A Complete Bibliography of Publications of Claude Elwood Shannon

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18 March 2022
Version 1.84

Abstract

This bibliography records publications of Claude Elwood Shannon (1916–2001).

Title word cross-reference

$27 [Sil18]. **$4.00** [Mur57]. 7×10 [Mur57]. H' [Siq98]. n [Sha55d, Sha93-45]. $P/N \to \infty$ [Sha48j]. s [Sha55d, Sha93-45].

1939 [Sha93v]. **1950** [Ano53]. **1955** [MMS06]. **1982** [TWA+87].

2001 [Bau01, Gal03, Jam09, Pin01]. **2D** [ZBM11].

3 [Cer17].

6G [SB21].

978 [Cer17]. **978-1-4767-6668-3** [Cer17].

= [Int03].

Aberdeen [FS43]. **ablation** [GKL+13]. **above** [TT12]. **absolute** [Ric03]. **Abstract** [Sha55c]. **abundance** [Gor06]. **abundances** [Ric03]. **Academics** [Pin01]. **According** [Sav64]. **account** [RAL+08]. **accuracy** [SGB02]. **activation** [GKL+13]. **Active** [LB08]. **actress** [Kah84]. **Actually** [Sha53f]. **Advanced** [Mar93]. **Affecting** [Nyq24]. **After** [Bot88, Sav11]. **After-Shannon** [Bot88]. **Age** [ACK+01, Cou01, Ger12, Nah13, SG17, Sha02, Wal01b, Sil18, Cer17]. **A'h** [New56]. **A'h-mose** [New56]. **Aid** [Bro11, Sha78, Sha93y, SM53]. **Albert** [New56]. **alcohol** [SBS+13]. **Algebra** [Roc99, Sha40c, Sha93a, Jan14]. **algorithm** [Cha72, HDC96, LM03]. **alignments** [CFRC04]. **Allied** [Kah84]. **alpha** [BSWCM14]. **alpha-Shannon** [BSWCM14]. **Alphabets** [GV15]. **Alternate** [Sha44e]. **Ambiguity** [Loe59, PGM+12]. **America** [FB69]. **American** [Ger12, Sha78]. **among** [AALR09, Di 00]. **Amplitude** [Sha54a]. **Analogue** [Sha43a, Sha93b]. **analogues** [Gor06]. **analyses** [SBS+13]. **Analysis** [Sha37, Sha38, Sha93-51, Sha21, GB00, RAL+07, SGB02, TKL+12, dTS+03]. **analyze** [HGR+12]. **Analyzer** [MS53a, MS53b, MS93c, Sha93-27, Sha41d, FS43]. **Anecdotes** [TWA+87]. **angular** [CS09]. **Animal** [Sha49d, Sha93-41]. **Apparatus** [Sha51b]. **Apple** [Cas16]. **Applicability** [Tim02]. **Application** [AALR09, JAS89, Sha48h, TWA+87, WVB10, FCW+00, POA+08, Rif85, SSAK06]. **Applications** [Fel66, Fel71, Fel09]. **Applied** [BLR+02, BLR+01, MBD+03, dTS+03]. **Applying** [ABS+13]. **Approach** [Sha48j, Sha55c, Sha93-38, BB88, LR05, Pri84, Pri85, RS06, Rog94, Wri67]. **approximation** [Koc05]. **April** [Gal03, Jam09]. **aqueous** [SGB02]. **Archimedes** [Pic08]. **architectural** [SBS+13]. **area** [JSMS12]. **aromaticity** [NS10]. **Articulation** [Lei07]. **artificial** [MMS06]. **Aspects** [Sha80, Sha93-44]. **assemblages** [Siq98]. **assess** [RFME+12]. **assessment** [BQhH08, JSMS12]. **Associative** [Bot88]. **asynchronisms** [RAL+07]. **atomic** [AALR09, GFD03, SK04]. **atoms** [Liu07, Sen05]. **Atrial** [LMC11, GKL+13]. **attack** [HN09]. **August** [MMS06]. **Austria** [Van89]. **authors** [Ano17a]. **Automata** [SM56, SM74, Sha93m, Sha93-60, SW93a, Sha53c, Sha58c, Mur57]. **Automaten** [SM74]. **Automatic** [Min95]. **Automation** [Min95, Sha63a, Sha93n]. **avoided** [GFD03]. **award** [Han10, Ano40b, Bar01, Kha16]. **Awards** [Pin01].

B [HGR+12, SW93h]. **backgrounds** [WMS+12]. **Backlash** [Sha41a, Sha93c]. **bacterial** [ABS+13]. **Ballistic** [FS43]. **Band** [Sha54a]. **Bandwagon** [Sha56a, Sha93d]. **Bandwidth** [Sha44d]. **basada** [Pla06]. **base** [JGH00].

Based [FM99, APMS+12, BQhH08, CFRC04, HSBJ02, Koc05, LM03, MBD+03, NS12, WGB09, WBB+12]. **Bayes** [APMS+12, AES17]. **Be** [Far03, Far02]. **Beautiful** [Far03, Far02]. **before** [Min02]. **Behavior** [DS46, DS93]. **behind** [Pic08]. **Beings** [Szi64]. **Bell** [Ger12, Min95]. **bellied** [dPV00]. **Berechnung** [Sha57b]. **Berkeley** [Sug13]. **Best** [Sha44a, Sha93e]. **beta** [MHBL12]. **Betting** [Sha56d]. **Between** [Min02, Kah84, Liu07, RS06, Sen21, Zha09]. **Beyond** [SB21, LP12]. **biases** [Zee02]. **Bihar** [JAS89]. **Binaire** [Loe59]. **Binary** [Bar01, Loe59, Sha54b, Sha93q, SGB02]. **Biodiversidad** [Pla06]. **Biodiversity** [Pla06]. **biographical** [Rog94]. **Biographies** [Cor87, Wei88]. **Biological** [HWO90, Ric03]. **biologist** [Sch06]. **biology** [Sch06]. **biomarkers** [APMS+12]. **Biopolitics** [Roc99]. **Bipolar** [GKL+13]. **bit** [Ale03, Ano01b]. **bold** [FFF09]. **bone** [RAL+08]. **Book** [Cer17, Mur57, Roc11, Tra10]. **Boole** [Nah13]. **Boolean** [Jan14]. **Bounds** [Mar08, Sha54a, Sha93w, Sha93x, SGB67a, SGB67b]. **box** [LM03]. **box-counting-based** [LM03]. **brave** [FFF09]. **breaking** [Eme01]. **Breed** [Bar01]. **Bridging** [RS06]. **brief** [Cro01]. **Building** [Hag79]. **Builds** [Bar01]. **Bush** [Sha93v, Sha39].

