–308. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0039`.

March:2010:IEG

[1377] N. H. March. Inhomogeneous electron gas theory of molecular dissociation energies. In March and Angilella [1545], pages 536–541.

ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0066.

March:2010:KPE

[1378] N. H. March. Kinetic and potential energies of an electron gas. In March and Angilella [1545], pages 1–2. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0001.

March:2010:LCE

[1379] N. H. March. Local coordination, electronic correlations and relation between thermodynamic and transport properties of *sp* liquid metals. In March and Angilella [1545], pages 457–464. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0055.

March:2010:LPD

[1380] N. H. March. The local potential determining the square root of the ground-state electron density of atoms and molecules from the SchrÖdinger equation. In March and Angilella [1545], pages 588–590. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0075.

March:2010:MMI

[1381] N. H. March. Melting of a magnetically induced Wigner electron solid and anyon properties. In March and Angilella [1545], pages 130–137. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0018.

March:2010:NCC

[1382] N. H. March, I. A. Howard, A. Holas, P. Senet, and V. E. Van Doren. Nuclear cusp conditions for components of the molecular energy density relevant for density-functional theory. In March and Angilella [1545], pages 650–654. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0083.

March:2010:NED

[1383] N. H. March. Nonlocal energy density functionals: Models plus some exact general results. In March and Angilella [1545], pages 850–859. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454

.M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0109.

March:2010:NRT

[1384] N. H. March and R. J. White. Non-relativistic theory of atomic and ionic binding energies for large atomic number. In March and Angilella [1545], pages 517–526. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0062.

March:2010:OBP

[1385] N. H. March. One-body potential theory of molecules and solids modified semiempirically for electron correlation. *Physics Letters A*, 374 (46):4724–4726, October 18, 2010. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0375960110012752.

March:2010:PAR

[1386] N. H. March and A. Nagy. Proposed approximate relation in inhomogeneous electron liquids between exchange-only potential and its Slater counterpart. *Physics and Chemistry of Liquids*, 48(5):648–651, ???? 2010. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2010:PDE

[1387] N. H. March and W. H. Young. Probability density of electron separation in a uniform electron gas. In March and Angilella [1545], pages 3–8. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0002.

March:2010:PDT

[1388] Norman H. March, Alejandro Cabo, and Francisco Claro. Phase diagram of two-dimensional electron gas in a perpendicular magnetic field around Landau level filling factors $\nu = 1$ and 3. In March and Angilella [1545], pages 201–205. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0025.

March:2010:POB

[1389] N. H. March and G. G. N. Angilella. Part 3: One-body potential theory of molecules and condensed matter. In March and Angilella [1545], page ?? ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN

QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_others03.

March:2010:PPT

[1390] N. H. March and Á. Nagy. Pauli potential in terms of kinetic energy density and electron density in the leading Coulombic term of the non-relativistic $1/Z$ expansion of spherical atomic ions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 81(1):014502, January 25, 2010. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL http://link.aps.org/doi/10.1103/PhysRevA.81.014502.

March:2010:PQE

[1391] N. H. March and G. G. N. Angilella. Part 1: Quantal electron crystals. In March and Angilella [1545], page ?? ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_others01.

March:2010:PSF

[1392] N. H. March and G. G. N. Angilella. Part 2: Structure, forces and electronic correlation functions in liquid metals. In March and Angilella [1545], page ?? ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_others02.

March:2010:PSS

[1393] N. H. March and I. A. Howard. Propagator and Slater sum in one-body potential theory. In March and Angilella [1545], pages 672–680. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0086.

March:2010:PTD

[1394] N. H. March, E. V. Chulkov, P. M. Echenique, and C. C. Matthai. Phase transitions driven by quasiparticle interactions. *Phase Transitions*, 83 (12):1085–1095, ???? 2010. CODEN PHTRDP. ISSN 0141-1594.

March:2010:PTF

[1395] N. H. March, M. Suzuki, and M. Parrinello. Phenomenological theory of first- and second-order metal-insulator transitions at absolute zero. In March and Angilella [1545], pages 57–59. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0008.

March:2010:QSC

[1396] N. H. March. Quantum statistics of charged particles and fingerprints of Wigner crystallization in D dimensions. In March and Angilella [1545], pages 206–216. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0026.

March:2010:QTP

[1397] N. H. March and M. P. Tosi. Quantum theory of pure liquid metals as two-component systems. In March and Angilella [1545], pages 363–386. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0048.

March:2010:RBD

[1398] N. H. March and A. M. Murray. Relation between Dirac and canonical density matrices, with applications to imperfections in metals. In March and Angilella [1545], pages 556–562. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0070.

March:2010:RBT

[1399] N. H. March. Relation between the total energy and eigenvalue sum for neutral atoms and molecules. In March and Angilella [1545], pages 527–528. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0063.

March:2010:RBW

[1400] N. H. March and J. S. Plaskett. The relation between the Wentzel–Kramers–Brillouin and the Thomas–Fermi approximations. In March and Angilella [1545], pages 504–516. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0061.

March:2010:RPC

[1401] N. H. March, I. A. Howard, and V. E. Van Doren. Recent progress in constructing nonlocal energy density functionals. In March and Angilella [1545], pages 659–671. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0085.

March:2010:SCP

[1402] N. H. March and A. M. Murray. Self-consistent perturbation treatment of impurities and imperfections in metals. In March and Angilella [1545], pages 741–755. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0098`.

March:2010:SCS

[1403] N. H. March and J. A. Alonso. Structural corrections to Stokes–Einstein relation for liquid metals near freezing. In March and Angilella [1545], pages 360–362. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0047`.

March:2010:SDG

[1404] N. H. March. Spatially dependent generalization of Kato's theorem for atomic closed shells in a bare Coulomb field. In March and Angilella [1545], pages 586–587. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0074`.

March:2010:SMM

[1405] N. H. March and Z. D. Zhang. Statistical-mechanical models with separable many-body interactions: especially partition functions and thermodynamic consequences. *Journal of Mathematical Chemistry*, 47(1): 520–538, January 2010. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-009-9575-8`.

March:2010:SPS

[1406] N. H. March and J. A. Alonso. Some properties of the structure factor $S(q)$ in two-dimensional classical liquids near freezing. *Physics and Chemistry of Liquids*, 48(3):409–413, ???? 2010. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2010:SPT

[1407] N. H. March. Some pointers towards a future orbital-free density functional theory of inhomogeneous electron liquids. *Physics and Chemistry of Liquids*, 48(2):141–155, ???? 2010. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2010:SSI

[1408] N. H. March and L. M. Nieto. Slater sum for an inhomogeneous liquid of fermions generated by a sech2x potential in one dimension. *Physics and Chemistry of Liquids*, 48(2):285–287, ???? 2010. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2010:TDE

[1409] N. H. March. Theoretical determination of the electron distribution in benzene by the Thomas–Fermi and the molecular-orbital methods. In March and Angilella [1545], pages 479–485. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0059`.

