

Bibliography

- [Abrams & Lloyd, 1998] Abrams, D.S., & Lloyd, S. (1998). Nonlinear Quantum Mechanics Implies Polynomial-Time Solution for NP-Complete and P Problems. *Physical Review Letters*, **81**, 3992–5.
- [Adleman, 1994] Adleman, L.M. (1994). Molecular Computation of Solutions to Combinatorial Problems. *Science*, **266**, 1021–3.
- [Aharonov & Bohm, 1961] Aharonov, Y., & Bohm, D. (1961). Time in the Quantum Theory and the Uncertainty Relation for Time and Energy. *Physical Review*, **122**, 1649–1658.
- [Alt & Pleshko, 1974] Alt, P.M., & Pleshko, P. (1974). Scanning Limitations of Liquid-Crystal Displays. *IEEE Transactions on Electron Devices*, **ED-21**, 146–55.
- [Alvelda & Lewis, 1998] Alvelda, P., & Lewis, N.D. (1998). New Ultra-Portable Display Technology and Applications. *Proceedings of SPIE*, **3362**, 322–5.
- [Anderson, 1992] Anderson, J.L. (1992). Why We Use Retarded Potentials. *American Journal of Physics*, **60**, 465–7.
- [Anderson *et al.*, 1995] Anderson, M.H., Ensher, J.R., Matthews, M.R., Wieman, C.E., & Cornell, E.A. (1995). Observation of Bose–Einstein Condensation in a Dilute Atomic Vapor. *Science*, **269**, 198–201.
- [Ash, 1990] Ash, Robert B. (1990). *Information Theory*. New York: Dover Publications.
- [Ashcroft & Mermin, 1976] Ashcroft, N., & Mermin, N.D. (1976). *Solid State Physics*. New York: Holt, Rinehart and Winston.
- [Aspect *et al.*, 1981] Aspect, A., Grangier, P., & Roger, G. (1981). Experimental Tests of Realistic Local Theories via Bell's Theorem. *Physical Review Letters*, **47**, 460–3.
- [Athas *et al.*, 1994] Athas, W.C., Svensson, L.J., Koller, J.G., Tzartzanis, N., & Chou, E. Ying-Chin. (1994). Low-Power Digital Systems Based on Adiabatic-Switching Principles. *IEEE Transactions on VLSI Systems*, **2**, 398–407.
- [Awschalom & Flatté, 2007] Awschalom, David D., & Flatté, Michael E. (2007). Challenges for Semiconductor Spintronics. *Nature Physics*, **3**, 153–159.
- [Baibich *et al.*, 1988] Baibich, M.N., Broto, J.M., Fert, A., Dau, F. Nguyen Van, Petroff, F., Etienne, P., Creuzet, G., Friederich, A., & Chazelas, J. (1988). Giant Magnetoresistance of (001)Fe/(001)Cr Magnetic Superlattices. *Physical Review Letters*, **61**, 2472–5.
- [Balanis, 1997] Balanis, Constantine. (1997). *Antenna Theory: Analysis and Design*. 2nd edn. New York: Wiley.
- [Balian, 1991] Balian, Roger. (1991). *From Microphysics to Macrophysics: Methods and Applications of Statistical Physics*. New York: Springer-Verlag. Translated by D. ter Haar and J.F. Gregg, 2 volumes.
- [Bardeen *et al.*, 1957] Bardeen, J., Cooper, L.N., & Schrieffer, J.R. (1957). Theory of Superconductivity. *Physical Review*, **108**, 1175–1204.
- [Barenco *et al.*, 1995] Barenco, Adriano, Bennett, Charles H., Cleve, Richard, DiVincenzo,

- David P., Margolus, Norman, Shor, Peter, Sleator, Tycho, Smolin, John, & Weinfurter, Harald. (1995). Elementary Gates for Quantum Computation. *Phys. Rev. A*, **52**, 3457–67.
- [Baym, 1973] Baym, Gordon. (1973). *Lectures on Quantum Mechanics*. Reading: W.A. Benjamin.
- [Beckman *et al.*, 1996] Beckman, D., Chari, A.N., Devabhaktuni, S., & Preskill, J. (1996). Efficient Networks for Quantum Factoring. *Physical Review A*, **54**, 1034–63.
- [Bell, 1964] Bell, J. (1964). On The Einstein Podolsky Rosen Paradox. *Physics*, **1**, 195–200.
- [Benioff, 1980] Benioff, P. (1980). The Computer as a Physical System: A Microscopic Quantum Mechanical Hamiltonian Model of Computers as Represented by Turing Machines. *Journal of Statistical Physics*, **22**, 563–91.