C [Mur57, Sug13, Wal01a, SW93i]. **Calcul** [Loe59]. **calculation** [Sha57b, Loe59]. **Calculations** [HWO90, SGB02]. **Calculator** [Sha93-42]. **calvarial** [RAL+08]. **cancer** [APMS+12]. **Candidates** [Pin01]. **Capacity** [BSWCM14, Bot88, GV15, Mar08, Sha56g, Sha56i, Sha57c, Sha93-47, Sha93-61, Sch06, Sha57b, SJ04, TT12]. **Capazität** [Sha57b]. **Case** [Hag79, Sha48a]. **cases** [Key05]. **Cathode** [PST48]. **Cathode-Ray** [PST48]. **caused** [SBS+13]. **Celebrating** [Zac16]. **cellular** [RFME+12]. **Century** [Sha93n, WL85, Sha63a]. **Certain** [Nyq24, Nyq28, Sha48f, Sha57a, Sha93f]. **chain** [Koc05]. **chain-based** [Koc05]. **chains** [ZBM11]. **Channel** [Sha48a, Sha56c, Sha56g, Sha56i, Sha57c, Sha93-36, Sha93-47, Sha93-61, Sch06, Sha57b, Sha59c]. **Channels** [Sha58a, Sha93f, Sha93g, Sha93w, Sha93x, Sha93-32, Sha93-57, POA+08, Sha57a, Sha58b, Sha61, SGB67a, SGB67b, TT12]. **Chaos** [Sch91]. **Characteristic** [Sen05]. **characterizing** [JGH00]. **checking** [FM99]. **chemical** [SSAK06]. **Chess** [Sha50b, Sha93h, Wha78, Lev88, Sha50g, Sha93-37]. **Chess-Playing** [Sha50b, Sha93h]. **China** [BQhH08]. **cipher** [AMS+10, HN09]. **Circuit** [GBR07, HS46, MS53a, MS53b, MS53c, MS93c, MS93d, Sha53j, Sha93y, SM53]. **Circuits** [FM99, MS54, MS93a, MS93b, OS44, OS93, Sha37, Sha38, Sha41b, Sha44e, Sha49f, Sha55e, Sha93-51, Sha93-48, Sha93-53, Sha21, SW93d, Jan14, MS56a, MS56b]. **Classic** [Lew21]. **classical** [SS07]. **classification** [APMS+12]. **Claude** [Ano01c, Cer17, Sil18, TWA+87, Ano40a, Ano40b, Ano00, Ano01a, Ano01b, Ano02, Bar01, Bau01, Bro11, CS01, CLM+01, Cou01, Ell84, Eme01, Eph01, Gag98, Gal01, Gal03, Gol01, GBC+02, Gui03, Han10, Hor90, Hor92, Hor11,

Jam09, Joh01, Kha16, Lew01, Nah13, NWV94, O'R12, Pin01, Pri82, Pri84, Pri85, Roc10, Roc11, RHQ+16, Sch06, Sha82a, Sha02, Sha14, Sla97, SW93k, SW93l, SW93b, SG17, SF03, SK01, Str14, Van89, Wal01b, Zac16]. **Closing** [Gui04]. **Closure** [Sha44c]. **Clustering** [DGH+06]. **coasts** [YLR+10]. **Cobol** [Bar01]. **Code** [Loe59, OS46, Sha43b, Gui04, Wri67]. **Codes** [Sha93-36, Gui04, Sha59c]. **Coding** [Bot88, Gol49, Sha40a, Sha48a, Sha53d, Sha54b, Sha55c, Sha59a, Sha59b, Sha60, Sha93f, Sha93i, Sha93q, Sha93s, Sha93w, Sha93x, Sha93-38, TWA+87, Sha57a, SGB67a, SGB67b, WMS+12, Zee02]. **codon** [FMSS03, Zee02]. **coherence** [LMC11, YN11]. **coherent** [RM06, YN11]. **cold** [Sen21]. **collected** [SW93k]. **Collection** [Bro11]. **Colleges** [HS54, HS93]. **colon** [APMS+12]. **Color** [Sha40a]. **Coloring** [Sha93-54, Sha49g]. **Combining** [Gor06]. **Communication** [Hag79, OS46, Sha48b, Sha48c, Sha48h, Sha49a, Sha49b, SW49, Sha49d, Sha50f, Sha50i, Sha53a, Sha53b, SW63, SW71, SW76, SW83, Sha84a, Sha84b, Sha85, Sha93j, Sha93k, Sha93l, Sha93z, Sha93-32, Sha93-41, Sha93-40, Sha93-57, Sha97, Sha98b, Sha98a, SW98, Sha01, SW93c, Wea49, Wea53, Lyn77, Rog94, Sha58b, Sha61, SW64, SW69, SW72, SW75b, SW75a, SW78, SW81, Sla97, TT12, Yoc00, dPV00, Doo49]. **Communications** [Ano01c, Ano01b, Kah84, SB21]. **Comparison** [GWZC12]. **comparisons** [AALR09]. **compendium** [Lev88]. **complete** [CHC+04, CHC+05]. **complex** [RFME+12, SSAK06]. **complexity** [LR05, SBS+13]. **component** [TKL+12]. **Components** [Sha56f]. **Compound** [WVB10]. **compounds** [SGB02]. **Computability** [dLMSS54, dLMSS56, dLMSS93]. **Computation** [Bar01, Sha50j, Sha93-42, Ric03, Zee02]. **Computer** [Lap96, Lev88, Lew21, Wha78, Bro00a, Sha50g, Sha93-37, Smi05, WL85, Pin01, Sha50j]. **Computers** [Sha53c, Sha53h, Sha63a, Sha93m, Sha93n, Sha93-33, SW93d, Sug13]. **Computing** [Bul15, DM15, Sha85, Wal01a, LM03, Min02]. **comunicación** [SW81]. **comunicazioni** [SW71, SW83]. **Concavity** [Sha55b, SH56, Sha93o, Sha93p]. **concept** [GB00]. **Concepts** [Som09]. **conceptual** [Ell09, Tim03]. **Conceptualization** [Asp85]. **concerning** [Tho09]. **confidence** [MHBL12]. **confidentiality** [Gag98]. **configuration** [WBB+12]. **confined** [Sen05]. **Congress** [Bro11]. **Connected** [DS46, DS93, Sha07]. **Connection** [Pin01]. **Connections** [AES17]. **connectivity** [RFME+12]. **conservation** [BQhH08]. **Consistency** [Sha41b]. **Contacts** [Sha53i, Sha93-39]. **Content** [WVB10, Rif85]. **context** [CLM+01]. **continued** [Sha48c]. **Continuous** [Sha43a, Sha93b]. **contribution** [RHQ+16]. **Contributions** [Sha93-60, Wea53, Sha58c]. **Control** [BBS46, Min95, Sha49d, Sha51b, Sha93-41, Min02]. **Controversies** [Bar01]. **Convergence** [GV15]. **conversation** [Ell84, Pri84, Pri85]. **Corporation** [Pin01]. **correcting** [Wri67]. **correlation** [RD04]. **cost** [Kra21]. **Counters** [Sha44b]. **Counting** [Ell09, Kör96, Sha44b, Sha44e, Koc05, LM03]. **Created** [Lew21, Nah13]. **Creative** [Sha52a]. **Criteria** [Sha41b]. **Criterion**