March:2010:TEB

[1410] N. H. March. Thermodynamics of the equilibrium between a fractional quantum Hall liquid and a Wigner electron solid. In March and Angilella [1545], pages 173–176. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0020`.

March:2010:TFF

[1411] N. H. March. Thomas–Fermi fields for molecules with tetrahedral and octahedral symmetry. In March and Angilella [1545], pages 486–503. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0060`.

Matthai:2010:SAS

[1412] C. C. Matthai and N. H. March. Small angle scattering from liquids: van der Waals forces in argon and collective mode in Na. In March and Angilella [1545], pages 250–260. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0031`.

Molina:2010:BND

[1413] L. M. Molina, M. J. López, I. Cabria, J. A. Alonso, and N. H. March. BeB_2 nanostructures: a density functional study. In March and Angilella [1545], pages 870–873. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0111`.

Niehaus:2010:BRR

[1414] Thomas A. Niehaus and Norman H. March. Brief review related to the foundations of time-dependent density functional theory. *Theoretical Chemistry Accounts*, 125(3-6):427–432, March 2010. CODEN TCACFW. ISSN 1432-881x (print), 1432-2234 (electronic).

Niehaus:2010:CID

[1415] Thomas A. Niehaus, N. H. March, and S. Suhai. Correlated and idempotent Dirac first-order density matrices with identical diagonal Fermion density: a route to extract a one-body potential energy in TDDFT. *Journal of Mathematical Chemistry*, 47(1):505–519, January 2010. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-009-9592-7`.

Parrinello:2010:TWC

[1416] M. Parrinello and N. H. March. Thermodynamics of Wigner crystallization. In March and Angilella [1545], pages 53–56. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0007`.

Perrot:2010:BPP

[1417] F. Perrot and N. H. March. Binding in pair potentials of liquid simple metals from nonlocality in electronic kinetic energy. In March and Angilella [1545], pages 309–318. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0040`.

Perrot:2010:PPL

[1418] F. Perrot and N. H. March. Pair potentials for liquid sodium near freezing from electron theory and from inversion of the measured structure factor. In March and Angilella [1545], pages 290–292. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0038`.

Pfalzner:2010:BSP

[1419] S. Pfalzner, H. Lehmann, and N. H. March. Bound-state plus continuum electron densities, and Slater sum, in a bare Coulomb field. In March and Angilella [1545], pages 594–603. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0077`.

Senatore:2010:RPF

[1420] G. Senatore and N. H. March. Recent progress in the field of electron correlation. In March and Angilella [1545], pages 138–172. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0019`.

Siringo:2010:SCF

[1421] F. Siringo, M. J. Lea, and N. H. March. Self-consistent force constant calculation for a two-dimensional Wigner electron crystal in high magnetic fields, and limitations of Lindemann's law of melting. In March and Angilella [1545], pages 110–116. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0015`.

Squire:2010:FSC

[1422] Richard H. Squire and Norman H. March. Fulleride superconductivity compared and contrasted with RVB theory of high T_c cuprates. In March and Angilella [1545], pages 177–188. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0021`.

Squire:2010:MMC

[1423] Richard H. Squire and Norman H. March. Microscopic model of cuprate superconductivity. *International Journal of Quantum Chemistry*, 110 (15):2808–2822, December 2010. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Stoddart:2010:DFT

[1424] J. C. Stoddart and N. H. March. Density-functional theory of magnetic instabilities in metals. In March and Angilella [1545], pages 764–800. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0100`.

Stoddart:2010:ETF

[1425] J. C. Stoddart and N. H. March. Exact Thomas–Fermi method in perturbation theory. In March and Angilella [1545], pages 575–582. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0072`.

Tankeshwar:2010:DPP

[1426] K. Tankeshwar and N. H. March. The deviation of the pair potential from the potential of mean force in molten Na near freezing. In March and Angilella [1545], pages 319–324. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0041`.

Tosi:2010:SAS

[1427] M. P. Tosi and N. H. March. Small-angle scattering from liquid metals and alloys and electronic correlation functions. In March and Angilella [1545], pages 387–398. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0049`.

Worster:2010:IEB

[1428] J. Worster and N. H. March. Interaction energies between defects in metals. In March and Angilella [1545], pages 221–224. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0029`.

Young:2010:DMA

[1429] W. H. Young and N. H. March. A density matrix approach to correlation in a uniform electron gas. In March and Angilella [1545], pages 9–27. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). LCCN QC173.454 .M36 2010. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814271783_0003`.

Zhang:2010:PGS

[1430] Z. D. Zhang and N. H. March. Polymer growth in solution and the dynamic epidemic model: dimensionality and critical exponents. *Physics and Chemistry of Liquids*, 48(3):403–408, ???? 2010. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:2011:FSP

[1431] C. Amovilli and N. H. March. A form of the single-particle kinetic energy density of an inhomogeneous electron liquid from a combination of one-body potential and ground-state electron density. *Physics and Chemistry of Liquids*, 49(1):91–96, ???? 2011. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:2011:HAF

[1432] C. Amovilli and N. H. March. Hookean atom with four electrons: On the formation of a tetrahedral Wigner molecule in the weak trapping

limit. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 83 (4):044502, April 21, 2011. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.83.044502`.

Arends:2011:SGC

[1433] M. J. Arends, C. H. Wilson, G. B. Poulin, C. Crombie, A. G. Rust, N. H. March, G. Poulogiannis, A. G. Fraser, and D. J. Adams. Screening for genes that cooperate with mutant RAS identified NRBP1 as a novel tumour suppressor that regulates the WNT pathway. *Journal of Pathology*, 224(2):S18–??, July 2011. CODEN JPTLAS. ISSN 0022-3417 (print), 1096-9896 (electronic). 6th Joint Meeting of the British Division of the International Academy of Pathology and the Pathological Society of Great Britain and Ireland, Univ Ghent, Dept Pathol, Onderbergen, Belgium, MAY 10–13, 2011.

Bogar:2011:PPH

[1434] Ferenc Bogár, Ferenc Bartha, Ferenc A. Bartha, and Norman H. March. Pauli potential from Heilmann–Lieb electron density obtained by summing hydrogenic closed-shell densities over the entire bound-state spectrum. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 83(1):014502, January 28, 2011. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.83.014502`.

Glasser:2011:MIE

[1435] M. L. Glasser, N. H. March, and L. M. Nieto. Models including electron correlation in relation to Fock's proposed expansion of the ground-state wave function of He-like atomic ions. *Physical Review A (Atomic, Molecular, and Optical Physics)*, 84(6):062119, December 22, 2011. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL `http://link.aps.org/doi/10.1103/PhysRevA.84.062119`.