- [Bennett, 1973] Bennett, C.H. (1973). Logical Reversibility of Computation. *IBM Journal of Research and Development*, **17**, 525.
- [Bennett, 1988] Bennett, C.H. (1988). Notes on the History of Reversible Computation. *IBM Journal of Research and Development*, **32**, 16–23.
- [Bennett & Brassard, 1984] Bennett, C.H., & Brassard, G. (1984). Quantum Cryptography: Public Key Distribution and Coin Tossing. Pages 175–9 of: *Proceedings of IEEE International Conference on Computers, Systems, and Signal Processing*. New York: IEEE.
- [Bennett & Brassard, 1989] Bennett, C.H., & Brassard, G. (1989). The Dawn of a New Era for Quantum Cryptography: the Experimental Prototype is Working. *Sigact News*, **20**, 78–82.
- [Bennett *et al.*, 1993] Bennett, C.H., Brassard, G., Crepeau, C., Jozsa, R., & Wootters, A. Peres W.K. (1993). Teleporting an Unknown Quantum State via Dual Classical and Einstein–Podolsky–Rosen channels. *Physical Review Letters*, **70**, 1895–9.
- [Benton, 1969] Benton, S.A. (1969). Hologram Reconstructions With Extended Incoherent Sources. *Journal of the Optical Society of America*, **59**, 1545–6.
- [Berggren *et al.*, 2007] Berggren, M., Nilsson, D., & Robinson, N.D. (2007). Organic Materials for Printed Electronics. *Nature Materials*, **6**, 3–5.
- [Berry & Geim, 1997] Berry, M.V., & Geim, A.K. (1997). Of Flying Frogs and Levitrons Magnetic Levitation. *European Journal of Physics*, **18**, 307–13.
- [Bertram *et al.*, 1998] Bertram, H.N., Zhou, H., & Gustafson, R. (1998). Signal to Noise Ratio Scaling and Density Limit Estimates in Longitudinal Magnetic Recording. *IEEE Transactions on Magnetics*, **34**, 1845–7.
- [Besag *et al.*, 1995] Besag, J., Green, P.J., Higdon, D., & Mengersen, K. (1995). Bayesian Computation and Stochastic Systems. *Statistical Science*, **10**, 3–66.
- [Bhaskar *et al.*, 1996] Bhaskar, N.D., White, J., Mallette, L.A., McClelland, T.A., & Hardy, J. (1996). A Historical Review of Atomic Frequency Standards used in Space Systems. Pages 24–32 of: *Proceedings of the 1996 IEEE International Frequency Control Symposium*. New York: IEEE.
- [Binnig *et al.*, 1986] Binnig, G., Quate, C.F., & Gerber, C. (1986). Atomic Force Microscope. *Physical Review Letters*, **56**, 930–3.
- [BIPM, 2019] BIPM. (2019). *The International System of Units (SI)*. Organisation Intergouvernementale de la Convention du Mètre.
- [Birtwistle & Davis, 1995] Birtwistle, G., & Davis, A. (eds). (1995). *Asynchronous Digital Circuit Design*. New York: Springer-Verlag.
- [Bitzer, 1999] Bitzer, D.L. (1999). Inventing the AC Plasma Panel. *Information Display*, **15**, 22–7.
- [Black, 1934] Black, H.S. (1934). Stabilized Feedback Amplifiers. *Bell System Technical Journal*, **13**, 1–18.
- [Blahut, 1988] Blahut, Richard E. (1988). *Principles and Practice of Information Theory*. Reading: Addison-Wesley.
- [Boguna & Corral, 1997] Boguna, M., & Corral, A. (1997). Long-Tailed Trapping Times

- and Levy Flights in a Self-Organized Critical Granular System. *Physical Review Letters*, **78**, 4950–3.
- [Born & Wolf, 1999] Born, Max, & Wolf, Emil. (1999). *Principles of Optics: Electromagnetic Theory of Propagation, Interference and Diffraction of Light*. 7th edn. Cambridge: Cambridge University Press.
- [Bortoletto *et al.*, 1999] Bortoletto, F., Bonoli, C., Fantinel, D., Gardio, D., & Pernechele, C. (1999). An Active Telescope Secondary Mirror Control System. *Review of Scientific Instruments*, **70**, 2856–60.
- [Bove, 1998] Bove, V.M. (1998). Object-Based Media and Stream-Based Computing. *Proceedings of SPIE*, **3311**, 24–9.