[Sha59b, Sha93i, Sha60]. **critical** [ZBM11]. **Crossbar** [HS46]. **crossings** [GFD03]. **Crossword** [Efr08]. **Crummy** [MS54]. **Cryptography** [Roc99, Sha45a, SW93c, BB88]. **Cryptology** [Kah84, Roc99]. **crystalline** [SBS+13]. **CSIDC** [Pin01]. **Cubic** [BERS86]. **Cubics** [Sha82b]. **Cybernetics** [DL63, Sha49d, Sha68a, Min02, Sha93-41].

Dartmouth [MMS06]. **Data** [BSWCM14, BBS46, Cor87, Sha41c, WVB10, Bla65, LCW+16, LHA+16]. **data-smoothing** [Bla65]. **database** [GB01]. **Datalog** [KNS17]. **Daubechies** [JZL98]. **Days** [Bul15]. **Decomposition** [GBR07, LB08, MHBL12]. **Decrease** [Szi64]. **deep** [HGR+12]. **Deflection** [Sha41f, Sha41e, Sha93-50, Sha93-46]. **degree** [ABS11, YN11]. **Delay** [Sha56c]. **Delsarte** [AL07]. **demon** [Kra21]. **Demonstrates** [Sha14]. **demonstrating** [LHA+16]. **Demonstration** [Sha14]. **densities** [AALR09, Liu07]. **Dependent** [WVB10]. **Derivation** [BS50, BS93]. **Derivatives** [Sha54a]. **Description** [Sha50j, Sha93-42]. **Descriptor** [WVB10, GB00]. **descriptors** [GB01, GPM06, SGB02]. **Desflurane** [BLR+02, BLR+01]. **Design** [FM99, Sha42, Sha93y, Sha93-55, SM53]. **Detection** [Sha44a, Sha93e, HSBJ02, HTR+08, LMC11]. **detectors** [WBB+12]. **detects** [CFRC04]. **Determinate** [Sha45b]. **determined** [YLR+10]. **Deutung** [Sha57b]. **developed** [Kah84]. **Development** [Sha85, Sle74]. **Developments** [Sha50f, Sha50i, Sha93-40]. **Device** [PST48]. **diagnosis** [TKL+12]. **diagnostic** [Rif85]. **diatom** [Siq98]. **Dictionary** [Cor87]. **Dies** [Ano01a, Bar01, Joh01, Ano01c]. **difference** [Sen21]. **differences** [GB01]. **Differential** [GB01, Sha41g, Sha42, Sha93-27, Sha93-55, SGB02, Sha41d]. **Difficulty** [Efr08]. **diffusion** [LS10]. **Digital** [ACK+01, Ano01c, Bul15, Cou01, Gol49, LP12, Sha50c, Ano01b, Cer17, Eme01, HDC96, Cas16, Wal01b]. **dimension** [RAL+08, SBS+13]. **Dimensional** [Sha78, GWZC12, SJ04]. **dimensionality** [CS09, POA+08]. **Diorama** [Sha82a, SW93b]. **Director** [Zor89, Pin01]. **Director-Elect** [Pin01]. **discipline** [Mat94]. **Discrete** [Sha48g, Sha59a, Sha59b, Sha93i, Sha93w, Sha93x, Sha60, SGB67a, SGB67b]. **Discussion** [CMU+53, CMU+93]. **Disjunctive** [KNS17]. **distinctions** [Ell09]. **distinguish** [WMS+12]. **distinguisher** [AMS+10]. **distinguishing** [HN09]. **Distortion** [Sha59a]. **distribution** [Di 00, NS12]. **Distributions** [WVB10, AALR09, GPM06]. **Divergence** [CCHL05, MPPP97]. **divergences** [AALR09]. **diversity** [BQhH08, BKU+94, De'12, Di 00, GB00, Gor06, ID00, Key05, MHBL12, Ric03, RS06, Siq98, SF03]. **Division** [Pin01]. **Djingis** [NWV94]. **DNA** [Bar01, Zha09]. **Do** [KNS17, dR55]. **Doppler** [HTR+08]. **Down** [Sha44b]. **Dr.** [Bre63]. **Dream** [Wal01a]. **Dretske** [Lom05]. **Driver** [Sha78]. **Drop** [Sha82a, SW93b]. **drug** [FCW+00]. **during** [Kah84, RAL+08]. **dynamical** [RAL+07]. **dynamics** [Let06, LM03].