Krishtal:2011:SOM

[1436] A. Krishtal, C. Van Alsenoy, and N. H. March. Second-order Møller–Plesset calculations of total ground-state energies of tetrahedral and octahedral molecules at equilibrium, confronted with some model-dependent scaling properties. *Journal of Physical Chemistry A*, 115(45):12998–13000, November 17, 2011. CODEN JPCAFH. ISSN 1089-5639 (print), 1520-5215 (electronic). URL `http://pubs.acs.org/doi/abs/10.1021/jp2043625`.

Krishtal:2011:TEO

[1437] A. Krishtal, N. H. March, and C. Van Alsenoy. Towards an exact orbital-free single-particle kinetic energy density for the inhomogeneous electron liquid in the be atom. *Physics and Chemistry of Liquids*, 49(5):693–697, ???? 2011. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2011:AME

[1438] N. H. March and M. Knapp-Mohammady. Aqueous microdroplet encapsulation of normal or cancerous single cells. *Physics and Chemistry of Liquids*, 49(3):409–413, ???? 2011. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2011:EED

[1439] N. H. March, A. Krishtal, C. Van Alsenoy, and J. D. Talman. Exchange energy density definitions from the optimized exchange-force, exemplified for non-relativistic Ne- and Ar-like atomic ions in the limit of large nuclear charge. *Journal of Mathematical Chemistry*, 49(2):335–341, February 2011. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-010-9741-z`.

March:2011:IEL

[1440] N. H. March and M. Knapp-Mohammady. The inhomogeneous electron liquid in some bioinorganic assemblies studied by density functional methods. *Physics and Chemistry of Liquids*, 49(2):259–269, ???? 2011. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2011:MVT

[1441] Norman H. March and Michaela Knapp-Mohammady. Molecular versus tissue liquids: an atomic length? *Physics and Chemistry of Liquids*, 49(6):830–834, November 2011. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451. URL `http://www.tandfonline.com/toc/gpch20/current`.

March:2011:RVS

[1442] N. H. March. On the range of validity of a semiclassical relation between the critical exponents at the Anderson localization transition. *The Journal of Physics and Chemistry of Solids*, 72(12):1529–1531, December 10, 2011. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022369711002897`.

March:2011:SEP

[1443] N. H. March and A. Rubio. Structural and electronic properties of low-dimensional C-nanoassemblies and possible analogues for Si (and Ge). *Journal of Nanomaterials*, ???? 2011. CODEN JNOABP. ISSN 1687-4110 (print), 1687-4129 (electronic).

March:2011:SSC

[1444] N. H. March and Á. Nagy. Scaling of some chemical properties of tetrahedral and octahedral molecules plus almost spherical C and B cages. *Journal of Mathematical Chemistry*, 49(10):2268–2274, November 2011. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-011-9885-5`.

Matthai:2011:ACM

[1445] C. C. Matthai and N. H. March. The application of condensed matter methods to the study of the conformation and elastic properties of biopolymers and the transport of DNA through cell membranes. *Theoretical Chemistry Accounts*, 130(4–6):1155–1167, December 2011. CODEN TCACFW. ISSN 1432-881X (print), 1432-2234 (electronic). URL `http://link.springer.com/article/10.1007/s00214-011-1022-9`.

Zhang:2011:CEA

[1446] Z. D. Zhang and N. H. March. Are the critical exponents for Anderson localization due to disorder well understood? *Journal of Mathematical Chemistry*, 49(3):816–820, March 2011. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-010-9778-z`.

Zhang:2011:CIT

[1447] Zhidong Zhang and Norman H. March. Conformal invariance in the three dimensional (3D) Ising model and quaternionic geometric phase in quaternionic Hilbert space. Technical report, ????, ????, 2011.

Zhang:2011:PRB

[1448] Z. D. Zhang and N. H. March. Proposed relationship between the exponents γ and η at liquid-vapour critical point via the dimensionality d. *Physics and Chemistry of Liquids*, 49(2):270–273, ???? 2011. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Zhang:2011:RSE

[1449] Z. D. Zhang and N. H. March. Refined semi-empirical formula for liquid-vapour critical point exponent delta and its relevance to the random

field Ising model. *Physics and Chemistry of Liquids*, 49(5):684–692, ???? 2011. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Zhang:2011:RVS

[1450] Z. D. Zhang and N. H. March. On the range of validity of a semiclassical relation between the critical exponents at the Anderson localization transition. *The Journal of Physics and Chemistry of Solids*, 72(12): 1529–1531, December 2011. CODEN JPCSAW. ISSN 0022-3697 (print), 1879-2553 (electronic).

Zhang:2011:TDI

[1451] Z. D. Zhang and N. H. March. Three-dimensional (3D) Ising universality in magnets and critical indices at fluid-fluid phase transition. *Phase Transitions*, 84(4):299–307, ???? 2011. CODEN PHTRDP. ISSN 0141-1594.

Zhang:2011:TTD

[1452] Z. D. Zhang and N. H. March. Temperature-time duality exemplified by Ising magnets and quantum-chemical many electron theory. *Journal of Mathematical Chemistry*, 49(7):1283–1290, August 2011. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-011-9820-9`.

Akbari:2012:FEI

[1453] Ali Akbari, Claudio Amovilli, Norman H. March, and Angel Rubio. Four electrons interacting pairwise in the limit of infinitesimal confining potentials: Especially the quintet spin state. *Chemical Physics Letters*, 536:162–164, May 21, 2012. CODEN CHPLBC. ISSN 0009-2614 (print), 1873-4448 (electronic).

Alonso:2012:OZD

[1454] J. A. Alonso and N. H. March. Ornstein–Zernike direct correlation function from diffraction experiments in supercooled liquid silicon and in disordered cobalt. *Physics and Chemistry of Liquids*, 50(1):131–136, ???? 2012. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:2012:CKE

[1455] C. Amovilli and N. H. March. Correlated kinetic energy density functional of ground states of harmonically confined two-electron atoms for arbitrary interparticle interaction. *Physica Scripta*, 85(6):065303, June 2012. CODEN PHSTBO. ISSN 0031-8949 (print), 1402-4896 (electronic). URL `http://stacks.iop.org/1402-4896/85/i=6/a=065303`.

Amovilli:2012:ECP

[1456] C. Amovilli and N. H. March. The exchange-correlation potential of DFT obtained from a semiempirically fine-tuned Hartree–Fock density for inhomogeneous electron liquids. *Physics and Chemistry of Liquids*, 50 (1):128–130, ???? 2012. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amovilli:2012:RBS

[1457] C. Amovilli and N. H. March. Relation between the Slater–Kohn–Sham orbitals generated by the one-body potential $V(r)$ of DFT and the Löwdin natural orbitals for inhomogeneous electron liquids. *Physics and Chemistry of Liquids*, 50(1):121–127, ???? 2012. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Angilella:2012:NCF

[1458] N. Angilella, V. Pittalà, N. H. March, and R. Pucci. Neutral and cationic free-space oxygen-silicon clusters SiO_n $(1 < n \leq 6)$, and possible relevance to crystals of SiO_2 under pressure. *Physics Letters A*, 376(4):476–479, January 9, 2012. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960111014344`.