- [Boyer *et al.*, 1998] Boyer, M., Brassard, G., Hoyer, P., & Tapp, A. (1998). Tight Bounds on Quantum Searching. *Progress of Physics*, **46**, 493–505.
- [Boyle & Smith, 1971] Boyle, W.S., & Smith, G.E. (1971). Charge-Coupled Devices – A New Approach to MIS Device Structures. *IEEE Spectrum*, **8**, 18–27.
- [Brodie & Muray, 1982] Brodie, Ivor, & Muray, Julius J. (1982). *The Physics of Microfabrication*. New York: Plenum Press.
- [Brody, 1996] Brody, T.P. (1996). The Birth and Early Childhood of Active Matrix – A Personal Memoir. *Journal of the Society for Information Display*, **4**, 113–27.
- [Brunel *et al.*, 1999] Brunel, C., Lounis, B., Tamarat, P., & Orrit, M. (1999). Triggered Source of Single photons based on Controlled Single Molecule Fluorescence. *Physical Review Letters*, **83**, 2722–5.
- [Brush, 1976] Brush, Stephen G. (1976). *The Kind of Motion We Call Heat: A History of the Kinetic Theory of Gases in the 19th Century*. New York: North-Holland. 2 volumes.
- [Buschow, 1991] Buschow, K.H.J. (1991). New Developments in Hard Magnetic Materials. *Reports on Progress in Physics*, **54**, 1123–213.
- [Calderbank & Shor, 1996] Calderbank, A.R., & Shor, P.W. (1996). Good Quantum Error-Correcting Codes Exist. *Physical Review A*, **54**, 1098–105.
- [Callen, 1985] Callen, Herbert B. (1985). *Thermodynamics and an Introduction to Thermostatistics*. 2nd edn. New York: Wiley.
- [Campbell & Green, 1966] Campbell, F.W., & Green, D. (1966). Optical and Retinal Factors Affecting Visual Resolution. *Journal of Physiology*, **181**, 576–93.
- [Chandrasekhar, 1992] Chandrasekhar, S. (1992). *Liquid Crystals*. 2nd edn. Cambridge: Cambridge University Press.
- [Chapin *et al.*, 1954] Chapin, D.M., Fuller, C.S., & Pearson, G.L. (1954). A New Silicon *p-n* Junction Photocell for Converting Solar Radiation into Electrical Power. *Journal of Applied Physics*, **25**, 676.
- [Chen *et al.*, 1996] Chen, R. H., Korotkov, A. N., & Likharev, K. K. (1996). Single-Electron Transistor Logic. *Appl. Phys. Lett.*, **68**, 1954–1956.
- [Cheng *et al.*, 2013] Cheng, Jian, Liu, Chang-sheng, Shang, Shuo, Liu, Dun, Perrie, Walter, Dearden, Geoff, & Watkins, Ken. (2013). A review of ultrafast laser materials micromachining. *Optics & Laser Technology*, **46**, 88–102.
- [Choma *et al.*, 2003] Choma, Michael A., Sarunic, Marinko V., Yang, Changhuei, & Izatt, Joseph A. (2003). Sensitivity advantage of swept source and Fourier domain optical coherence tomography. *Optics Express*, **11**, 2183–2189.
- [Chow *et al.*, 1985] Chow, W.W., Gea-Banacloche, J., Pedrotti, L.M., Sanders, V.E., Schleich, W., & Scully, M.O. (1985). The Ring Laser Gyro. *Reviews of Modern Physics*, **57**, 61–104.
- [Chu & Wong, 1982] Chu, S., & Wong, S. (1982). Linear Pulse Propagation in an Absorbing Medium. *Physical Review Letters*, **48**, 738–741.
- [Chuang *et al.*, 1998a] Chuang, I.L., Gershenfeld, N., Kubinec, M.G., & Leung, D.W. (1998a). Bulk Quantum Computation with Nuclear Magnetic Resonance: Theory and Experiment. *Proceedings of the Royal Society of London Series A*, **454**, 447–67.

- [Chuang *et al.*, 1998b] Chuang, I.L., Gershenfeld, N., & Kubinec, M. (1998b). Experimental Implementation of Fast Quantum Searching. *Physical Review Letters*, **80**, 3408–11.
- [Cirac & Zoller, 1995] Cirac, J.I., & Zoller, P. (1995). Quantum Computations with Cold Trapped Ions. *Physical Review Letters*, **74**, 4091–4.
- [Clarke, 1999] Clarke, R.J. (1999). Image and Video Compression: A Survey. *International Journal of Imaging Systems & Technology*, **10**, 20–32.