E100 [LS35]. **E58** [SSS34]. **Early** [Bul15, Sha14]. **earth** [Yoc00]. **eco**

[RHQ+16]. **eco-evolutionary** [RHQ+16]. **Economic** [BQhH08]. **edited** [Mur57]. **Editorial** [Sha56a, Sha84b]. **Edmund** [Sug13]. **Education** [Hig63]. **educator** [Sug13]. **EEG** [BLR+02]. **effect** [HGR+12]. **effectiveness** [Jan14]. **Effects** [BLR+02, BLR+01]. **Efficient** [Sha48a, Sha54b, Sha93q]. **einem** [Szi29]. **Eingriffen** [Szi29]. **einiger** [Sha57b]. **Einstein** [Ano00, New56, Per05, Sen21]. **Elect** [Pin01]. **electric** [GFD03]. **Electrical** [Ano40b, MS53a, WL85]. **electroencephalographic** [BLR+01]. **electrogram** [GKL+13]. **electron** [GWZC12, RD04]. **Electronic** [Sha46]. **element** [BKU+94]. **Elementary** [LS35, SSS34]. **eleven** [Sha07]. **Elwood** [Bau01, Bro11, Gal03, GBC+02, Jam09, SW93k, SW93l]. **EMC** [Pin01]. **Employing** [OS46]. **enabled** [WMS+12]. **encryption** [Gag98]. **engineer** [Nah13]. **Engineering** [Cer88, Hag79, FFF09, Smi05, WL85]. **Engineers** [Ano40b, Kah84, Tra10, Jam10]. **England** [Sha78]. **English** [Sha51a, Sha93-34]. **Enigma** [Ano16, LHA+16]. **Ensembles** [Sha48e]. **entanglement** [POA+08, ZBM11]. **entropic** [NS12]. **entropies** [APMS+12, GWZC12, LR05, WMS+12, ZBM11]. **Entropieverminderung** [Szi29]. **Entropy** [BLR+02, GB01, GV15, HGR+12, JSMS12, LMC11, PGM+12, RFME+12, Sav64, Sha51a, Sha93-34, Szi64, WVB10, ABS11, BLR+01, CFRC04, FMSS03, FCW+00, GKL+13, GB00, GFD03, GPM06, HTR+08, Key05, Koc05, Let06, Liu07, LM03, MHBL12, Mat94, NS12, NS10, PP06, RAL+07, RM06, Ric03, RS06, RAL+08, SSK+05, Sen05, SK04, SS07, SBS+13, SGB02, SD96, Szi29, Szi76, TKL+12, WGB09, YN11, Zha09, dPV00, dTS+03]. **entropy-based** [CFRC04, WGB09]. **Entropy-TOPSIS** [JSMS12]. **Entstehung** [Hag79]. **Environmental** [YLR+10, JSMS12]. **Equation** [Sha42, Sha93-55]. **Equations** [Far03, FS43, Ale03, Far02]. **erasure** [Kra21]. **Ergebnisse** [Sha57b]. **Ergodic** [Sha48e]. **Error** [Sha56c, Sha56i, Sha93w, Sha93x, Sha93-36, Sha93-61, Sha59c, SGB67a, SGB67b, Wri67]. **error-correcting** [Wri67]. **Errors** [Mar08]. **essential** [Gui03]. **Estimates** [Sav64]. **Estimating** [Let06]. **Estimation** [BSWCM14]. **Europe** [FB69]. **evenness** [YLR+10]. **event** [dTS+03]. **event-related** [dTS+03]. **evidence** [Tho09]. **evolution** [HGR+12]. **evolutionary** [RHQ+16]. **Exact** [Cro63]. **Exam** [NWV94]. **Exchange** [Sha50d, Sha93-28]. **expected** [ABS11]. **experiment** [YN11]. **Experimental** [LCW+16, Sha41e, Sha93-46]. **Experimentally** [LHA+16]. **Expert** [Bar01, NWV94]. **explains** [Sen21]. **Explicit** [Sha53f]. **Exploring** [RHQ+16]. **Exposition** [Sha53a, Sha53b, Sha93k]. **expression** [SGG04]. **extension** [BB88].

Factors [Nyq24]. **factory** [Ger12]. **Fair** [Pin01]. **Fallstudie** [Hag79]. **Fast** [GV15]. **Father** [Ano98, Ano01a, Hor90, Sha02, Wal01b, Hor11]. **fear** [NWV94]. **feature** [GPM06]. **features** [SSK+05, Sen05]. **February** [Gal03, Jam09, Sha93v]. **Feedback** [Sha44c, Min02]. **female** [Di 00]. **Fibrillation** [LMC11, GKL+13]. **Fidelity** [Sha59b, Sha93i, Sha60]. **fields** [GFD03, dR55]. **Fifty** [Ver98]. **filter** [CFRC04]. **Finders** [Sha41f, Sha93-50].