Cabria:2012:DFS

[1459] I. Cabria, M. J. López, J. A. Alonso, and N. H. March. Density functional study of low-lying isomers of SiO_4, GeO_4 and CO_4, and their relation to tetrahedral solid phases. *The European Physical Journal D — Atomic, Molecular, Optical and Plasma Physics*, 66(4):105–??, April 2012. CODEN EPJDF6. ISSN 1434-6060 (print), 1434-6079 (electronic). URL `http://link.springer.com/article/10.1140/epjd/e2012-20737-9`.

Forte:2012:IEL

[1460] G. Forte, G. G. N. Angilella, V. Pittala, N. H. March, and R. Pucci. Inhomogeneous electron liquid in the free-space building block li2c2 plus its dimer and trimer. *Physics and Chemistry of Liquids*, 50(1):46–53, ???? 2012. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Forte:2012:MXR

[1461] Giuseppe Forte, Josep M. Oliva, Alexandru T. Balaban, Douglas J. Klein, and Norman H. March. Modelling X-ray scattering factors from fluids of some fluorinated molecules and related compounds. *Physics and Chemistry of Liquids*, 50(3):403–411, May 2012. CODEN PCLQAC.

ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451. URL `http://www.tandfonline.com/doi/full/10.1080/00319104.2011.647625`.

Forte:2012:NCF

[1462] G. Forte, G. G. N. Angilella, V. Pittala, N. H. March, and R. Pucci. Neutral and cationic free-space oxygen-silicon clusters SiO_n $(1 < n \leq 6)$, and possible relevance to crystals of SiO_2 under pressure. *Physics Letters A*, 376(4):476–479, January 9, 2012. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Glasser:2012:ASG

[1463] M. L. Glasser, N. H. March, and L. M. Nieto. Analytic structure of ground-state energies and wave functions for the inhomogeneous electron liquid in non-relativistic He-like atomic ions with nuclear charge Z_e. *Physics and Chemistry of Liquids*, 50(3):389–398, ???? 2012. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Glasser:2012:ASM

[1464] M. L. Glasser, N. H. March, and L. M. Nieto. An analytically solvable model of confined electrons in a magnetic field and its relation to Landau diamagnetism. *Physics Letters A*, 376(17):1477–1480, March 26, 2012. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Glasser:2012:PIT

[1465] M. L. Glasser, N. H. March, and L. M. Nieto. Proposed interpretation of the transverse magnetic field dependence of the melting temperature $T - m(B)$ of a two-dimensional one-component plasma driven by logarithmic interactions. *Phase Transitions*, 85(11):1018–1021, ???? 2012. CODEN PHTRDP. ISSN 0141-1594.

Hoggan:2012:PPL

[1466] Philip E. Hoggan and N. H. March. Pair potential of liquid metallic be from electron theory compared and contrasted with recent ab initio work on the free-space beryllium dimer. *Physics and Chemistry of Liquids*, 50 (3):399–402, ???? 2012. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Kar:2012:BEC

[1467] Rakesh Kar, Anirban Misra, N. H. March, and D. J. Klein. Bose–Einstein condensation of magnons in ferromagnetic thin films. *Phase Transitions*, 85(9):831–839, ???? 2012. CODEN PHTRDP. ISSN 0141-1594.

Klein:2012:MCR

[1468] D. J. Klein and N. H. March. Molecular conductance in relation to inverse transport theory and to chemical bond order. *International Journal of Quantum Chemistry*, 112(1):99–102, January 2012. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). 51st International Symposium on Theory and Computations in Molecular and Materials Sciences, Biology and Pharmacology, St Simons Isl, GA, FEB 25-MAR 01, 2011.

Knapp-Mohammady:2012:CLS

[1469] Michaela Knapp-Mohammady and Norman H. March. Can liquid supercooling and glassy-like structure be invoked to interpret collective cell behaviour in the human body? *Physics and Chemistry of Liquids*, 50(2): 137–151, March 2012. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451. URL `http://www.tandfonline.com/doi/full/10.1080/00319104.2011.609959`.

March:2012:ASM

[1470] N. H. March and L. M. Nieto. An analytically solvable model of confined electrons in a magnetic field and its relation to Landau diamagnetism. *Physics Letters A*, 376(17):1477–1480, March 26, 2012. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960112000369`.

March:2012:EMC

[1471] N. H. March, G. G. N. Angilella, and R. Pucci. Equation of motion of the correlated first-order density matrix for the ground-state of the Hookean atom with two electrons. *Journal of Mathematical Chemistry*, 50(4):914–919, April 2012. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-011-9934-0`.

March:2012:IEL

[1472] Norman H. March and Michaela Knapp-Mohammady. The inhomogeneous electron liquid in the ligand oestradiol compared and contrasted with that in oestrone. *Physics and Chemistry of Liquids*, 50(2):271–277, March 2012. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451. URL `http://www.tandfonline.com/doi/full/10.1080/00319104.2011.604780`.

March:2012:PPF

[1473] N. H. March, A. Nagy, F. Bogar, and F. Bartha. Pauli potential functional for spherical inhomogeneous electron liquids generated by a bare

Coulomb field. *Physics and Chemistry of Liquids*, 50(3):412–414, ???? 2012. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2012:PTD

[1474] Norman H. March and Richard H. Squire. Phase transitions driven by quasiparticle interactions. II. *International Journal of Quantum Chemistry*, 112(1):89–98, January 2012. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). 51st International Symposium on Theory and Computations in Molecular and Materials Sciences, Biology and Pharmacology, St Simons Isl, GA, FEB 25-MAR 01, 2011.

March:2012:SCT

[1475] N. H. March. Superfluidity with and without a condensate in two and three dimensions. *Physics and Chemistry of Liquids*, 50(6):819–821, ???? 2012. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2012:SMI

[1476] N. H. March and A. Nagy. Some model inhomogeneous electron liquid in D dimensions: relation between energy and chemical potential and a spatial generalisation of Kato's nuclear cusp theorem. *Physics and Chemistry of Liquids*, 50(2):266–270, ???? 2012. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

March:2012:TDL

[1477] N. H. March and J. A. Alonso. Temperature dependence of the liquid structure factor of dense monatomic fluids in the long wavelength limit in relation to thermal expansivity. *Philosophical Magazine Letters*, 92 (3):133–135, ???? 2012. CODEN PMLEEG. ISSN 0950-0839 (print), 1362-3036 (electronic).