Finding [Bro11]. **Finds** [Bar01]. **Fine** [LB08]. **Fine-grained** [LB08]. **Finest** [Min95]. **fingerprint** [WGB09]. **Finite** [SK04, YCS12]. **Fire** [BBS46]. **Fire-Control** [BBS46]. **First** [Bre63, Hor11, Ric03]. **Fisher** [AALR09, AES17, HTR+08, Liu07, RD04, YCS12]. **Flaw** [Bar01]. **Flow** [EFS56, EFS93, CSJJ10]. **flowmetry** [HTR+08]. **fluctuations** [RM06]. **fMRI** [dTS+03]. **foray** [Cro01]. **Forecaster** [Sha56e]. **forest** [BQhH08]. **Formal** [Som09]. **Formula** [BSWCM14, Sha50h]. **formulate** [Sch06]. **Foundational** [Tim02]. **foundations** [Ano01b, Ell09]. **Founder** [Ano01c, Sch06]. **Four** [DS46, DS93]. **Four-Terminal** [DS46, DS93]. **Fourier** [JGH00]. **Fourth** [Sha78]. **Fourth-Dimensional** [Sha78]. **Fractal** [SBS+13, RAL+08]. **Fractals** [Sch91]. **fractional** [CS09]. **Framework** [All04]. **free** [SS07]. **French** [Loe59, SW75a]. **Frequencies** [PGM+12]. **Fresnel** [LP12]. **fridge** [Sen21]. **Frontiers** [SG18]. **Frontmatter** [SW93e]. **Function** [Sha55b, Sha93p, LMC11]. **Functional** [FM99]. **Functions** [Sha48e, Sha53i, Sha55d, SH56, Sha93o, Sha93-39, Sha93-45]. **Fundamentals** [Sha53a, Sha53b, Sha93k]. **Funding** [Pin01]. **Future** [Lew21].

Game [Sha55a, Sha93r]. **Games** [SW93d, Cha72]. **Ganga** [JAS89]. **gap** [RS06]. **Gating** [LB08]. **Gaussian** [Koc05, RM06, Sha59c, Sha93-36]. **Gaylord** [Ano34, Ano98, Ano00]. **geheime** [Roc10, Roc11]. **Gene** [DGH+06, MBD+03, SGG04]. **General** [Cro63, Sha53d, Sha93s, Som09, NS12]. **Generalization** [BB88]. **Generalizations** [Sha48i]. **generalized** [Key05]. **generation** [Lyn77]. **genes** [JGH00]. **genesis** [CLM+01, Tho09]. **Genetics** [Sha40c, Sha93a, SW93f, Cro01]. **Genghis** [NWV94]. **Genius** [Cou01, Int03, Ano01b, Cer17]. **genome** [Zha09]. **genomes** [ABS+13, CHC+04, CHC+05, CCHL05, JGH00, Zee02]. **Geometrical** [Sha56g, Sha57c, Sha93-47, Sha57b]. **Geometrische** [Sha57b]. **George** [Nah13]. **German** [Bau01, Hag79, Roc10, Roc11, Sha50f, Sha57b, SM74, SW76, Szi29]. **Geschichte** [Roc10, Roc11]. **Gini** [AES17]. **Give** [Sha53f]. **Go** [Bar01]. **goal** [SB21]. **goal-oriented** [SB21]. **Goals** [Pin01]. **Goodman** [Cer17, Sil18, Doo18]. **grained** [LB08]. **Graph** [AL07, APMS+12, Cha72]. **graze** [dR55]. **Great** [Bel53, DM15, Far03, Lap96, Far02, Ger12, Pic08]. **grooming** [Di 00]. **ground** [Eme01]. **ground-breaking** [Eme01]. **Grundlagen** [SW76]. **guarantee** [Kah84]. **Gun** [Zor89]. **Gunfire** [BBS46].

Hanoi [Sha53l]. **Haplotype** [PGM+12]. **Harvard** [Sha50j, Sha93-42]. **Hawking** [Pic08]. **hazards** [AES17]. **healthy** [HTR+08]. **heat** [Kra21]. **Hedy** [Kah84]. **Height** [Sha41c]. **Helleh** [JSMS12]. **Hellman** [BB88]. **hepatitis** [HGR+12]. **heterogeneous** [ABS11]. **Hickman** [Sha40b, Sha93-59]. **High** [Pin01, CFRC04, HTR+08, Kra21, LS10, SGB02]. **high-quality** [CFRC04]. **high-values** [HTR+08]. **highly** [SBS+13]. **Historical** [Cor87, Jan14]. **History** [Roc10, Roc11, FFF09, Rog94]. **Hla**

[PGM+12]. **Hoffman** [AL07]. **holography** [LP12]. **Hometown** [Cer88]. **homologues** [CFRC04]. **Honored** [Ano40b]. **Honors** [Ano98, Cer88]. **Host** [RFME+12]. **hot** [Sen21]. **Hour** [Min95]. **human** [APMS+12, Min02, Zee02]. **hyperentanglement** [CS09]. **Hypergraph** [LB08]. **hypotheses** [Di 00].

idea [Ger12]. **Ideal** [Sha48j, Sha55c, Sha55e, Sha93-38, Sha93-48]. **Ideas** [Lew21]. **identification** [FCW+00]. **identifies** [SGB02]. **IEEE** [Pin01]. **II** [Kah84, MS56b, MS93b, SGB67b, Sha93x, Wri67]. **illumination** [YN11]. **imaging** [SJ04, YN11]. **Impact** [Gal01, Gal06]. **implanted** [SBS+13]. **implemented** [Cha72]. **implications** [GKL+13, Lyn77]. **inadequacy** [Tim03]. **including** [Rif85]. **incontinence** [TKL+12]. **Increases** [Pin01]. **Increasing** [CS09]. **independent** [Rif85]. **Index** [JAS89, BQhH08, BKU+94, Di 00, Gor06, ID00, Key05, Lei07, Pla06, RS06, Siq98, SF03, WC99, Zha09]. **India** [JAS89]. **indicator** [GFD03]. **indice** [Pla06]. **indices** [Gor06]. **individual** [dPV00]. **induced** [SBS+13]. **Industrial** [Hag79]. **Industrie** [Hag79]. **Industrie-** [Hag79]. **Industry** [Cer88, RFME+12]. **Inequalities** [KNS17]. **Inequality** [GV15]. **Inference** [Pla06, Wri67]. **Inferencia** [Pla06]. **inflammatory** [SBS+13]. **Inform** [San05]. **informacii** [DL63]. **Information** [ACK+01, All04, Ano53, Ano98, Ano01a, Asp85, Bro00b, Cro63, DGH+06, DL63, Gal06, HWO90, Hor90, Lom05, Roc10, Roc11, Sav11, Sha49c, Sha50c, Sha52b, Sha53e, Sha56b, Sha58a, Sha59a, Sha63b, Sha68b, Sha93g, Sha93t, Sha93u, Sha93-49, Sil18, SW93c, Som09, Str14, SG18, Tim02, WVB10, Zee02, ABS+13, Ale03, Cer17, CHC+04, CHC+05, CCHL05, CLM+01, Ell09, Eme01, GWZC12, Gui03, Hor11, HSBJ02, HTR+08, JGH00, Lei07, Liu07, LHV16, LR05, LS10, Lyn77, MBD+03, Nah13, Rif85, RD04, SSAK06, Sch06, Sen05, SK04, Sle74, SG17, SJ04, SD96, Tho09, Tim03, YCS12, Col93, Roc10, Sha56d, Sha02, Som09, Roc11]. **Informationskonzepten** [Hag79]. **Informationstheorie** [SW76]. **Infrequent** [Sha54b, Sha93q]. **innovation** [Ger12]. **Input** [Sha55b, Sha93p]. **Institute** [Ano40a]. **Instructor** [Ano40b]. **integral** [SJ04]. **integrated** [JSMS12]. **Integration** [FS43, Sha50h]. **intellectual** [FB69]. **intelligence** [MMS06]. **Intelligent** [Szi64, Szi29, Szi76]. **intelligenter** [Szi29]. **interference** [Szi29, Szi76]. **Internal** [Sha54c, Sha93-58, Sha56h]. **International** [Pin01]. **interpolation** [Mar91, Mar93]. **Interpretation** [Lom05]. **interval** [MHBL12]. **Intervention** [Szi64]. **Interview** [Pri82, TWA+87, Van89]. **Introduction** [Fel66, Mar91, TWA+87, Fel71, Fel09]. **Intuitive** [Roc99]. **invasive** [TKL+12]. **Invented** [Sil18, Ano01b, Cer17, SG17]. **Invests** [Pin01]. **Involvement** [Pin01]. **Ioan** [Tra10]. **Iran** [JSMS12]. **Irving** [TWA+87]. **ISBN** [Cer17]. **Italian** [SW71, SW83]. **Iterative** [WVB10].

J [Mur57]. **J.** [Wal01a]. **James** [Tra10]. **Jensen** [AALR09, MPPP97]. **Jimmy** [Cer17, Doo18, Sil18]. **John** [UKTS68, UKTS69]. **Juggler** [Hor90]. **Juggling** [Sha80, Sha82a, Sha93-44, SW93b].

Kanal [Sha57b]. **Kelly** [Sha56d]. **Key** [Sle74]. **Khan** [NWV94]. **kibernetike** [DL63]. **Kiss** [Sha93-43, Sha49e]. **Koehler** [YN11]. **Kommunikation** [Sha50f]. **Korean** [YLR+10]. **Kriegsforschung** [Hag79]. **kth** [Koc05]. **kth-order** [Koc05].

Laboratory [HS54, HS93, Sha50j, Sha93-42]. **Labs** [Ger12, Min95]. **laid** [Ano01b, Eme01]. **Lakatos** [Sha40b, Sha93-59]. **Lamarr** [Kah84]. **L'Ambiguité** [Loe59]. **Language** [Sav64]. **Large** [DS46, DS93, Mar08]. **Large-scale** [Mar08]. **laser** [HTR+08]. **Lattice** [Sha53e, Sha93u]. **Lattices** [Sha49e, Sha93-43]. **Laws** [Sch91, ID00, Pic08]. **leaders** [Kah84]. **Leap** [Ano16]. **Learning** [Hig63, Sha14]. **Least** [BS50, BS93]. **Leben** [Roc10, Roc11]. **lecture** [Han10, TWA+87]. **Lectures** [Hig63]. **Legal** [RFME+12]. **Legal-Social** [RFME+12]. **Less** [MS93a, MS93b, MS56a, MS56b]. **Letter** [Sha39, Sha93v, TWA+87]. **levels** [SGG04]. **library** [New56, Bro11]. **Licklider** [Wal01a]. **Life** [Gal01, Roc10, Roc11, Mat94, Yoc00]. **light** [RM06]. **Like** [Bot88]. **limit** [TT12]. **Limited** [Sha54a]. **limits** [LP12]. **line** [HTR+08]. **Linear** [Bla65, BS50, BS93, BERS86, DS46, DS93, Sha41g, Sha42, Sha93-55, HN09, TT12]. **Lines** [Sha93-54, Zac16, Sha49g]. **linking** [De'12]. **Linz** [Van89]. **literature** [Mat94, New56]. **LMC** [LR05]. **Locals** [Ano34]. **locking** [LCW+16, LHA+16]. **Logarithmic** [ZBM11]. **logic** [Sug13, Sha49e, Sha93-43]. **logician** [Nah13]. **London** [Ano53]. **Loop** [Sha44c]. **Low** [GBR07]. **Low-Power** [GBR07]. **Lower** [SGB67a, SGB67b, Sha93w, Sha93x]. **LTE** [BSWCM14].