Zhang:2012:PCB

[1478] Z. D. Zhang and N. H. March. Proposed connection between critical exponents and fractal dimensions in the Ising model. *Journal of Mathematical Chemistry*, 50(4):920–925, April 2012. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-011-9935-z`.

Akbari:2013:EFP

[1479] A. Akbari, C. Amovilli, N. H. March, and A. Rubio. Explicit form of Pauli potential for direct derivation of pair density from a two-particle differential equation for the quintet state of four electrons with harmonic

interparticle interactions. *Journal of Mathematical Chemistry*, 51(5): 1462–1466, May 2013. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-013-0158-3`.

Akbari:2013:PFV

[1480] Ali Akbari, Norman H. March, and Angel Rubio. A proposed family of variationally correlated first-order density matrices for spin-polarized three-electron model atoms. *Journal of Mathematical Chemistry*, 51(2): 763–773, February 2013. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic).

Angilella:2013:NSR

[1481] N. Angilella, N. H. March, and R. Pucci. The nuclear structure and related properties of some low-lying isomers of free-space O_n clusters ($n = 6, 8, 12$). *Physics Letters A*, 377(10-11):801–803, April 1, 2013. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960113001187`.

Angilella:2013:SPK

[1482] G. G. N. Angilella and N. H. March. The single-particle kinetic energy of many-fermion systems: Transcending the Thomas–Fermi plus von Weizsäcker method. In Wesolowski and Wang [1546], pages 31–53. ISBN 981-4436-72-0 (hardcover), 1-299-55634-5 (MyiLibrary). LCCN QD462.6.D45 R45 2013. URL `http://www.worldscientific.com/doi/abs/10.1142/9789814436731_0003`.

Ayuela:2013:NTA

[1483] Andres Ayuela, Douglas J. Klein, and Norman H. March. Neel temperature of antiferromagnets for phase transitions driven by spin-wave interactions. *Croatica Chemica Acta*, 86(4):463–467, ???? 2013. CODEN CCACAA. ISSN 0011-1643 (print), 1334-417X (electronic).

Cabria:2013:EAS

[1484] Iván Cabria, María J. López, Norman H. March, and Julio A. Alonso. Evolution of the atomic structure and the magnetism of small oxygen clusters. *Computational & Theoretical Chemistry*, 1021(0):215–221, 2013. CODEN CTCOA5. ISSN 2210-271X. URL `http://www.sciencedirect.com/science/article/pii/S2210271X13003113`. Clusters: From Dimers to Nanoparticles.

Cordero:2013:SFT

[1485] Nicolás A. Cordero, Norman H. March, and Julio A. Alonsod. Semiempirical fine-tuning for Hartree–Fock ionization potentials of atomic ions with non-integral atomic number. *Physics Letters A*, 377(41): 2955–2958, 2013. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960113008128`.

Forte:2013:NSR

[1486] G. Forte, G. G. N. Angilella, N. H. March, and R. Pucci. The nuclear structure and related properties of some low-lying isomers of free-space O_n clusters ($n = 6, 8, 12$). *Physics Letters A*, 377(10-11):801–803, April 1, 2013. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic).

Geldof:2013:CRW

[1487] D. Geldof, C. Van Alsenoy, and N. H. March. The central role of the von Weizsäcker kinetic energy density in determining the energy functional of a model two-electron atom with harmonic confinement and inverse square interparticle repulsion. *Journal of Mathematical Chemistry*, 51 (6):1561–1568, June 2013. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-013-0164-5`.

Glasser:2013:WHC

[1488] M. L. Glasser, N. H. March, and L. M. Nieto. Weak harmonic confinement of the quintet solution of a Moshinsky atom with 4 electrons. *Journal of Mathematical Chemistry*, 51(6):1515–1520, June 2013. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-013-0151-x`.

March:2013:NOR

[1489] N. H. March, G. G. N. Angilella, and R. Pucci. Natural orbitals in relation to quantum information theory: from model light atoms through to emergent metallic properties. *International Journal of Modern Physics. B, Condensed Matter Physics, Statistical Physics, Applied Physics*, 27 (30):1330021, 2013. CODEN IJPBEV. ISSN 0217-9792 (print), 1793-6578 (electronic). URL `http://www.worldscientific.com/doi/abs/10.1142/S0217979213300211`.

March:2013:TCS

[1490] N. H. March and J. A. Alonso. Transport coefficients in the strongly coupled liquid alkali metals. *Physics Letters A*, 377(10-11):810–812,

April 1, 2013. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0375960113000959`.

March:2013:TPV

[1491] N. H. March and Z. D. Zhang. Theory and phenomenology for a variety of classical and quantum phase transitions. *Journal of Mathematical Chemistry*, 51(7):1694–1711, August 2013. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-013-0181-4`.

Squire:2013:CVT

[1492] Richard H. Squire, Norman H. March, Rebecca A. Minnick, and Richard Turschmann. Comparison of various types of coherence and emergent coherent systems. *International Journal of Quantum Chemistry*, 113(19): 2181–2199, October 2013. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Squire:2013:TRC

[1493] Richard H. Squire, Norman H. March, Rebecca A. Minnick, and Richard Turschmann. Tutorial review: Comparison of various types of coherence and emergent coherent systems. *International Journal of Quantum Chemistry*, 113(19):2181–2199, October 5, 2013. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Squire:2014:TRC

[1494] Richard H. Squire, Norman H. March, and Angel Rubio. Are there really Cooper pairs and persistent currents in aromatic molecules? *International Journal of Quantum Chemistry*, 114(7):437–440, April 5, 2014. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

March:2016:ESM

[1495] Norman H. March and Giuseppe G. N. Angilella. *Exactly Solvable Models in Many-Body Theory*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 2016. ISBN 981-314-014-3 (hardcover). xvi + 330 pp. LCCN QC173.454.

Piris:2016:RCI

[1496] M. Piris and N. H. March. Review: Chemical and ionization potentials: Relation via the Pauli potential and NOF theory. *International Journal of Quantum Chemistry*, 116(11):805–818, June 5, 2016. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).

Heber:1969:BHM

[1497] G. Heber. Buchbesprechung: N. H. March, *Liquid Metals*. (International Series of Monographs in Natural Philosophy, Volume 15). VII + 133 S. m. Fig. Oxford/London/Edinburgh/New York/Toronto/Sydney/Paris/Braunschweig 1968. Pergamon Press. Preis geb. 50, s. net. (German) [book review: ...]. *Zeitschrift für Angewandte Mathematik und Mechanik*, 49(5):316, ???? 1969. CODEN ZAMMAX. ISSN 1521-4001.

Kobe:1969:BRB

[1498] Donald H. Kobe. Book review: *The Many-Body Problem in Quantum Mechanics*, by N. H. March, W. H. Young, and S. Sampanthar. *American Journal of Physics*, 37(1):116, ???? 1969. CODEN AJPIAS. ISSN 0002-9505 (print), 1943-2909 (electronic). URL `http://link.aip.org/link/?AJP/37/116/1`.

Macke:1969:BHM

[1499] W. Macke. Buchbesprechung: N. H. March, u. a. *The Many-Body Problem in Quantum Mechanics*. (Cambridge Monographs on Physics) IX + 459 S. m. Fig. Cambridge 1967. University Press. Preis geb. 90 s. net. (German) [book review: ...]. *Zeitschrift für Angewandte Mathematik und Mechanik*, 49(3):189, ???? 1969. CODEN ZAMMAX. ISSN 0044-2267 (print), 1521-4001 (electronic).

Rice:1969:BRB

[1500] Stuart A. Rice. Book review: *Liquid Metals*, by N. H. March. *Physics Today*, 22(2):83, ???? 1969. CODEN PHTOAD. ISSN 0031-9228 (print), 1945-0699 (electronic). URL `http://link.aip.org/link/?PTO/22/83/2`.

Krumhansl:1974:BRB

[1501] J. A. Krumhansl. Book review: *Theoretical Solid State Physics*, by William Jones; Norman H. March Theoretical Solid State Physics. Vol. 2, Nonequilibrium and Disorder by William Jones; Norman H. March. Vol. 1, Perfect Lattices in Equilibrium. *Science*, 184(4138):789–790, May 17, 1974. CODEN SCIEAS. ISSN 0036-8075 (print), 1095-9203 (electronic). URL `http://www.jstor.org/stable/1738658`.

Ohrn:1974:BRB

[1502] Yngve Öhrn. Book review: *Many Body Problems* by G. E. Brown, and *The Many Body Problems in Quantum Mechanics*, N. H. March, W. H. Young, and S. Sampanthar. *Physics Today*, 27(2):49, 52, February

1974. CODEN PHTOAD. ISSN 0031-9228 (print), 1945-0699 (electronic). URL `http://link.aip.org/link/?PTO/27/49/1; http://www.physicstoday.org/resource/1/phtoad/v27/i2/p49_s1`.

Anonymous:1976:BBC

[1503] Anonymous. Buchbesprechung: *Self-Consistent Fields in Atoms*. Von N. H. March, Pergamon Press 1975, 223 S., 8,25$. (German) [book review: ...]. *Physik in unserer Zeit*, 7(6):191, ???? 1976. CODEN PHUZAH. ISSN 1521-3943.

Nesbet:1976:BRB

[1504] R. K. Nesbet. Book review: *Self-Consistent Fields in Atoms*, by N. H. March. *Physics Today*, 29(7):50–52, ???? 1976. CODEN PHTOAD. ISSN 0031-9228 (print), 1945-0699 (electronic). URL `http://link.aip.org/link/?PTO/29/50/2`.

Gubbins:1977:BRB

[1505] Keith E. Gubbins. Book review: *Atomic Dynamics in Liquids*, by N. H. March and M. P. Tosi. *Physics Today*, 30(10):69–71, ???? 1977. CODEN PHTOAD. ISSN 0031-9228 (print), 1945-0699 (electronic). URL `http://link.aip.org/link/?PTO/30/69/2`.

Versmold:1985:BBF

[1506] H. Versmold. Buchbesprechung: *Coulomb-Flüssigkeiten: Coulomb Liquids*. Von N. H. March und M. P. Tosi. Academic Press, London Florida 1984. 351 S., $59.00. ISBN 0-12-470520. (German) [book review: ...]. *Nachrichten aus Chemie, Technik und Laboratorium*, 33(7):608–609, ???? 1985. CODEN NCTLDI. ISSN 1439-9598 (print), 1868-0054 (electronic).

Emery:1986:BRB

[1507] V. J. Emery. Book review: *Polymers, Liquid Crystals, and Low-Dimensional Solids by Norman March, Marco Tosi. American Scientist*, 74(6):666, November 1986. CODEN AMSCAC. ISSN 0003-0996 (print), 1545-2786 (electronic). URL `http://www.jstor.org/stable/27854374`.

Hensel:1986:BRH

[1508] F. Hensel. Book review: N. H. March, R. A. Street, and M. Tosi (Eds.): *Amorphous Solids and the Liquid State*, Plenum Press, New York and London 1985. 539 Seiten, Preis: $90. *Berichte der Bunsen-Gesellschaft für Physikalische Chemie, 1963–1990*, 90(12):1241, ???? 1986. CODEN BBPCAX. ISSN 0005-9021.

Magat:1986:BRB

[1509] E. E. Magat. Book review: *Polymers, Liquid Crystals, and Low-Dimensional Solids*, Norman March and Mario Tosi, Eds., Plenum, New York, 1985, 628 pp. Price: $89.50. *Journal of Polymer Science Part C: Polymer Letters*, 24(7):357, ???? 1986. CODEN JSCLE2. ISSN 0887-6258 (print), 1556-0333 (electronic).

Abraham:1989:BRN

[1510] Neal Abraham. Book review: Nonlinearities: *Order and Chaos in Nonlinear Physical Systems*, by Stig Lundqvist; Norman H. March; Mario P. Tosi. *Science*, 246(4933):1065, November 24, 1989. CODEN SCIEAS. ISSN 0036-8075 (print), 1095-9203 (electronic). URL `http://www.jstor.org/stable/1704962`.

Meneveau:1989:BRB

[1511] Charles Meneveau. Book review: *Order and Chaos in Nonlinear Physical Systems*, Physics of Solids and Liquids Series by Stig Lundqvist, Norman H. March, Mario P. Tosi. *American Scientist*, 77(5):502–503, September 1989. CODEN AMSCAC. ISSN 0003-0996 (print), 1545-2786 (electronic). URL `http://www.jstor.org/stable/27855988`.

VanAlsenoy:2013:PIS

[1512] C. Van Alsenoy and N. H. March. Positive ions of SiH_4: Jahn–Teller-like distortions for SiH_4^+ and eventually molecular collapse on further ionisation. *Journal of Mathematical Chemistry*, 51(1):117–124, January 2013. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://hdl.handle.net/10067/1059350151162165141; http://link.springer.com/article/10.1007/s10910-012-0067-x`.

Zhang:2013:CEP

[1513] Z. D. Zhang and N. H. March. Critical exponents proposed for marginal Fermi liquid. *Physics and Chemistry of Liquids*, 51(2):261–264, March 1, 2013. CODEN PCLQAC. ISSN 0031-9104, 0031-9104, 1026-7727, 1029-0451.

Amore:2014:ACS

[1514] Paolo Amore, John P. Boyd, and Francisco M. Fernández. Accurate calculation of the solutions to the Thomas–Fermi equations. *Applied Mathematics and Computation*, 232(??):929–943, April 1, 2014. CODEN AMHCBQ. ISSN 0096-3003 (print), 1873-5649 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0096300314001829`.