MAC [Mar08]. **Machine** [Ano16, Sha50b, Sha51c, SM53, Sha53g, Sha93h, Sha93y, Sha93-30, Sha93-35, Sha93-58, Sha14, Wal01a, LHA+16, Min02, Sha56h, Sha49d, Sha54c, Sha93-41]. **Machines** [Bre63, Sha42, Sha56f, Sha93r, Sha93-55, dLMSS54, dLMSS93, Bro00a, Sha55a, dLMSS56]. **MADDIDA** [TWA+87]. **Made** [Wal01a, Eme01]. **magnetic** [GFD03]. **making** [Gui03]. **Man** [Bre63, Pri84, Pri85]. **Man-Machines** [Bre63]. **Mapping** [DGH+06, MBD+03]. **Maps** [Pin01]. **Marker** [DGH+06]. **Markhoff** [Sha48g]. **Markov** [RFME+12, Koc05, PP06]. **Markov-Shannon** [RFME+12]. **Mars** [Smi05]. **Martin** [ID00]. **master** [Eme01]. **Mastermind** [Str14]. **Masterpiece** [Hor11]. **matematica** [SW71, SW83, SW81]. **math** [Luc12]. **Mathematical** [Ano00, CLM+01, Doo49, Roc99, Sha41d, Sha45a, Sha48b, Sha48c, SW49, SW63, SW71, SW75a, SW76, SW83, Sha93z, Sha93-27, Sha97, SW98, Sha01, Wea53, Lyn77, SW64, SW69, SW72, SW75b, SW78, SW81]. **Mathematician** [Joh01]. **Mathematics** [Wea49, Jan14, New56]. **mathématique** [SW75a]. **Mathematische** [SW76]. **Mathematization** [Roc99]. **Mathmanship** [Sha53f]. **matrix** [Gor06]. **Maximum** [EFS56, EFS93, Rif85]. **Maxwell** [Kra21]. **May** [Bre63]. **Maze** [Sha51c, Sha93-35]. **Maze-Solving** [Sha93-35].

McCarthy [Mur57]. **meaning** [Sha57b]. **Measure** [Bot88, Cro63, JAS89, PGM+12, Sha59a, GB01, ID00, Mat94, NS10, SSAK06]. **measured** [SSK+05]. **Measurement** [BLR+02, BLR+01]. **measures** [RS06]. **measuring** [dPV00]. **mechanical** [RAL+07]. **Mechanics** [Tim02, Tim03]. **Mechanism** [Sha41c, Sha41f, Sha41e, Sha93-50, Sha93-46]. **medical** [Rif85]. **medium** [Ano01b]. **Meet** [Ano17a]. **Meets** [Efr08, SG18, NWV94]. **Membership** [Pin01]. **Memory** [Bot88, Sha50d, Sha93-28]. **Memoryless** [Sha93w, Sha93x, SGB67a, SGB67b]. **message** [Ano01b, Gui03]. **metagenomes** [ABS+13]. **Method** [Cro63, Sha50c, Sha50e, Sha93-29, HSBJ02]. **Methodology** [WVB10, JSMS12]. **Methods** [Sha46]. **microspheres** [SBS+13]. **migration** [FB69]. **Military** [Hag79]. **Mind** [Ano17a, Doo18, Sha53g, Sha93-30, Cer17, SG17, Sil18]. **Mind-Reading** [Sha53g, Sha93-30]. **Minds** [Bro00a, Pic08]. **Minimize** [Sha44d]. **miscellaneous** [SW93l]. **Mixed** [Sha45b]. **Model** [Efr08, De'12]. **models** [PP06, RFME+12]. **Modern** [Far03, Far02]. **Modest** [Sha78]. **Modification** [WC99]. **Modified** [BSWCM14, YLR+10]. **Modulation** [OS46, Sha43b]. **module** [Jan14]. **Molecular** [HWO90, GB00, GB01, LM03, RFME+12, SGB02]. **molecules** [Liu07]. **momentum** [AALR09, CS09, GWZC12]. **monotonicity** [SS07]. **mose** [New56]. **möter** [NWV94]. **mouse** [Zee02]. **Moving** [Sha50e, Sha93-29]. **MRI** [LS10]. **much** [Eme01]. **multidimensional** [HN09]. **multinomial** [De'12]. **multiple** [De'12, Rif85]. **multiverse** [Bro00a]. **Must** [Far03, Far02]. **mutations** [HGR+12]. **Mutual** [DGH+06, HSBJ02, Lei07, MBD+03].

Nachrichtentechnik [Hag79]. **Naive** [APMS+12]. **Named** [Pin01]. **natural** [HGR+12]. **Network** [EFS56, EFS93, Sha48d, Sha93-31, Sha93-54, Sha49g]. **Networks** [DS46, DS93, RS93, ABS11, RFME+12, RS42, SB21]. **Neuentwicklungen** [Sha50f]. **Neumann** [ABS11, Sha58c, Sha93-60, TWA+87, UKTS68, UKTS69]. **Neural** [RFME+12, YCS12]. **News** [Bar01, Kra21]. **No** [Sha82a, SW93b]. **No-Drop** [Sha82a, SW93b]. **Noble** [Ano40b]. **Noise** [Bot88, Sha93j, Sha49a, Sha84a, Sha98b, Sha84b]. **Noise-Like** [Bot88]. **Noisy** [Sha48a, Sha56d, Sha56c, Sha56i, Sha93f, Sha93-61, Sha57a]. **Non** [TKL+12, Rif85, WMS+12]. **non-coding** [WMS+12]. **non-independent** [Rif85]. **Non-invasive** [TKL+12]. **nonequilibrium** [NS12]. **noninvasive** [RAL+07]. **Nonlinear** [TT12]. **Nonoverlapping** [Sha44d]. **nonuniform** [GWZC12]. **Norbert** [Sha49d, Sha93-41]. **Normal** [Sha48e]. **normality** [Siq98]. **Notation** [Sha50a, Sha93-52]. **Note** [EFS56, EFS93, Sha48f, Sha48g, Sha93-32, Sha58b, Sha84b]. **Notes** [Gol49, Sha56d, Sha56c, SW93g, SW93h, SW93i]. **novel** [GB00]. **Number** [DS46, DS93, RS93, RS42, SJ04]. **Numbers** [Sha48f, Sha50a, Sha93-52]. **Numerical** [YN11]. **Nyquist** [Ano17b, WBB+12].