Amovilli:2016:AWM

[1515] C. Amovilli and N. H. March. Approaching the s-wave model ground state energy of He-like atomic ions: results from a model Hamiltonian. *Journal of Mathematical Chemistry*, 54(9):1792–1797, October 2016. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10910-016-0647-2; http://link.springer.com/article/10.1007/s10910-016-0647-2`.

Amovilli:2015:EPN

[1516] C. Amovilli and N. H. March. Electrostatic potentials at the nucleus for isoelectronic series of light atomic ions using the QMC method in relation to DFT. *Journal of Mathematical Chemistry*, 53(8):1725–1732, September 2015. CODEN JMCHEG. ISSN 0259-9791 (print), 1572-8897 (electronic). URL `http://link.springer.com/article/10.1007/s10910-015-0514-6`.

Downing:2017:BRE

[1517] C. A. Downing. Book review: *Exactly solvable models in many-body theory*, by N. H. March and G. G. N. Angilella. *Contemporary physics*, 58(3):276–277, 2017. CODEN CTPHAF. ISSN 0010-7514 (print), 1366-5812 (electronic).

Fermi:1928:SMB

[1518] Enrico Fermi. Eine statistische Methode zur Bestimmung einiger Eigenschaften des Atoms und ihre Anwendung auf die Theorie des periodischen Systems der Elemente. (German) [A statistical method for the determination of some atomic properties and its application to the theory of the periodic system of elements]. *Zeitschrift für Physik*, 48(1–2):73–79, January 1928. CODEN ZEPYAA. ISSN ???? URL `http://www.springerlink.com/content/v762582061464612/`. See English translation in [193, pp. 205–213].

Herman:1972:CSS

[1519] Frank Herman, Norris W. Dalton, and Thomas R. Koehler, editors. *Computational Solid State Physics: Proceedings of an International Symposium Held October 6–8, 1971, in Wildbad, Germany*, The IBM Research Symposia Series. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1972. ISBN 0-306-30583-6, 1-4684-1979-X (print), 1-4684-1977-3 (e-book). LCCN QC176-176.9. URL `http://link.springer.com/book/10.1007/978-1-4684-1977-1`.

Silbert:1991:BRF

[1520] Moises Silbert. Book review: Flesh on the bones of liquid metals: *Liquid Metals: Concepts and Theory* N H March 1991 Cambridge University, Press 492pp £60.00 hb. *Physics World*, 4(7):47, July 1991. CODEN PHWOEW. ISSN 0953-8585 (print), 2058-7058 (electronic). URL `http://physicsworldarchive.iop.org/full/pwa-pdf/4/7/phwv4i7a29.pdf`.

Ploog:1994:BRB

[1521] Klaus H. Ploog. Book review: *Physics of low-dimensional semiconductor structures*. Edited by P. Butcher, N. H. March, and M. P. Tosi, Plenum Press, New York 1993, xvi, 588 pp., hardcover, $120.00, ISBN 0-306-44170-5. *Advanced Materials*, 6(3):252, ???? 1994. CODEN ADVMEW. ISSN 0935-9648 (print), 1521-4095 (electronic).

March:1974:OTM

[1522] Norman H. (Norman Henry) March and C. A. (Charles Alfred) Coulson, editors. *Orbital Theories of Molecules and Solids*. Clarendon Press, New York, NY, USA, 1974. ISBN 0-19-855350-1. xiv + 385 pp. LCCN QD461 .O68.

Phariseau:1977:EFI

[1523] P. Phariseau and L. Scheire, editors. *Electrons in Finite and Infinite Structures*, volume 24 of *NATO Advanced Study Institutes Series: Series B: Physics*. Plenum Press, New York, NY, USA; London, UK, 1977. ISBN 0-306-35724-0, 1-4684-2813-6 (print), 1-4684-2811-X (e-book). LCCN QC176.8.E4 N34 1976. URL `http://link.springer.com/book/10.1007/978-1-4684-2811-7`.

Andre:1978:QTP

[1524] Jean-Marie André, Joseph Delhalle, and János Ladik, editors. *Quantum Theory of Polymers*, volume 39 of *NATO Advanced Study Institutes Series*. D. Reidel, Dordrecht, The Netherlands; Boston, MA, USA; Lancaster, UK; Tokyo, Japan, 1978. ISBN 94-009-9814-7 (print), 94-009-9812-0 (e-book). URL `http://link.springer.com/book/10.1007/978-94-009-9812-4`.

Lundqvist:1983:TIE

[1525] Stig Lundqvist and Norman H. (Norman Henry) March, editors. *Theory of the Inhomogeneous Electron Gas*. Physics of Solids and Liquids. Plenum Press, New York, NY, USA; London, UK, 1983. ISBN 0-306-41207-1, 1-4899-0417-4, 1-4899-0415-8. xiii + 395 pp. LCCN QC175.16.E6 T46 1983. URL `http://www.springerlink.com/content/978-1-4899-0415-7`.

March:1984:PLC

[1526] Norman H. (Norman Henry) March and M. P. (Mario P) Tosi, editors. *Polymers, Liquid Crystals, and Low-Dimensional Solids*. Physics of Solids and Liquids. Plenum Press, New York, NY, USA; London, UK, 1984. ISBN 0-306-41641-7. xx + 628 pp. LCCN QD381 .P6125 1984.

March:1985:ASL

[1527] Norman H. (Norman Henry) March, R. A. Street, and M. P. (Mario P) Tosi, editors. *Amorphous solids and the liquid state*. Physics of Solids and Liquids. Plenum Press, New York, NY, USA; London, UK, 1985. ISBN 0-306-41947-5, 0-317-37904-6. xix + 539 pp. LCCN QC145.2 .A46 1985.

March:1985:PLC

[1528] Norman March and Mario Tosi, editors. *Polymers, Liquid Crystals, and Low-Dimensional Solids*. Physics of Solids and Liquids. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1985. ISBN 1-4612-9448-7 (print), 1-4613-2367-3 (e-book). 648 pp. LCCN QC176.9.

Butcher:1986:CSM

[1529] Paul N. Butcher, Norman H. (Norman Henry) March, and M. P. (Mario P) Tosi, editors. *Crystalline Semiconducting Materials and Devices*. Physics of Solids and Liquids. Plenum Press, New York, NY, USA; London, UK, 1986. ISBN 0-306-42154-2. xviii + 645 pp. LCCN QC610.9 .C79 1986.

Erdahl:1987:DMD

[1530] Robert Erdahl and Vedene H. Smith, Jr., editors. *Density Matrices and Density Functionals. Proceedings of the A. John (Albert John) Coleman Symposium*. D. Reidel, Dordrecht, The Netherlands; Boston, MA, USA; Lancaster, UK; Tokyo, Japan, 1987. ISBN 90-277-2477-6. LCCN QC174.17.D44 D47 1987.

March:1987:SPD

[1531] Norman H. (Norman Henry) March and B. M. Deb, editors. *The Single-Particle Density in Physics and Chemistry*, volume 8 of *Techniques of physics*. Academic Press, New York, USA, 1987. ISBN 0-12-470518-9. ix + 385 pp. LCCN QC20.7.D43 S56 1987; QC793.3 .D46 1987.

Rogers:1987:SCP

[1532] Forrest J. Rogers and Hugh E. Dewitt, editors. *Strongly Coupled Plasma Physics*, volume 154 of *NATO ASI series. Series B, Physics*. Plenum

Press, New York, NY, USA; London, UK, 1987. ISBN 0-306-42581-5. LCCN QC717.6 .N366 1986.

Lundqvist:1988:OCN

[1533] Stig Lundqvist, Norman H. (Norman Henry) March, and M. P. (Mario P) Tosi, editors. *Order and Chaos in Nonlinear Physical Systems*. Physics of Solids and Liquids. Plenum Press, New York, NY, USA; London, UK, 1988. ISBN 0-306-42847-4. xvii + 469 pp. LCCN QC173.4.O73 O73 1988.

Bortolani:1990:IAM

[1534] V. Bortolani, Norman H. (Norman Henry) March, and M. P. (Mario P) Tosi, editors. *Interaction of Atoms and Molecules with Solid Surfaces*. Physics of Solids and Liquids. Plenum Press, New York, NY, USA; London, UK, 1990. ISBN 0-306-43424-5. xx + 679 pp. LCCN QC173.4.S94 I56 1990.

Butcher:1993:PLD

[1535] Paul N. Butcher, Norman H. (Norman Henry) March, and M. P. Tosi, editors. *Physics of Low-Dimensional Semiconductor Structures*. Physics of solids and liquids; Language of science. Plenum Press, New York, NY, USA; London, UK, 1993. ISBN 0-306-44170-5. xvii + 588 pp. LCCN QC611 .P584 1993. URL `http://www.loc.gov/catdir/enhancements/fy0820/92032072-d.html`; `http://www.loc.gov/catdir/enhancements/fy0820/92032072-t.html`.

Tosi:1993:PLD

[1536] M. P. (Mario P) Tosi, Paul N. Butcher, and Norman H. (Norman Henry) March, editors. *Physics of Low-Dimensional Semiconductor Structures*. Plenum, New York, NY, USA, 1993. ISBN 0-306-44170-5. xvii + 588 pp. LCCN ????

Srivastava:1995:CMD

[1537] S. K. Srivastava and Norman H. (Norman Henry) March, editors. *Condensed Matter: Disordered Solids*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 1995. ISBN 981-02-1924-5. vii + 463 pp. LCCN QC173.4.C65 C655 1995.

Cederbaum:1997:AMI

[1538] L. Cederbaum, Kenneth C. Kulander, and Norman H. (Norman Henry) March, editors. *Atoms and Molecules in Intense Fields*, volume 86 of *Structure and bonding*. Springer-Verlag, Berlin, Germany / Heidelberg,

Germany / London, UK / etc., 1997. ISBN 3-540-49812-5 (print), 3-540-61015-4 (e-book). ISSN 0081-5993 (print), 1616-8550 (electronic). viii + 193 pp. LCCN QD461 .S92 v. 86.

Lung:1999:MPM

[1539] C. W. Lung and Norman H. (Norman Henry) March. *Mechanical Properties of Metals: Atomistic and Fractal Continuum Approaches*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 1999. ISBN 981-02-2622-5, 981-02-4858-X (e-book). xv + 415 pp. LCCN TA460 .L86 1999.

March:1999:ECS

[1540] Norman H. (Norman Henry) March, editor. *Electron Correlation in the Solid State*. Imperial College Press, London, UK, 1999. ISBN 1-86094-200-8. xv + 436 pp. LCCN QC176.8.E4 E33 1999.

Surjan:1999:CL

[1541] Péter R. Surján, R. J. Bartlett, F. Bogár, D. L. Cooper, B. Kirtman, W. Klopper, W. Kutzelnigg, N. H. March, P. G. Mezey, H. Müller, J. Noga, J. Paldus, J. Pipek, M. Raimondi, I. Røeggen, J. Q. Sun, P. R. Surján, C. Valdemoro, and S. Vogtner, editors. *Correlation and Localization*, volume 203 of *Topics in Current Chemistry*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1999. ISBN 3-540-65754-1 (print), 3-540-48972-X (e-book). viii + 232 pp. URL `http://link.springer.com/book/10.1007/3-540-48972-X`.

March:2002:ILS

[1542] Norman H. (Norman Henry) March and M. P. Tosi. *Introduction to Liquid State Physics*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 2002. ISBN 981-02-4652-8 (paperback), 981-02-4639-0, 981-277-848-9 (e-book). xvii + 431 pp. LCCN QC145.2 .M42 2002eb. URL `http://site.ebrary.com/lib/princeton/Doc?id=10201245; http://site.ebrary.com/lib/yale/Doc?id=10201245; http://www.worldscientific.com/worldscibooks/10.1142/4717`.

Parr:2002:RMQ

[1543] Robert G. Parr and K. D. (Kali Das) Sen, editors. *Reviews of Modern Quantum Chemistry: A Celebration of the Contributions of Robert G. Parr, Volume 1*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 2002. ISBN 981-02-4889-X, 981-277-570-6 (e-book). LCCN QD462. URL `http://www.worldscientific.com/worldscibooks/10.1142/4910-vol1`.

Rahman:2004:UDS

[1544] Naseem K. Rahman, W. Becker, and M. V. Fedorov, editors. *Universality and diversity in science: Festschrift in honor of Naseem K. Rahman's 60th birthday*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 2004. ISBN 981-256-026-2. viii + 166 pp. LCCN QC776 .U694 2004.

March:2010:MBT

[1545] Norman H. (Norman Henry) March and G. G. N. Angilella, editors. *Many-Body Theory of Molecules, Clusters, and Condensed Phases*, volume 41 of *World scientific series in 20th century physics*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 2010. ISBN 981-4271-77-2, 981-4271-78-0 (e-book). xxi + 882 pp. LCCN QC173.454 .M36 2010.

Wesolowski:2013:RPO

[1546] Tomasz A. Wesolowski and Yan Alexander Wang, editors. *Recent Progress in Orbital-Free Density Functional Theory*, volume 6 of *Recent Advances in Computational Chemistry*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2013. ISBN 981-4436-72-0 (hardcover), 1-299-55634-5 (MyiLibrary). xi + 451 pp. LCCN QD462.6.D45 R45 2013. URL `http://lib.myilibrary.com?id=486884`.