Obituary [CS01]. **objective** [RAL+08]. **Obtaining** [Cro63]. **Oh** [Wei88]. **on-line** [HTR+08]. **One** [KNS17, Sha54b, Sha93q, GWZC12, Pri84, Pri85]. **one-dimensional** [GWZC12]. **onf** [Gal06]. **Online** [Bar01]. **Operation** [Sha53j]. **Operators** [Sha41g]. **opinion** [ID00]. **Optical** [CSJJ10]. **Optimal** [Sha93-36, Sha59c]. **Optimization** [WBB+12]. **orbital** [CS09]. **order** [Koc05, Zha09]. **Ordering** [Sha93-32, Sha58b]. **organization** [RAL+08]. **oriented** [SB21]. **Origin** [Yoc00]. **origins** [Kah84]. **Outfit** [HS54, HS93]. **Overdamped** [Sha41a, Sha93c].

P.C.M. [OS44, OS93]. **packets** [HSBJ02]. **Page** [Ano93]. **pages** [Mur57]. **Panel** [HS46]. **Papers** [Bro11, CMU+53, CMU+93, Lap96, Lew21, Sle74, SW93k, DL63]. **Parallel** [RS93, GFD03, RS42]. **Parametric** [Ric03]. **Parasite** [RFME+12]. **Parasite-Host** [RFME+12]. **Parkinson** [Zor89]. **Part** [SW93g, SW93h, SW93i]. **Partial** [Sha93-32, Sha58b]. **partially** [RM06, YN11]. **Partitioning** [LB08]. **pathway** [RFME+12]. **patient** [Gag98]. **Patna** [JAS89]. **Pay** [Sha56e]. **PCM** [OPS48, OPS93]. **Peak** [BSWCM14]. **Pedodiversity** [ID00]. **perfect** [Gui04]. **Periodic** [Sha44c]. **periodicity** [JGH00]. **Permissions** [SW93j]. **Personal** [Lew01, Wal01a]. **pg** [Koc05]. **phage** [ABS+13]. **Philosophy** [OPS48, OPS93]. **photon** [Koc05, POA+08]. **photon-counting** [Koc05]. **Pioneer** [Bar01]. **Pioneers** [Wei88]. **pixilated** [WBB+12]. **Plan** [Pin01]. **plane** [RD04]. **platforms** [BKU+94]. **Play** [Sil18, Cer17, SG17, Doo18, Ano17a]. **played** [Kah84]. **Playful** [Ano01b]. **Playing** [Sha50b, Sha93h, Sha93r, Sha50g, Sha55a, Sha93-37]. **plea** [SF03]. **Pleasures** [Kör96]. **plots** [Let06, RAL+07]. **Podolsky** [Per05]. **Poetic** [Hor11]. **points** [JZL98, ZBM11]. **polarized** [RM06]. **Pollution** [JAS89]. **poly** [SBS+13]. **Polynomially** [GV15]. **popularizer** [Sug13]. **Population** [PGM+12, MBD+03]. **population-based** [MBD+03]. **populations** [YCS12]. **Portfolio** [Sha56e]. **position** [AALR09, GWZC12]. **possible** [Eme01]. **Potential** [Mar08]. **Potentialities** [Sha53h, Sha93-33]. **Power** [GBR07, LB08, Sch91, Sha50e, Sha93-29]. **Powers** [AL07]. **pp** [Sil18]. **practical** [AMS+10]. **practice** [Bla65]. **Preceding** [CMU+53, CMU+93]. **predict** [SGB02]. **Prediction** [BBS46, BS50, BS93, BKU+94, Sha51a, Sha93-34, Bla65]. **predictors** [De'12]. **Presence** [Mar08, Sha93j, Sha49a, Sha84a, Sha84b, Sha98b]. **Presentation** [Sha51c, Sha93-35]. **Press** [Mur57]. **Price** [Mur57]. **primates** [Di 00]. **Primes** [Bul15]. **Princeton** [Mur57]. **principal** [TKL+12]. **Principle** [Tim02, SGG04]. **Principles** [DM15]. **Printed** [Sha51a, Sha93-34]. **Probabilistic** [Efr08, dLMSS54, dLMSS93, dLMSS56]. **Probabilities** [Cro63, Sha55b, Sha93p]. **Probability** [Fel66, Sha56c, Sha59c, Sha93w, Sha93x, Sha93-36, Fel71, Fel09, SGB67a, SGB67b]. **Problem** [Sha53d, Sha53f, Sha56e, Sha93s, Pri84, Pri85, SS07, Wri67]. **Problems** [LS35, SSS34, LS35, SSS34]. **Proceedings** [Ano53]. **Process** [Sha48g].

processes [Koc05]. **Processing** [Cor87]. **Professor** [Ano01c]. **Profile** [Hor92, CFRC04]. **profile-profile** [CFRC04]. **profiles** [BKU+94]. **Profiling** [WVB10]. **Programmers** [Bar01]. **Programming** [Bar01, Sha50g, Sha93-37]. **Progress** [Sha63a, Sha93n]. **project** [MMS06]. **Promise** [Sha63a, Sha93n]. **Promoter** [SSK+05]. **Proof** [Sha50h]. **property** [SGB02]. **proportion** [YLR+10]. **proportional** [AES17]. **Proposal** [Sha78, MMS06, Ric03]. **protected** [JSMS12]. **protein** [APMS+12, SD96]. **provide** [RAL+08]. **published** [Hor11]. **Pulse** [OS46, Sha43b, Sha44b, Sha44d, Sha44e]. **Pulses** [Sha44a, Sha44d, Sha93e]. **putative** [FCW+00]. **Puzzle** [Efr08]. **pyrosequencing** [HGR+12].

Q&A [Ano17a]. **QSAR** [SGB02]. **QSDR** [APMS+12]. **Quadratic** [BERS86, RS06]. **Qualitative** [All04]. **quality** [CFRC04, RFME+12, YLR+10]. **Quantify** [WVB10]. **Quantitative** [AALR09]. **Quantum** [Ano16, LHA+16, Tim02, Bro00a, LCW+16, POA+08, Tim03, ZBM11]. **quasispecies** [HGR+12]. **quest** [Bro00a].

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