- [Cohen *et al.*, 2003] Cohen, E. Richard, Lide, David R., & Trigg, George L. (eds). (2003). *A Physicist's Desk Reference*. New York: Springer.
- [Comiskey *et al.*, 1998] Comiskey, B., Albert, J.D., Yoshizawa, H., & Jacobson, J. (1998). An Electrophoretic Ink for All-Printed Reflective Electronic Displays. *Nature*, **394**, 253–5.
- [Conway, 1991] Conway, B.E. (1991). Transition from Supercapacitor to Battery Behavior in Electrochemical Energy-Storage. *Journal of the Electrochemical Society*, **138**, 1539–48.
- [Conway & Sloane, 1993] Conway, J.H., & Sloane, N.J.A. (1993). *Sphere Packings, Lattices, and Groups*. 2nd edn. New York: Springer-Verlag.
- [Cook, 1971] Cook, S.A. (1971). The Complexity of Theorem-Proving Procedures. Pages 151–8 of: *Proceedings of the 3rd Annual ACM Symposium on the Theory of Computing*. New York: Association for Computing Machinery.
- [Cooper *et al.*, 1999] Cooper, E.B., Manalis, S.R., Fang, H., Dai, H., Matsumoto, K., Minne, S.C., Hunt, T., & Quate, C.F. (1999). Terabit-per-Square-Inch Data Storage with the Atomic Force Microscope. *Applied Physics Letters*, **75**, 3566–8.
- [Cooper, 1956] Cooper, L.N. (1956). *Physical Review*, **104**, 1189.
- [Corney, 1978] Corney, Alan. (1978). *Atomic and Laser Spectroscopy*. Oxford: Clarendon Press.
- [Cory *et al.*, 1997] Cory, D.G., Fahmy, A.F., & Havel, T.F. (1997). Ensemble Quantum Computing by NMR Spectroscopy. *Proceedings of the National Academy of Science*, **94**, 1634–9.
- [Cory *et al.*, 1998] Cory, D.G., Price, M.D., Maas, W., Knill, E., Laflamme, R., Zurek, W.H., Havel, T.F., & Somaroo, S.S. (1998). Experimental Quantum Error Correction. *Physical Review Letters*, **81**, 2152–5.
- [Cover & Thomas, 2012] Cover, Thomas M, & Thomas, Joy A. (2012). *Elements of information theory*. John Wiley & Sons.
- [Cowper, 1998] Cowper, R. (1998). A View of Next Generation Optical Communication Systems – Possible Future High-Capacity Transport Implementations. *Proceedings of SPIE*, **3491**, 575–80.
- [Crisanti *et al.*, 1993] Crisanti, A., Jensen, M.H., Vulpiani, A., & Paladin, G. (1993). Intermittency and Predictability in Turbulence. *Physical Review Letters*, **70**, 166–9.
- [Crommie *et al.*, 1993] Crommie, M.F., Lutz, C.P., & Eigler, D.M. (1993). Confinement of Electrons to Quantum Corrals on a Metal Surface. *Science*, **262**, 218–20.
- [Danzer, 1999] Danzer, Paul (ed). (1999). *The ARRL Handbook for Radio Amateurs*. 76th edn. Newington: American Radio Relay League.
- [Datta & Das, 1990] Datta, Supriyo, & Das, Biswajit. (1990). Electronic Analog of the ElectroOptic Modulator. *Appl. Phys. Lett.*, **56**, 665–667.
- [Davis *et al.*, 1977] Davis, J.R., Dinger, R.J., & Goldstein, J.A. (1977). Development of a Superconducting ELF Receiving Antenna. *IEEE Transactions on Antennas & Propagation*, **AP-25**, 223–31.
- [de Groot & Mazur, 1984] de Groot, S.R., & Mazur, P. (1984). *Non-Equilibrium Thermodynamics*. Mineola: Dover Publications, Inc.
- [Delavaux & Nagel, 1995] Delavaux, J.-M.P., & Nagel, J.A. (1995). Multi-Stage

- Erbium-Doped Fiber Amplifier Designs. *Journal of Lightwave Technology*, **13**, 703–20.
- [Denk *et al.*, 1990] Denk, W., Strickler, J.H., & Webb, W.W. (1990). Two-Photon Laser Scanning Fluorescence Microscopy. *Science*, **248**, 73–6.
- [Dennard, 1968] Dennard, R.H. (1968). *Field-Effect Transistor Memory*. US Patent No. 3 387 286.
- [Denyer *et al.*, 1995] Denyer, P.B., Renshaw, D., & Smith, S.G. (1995). Intelligent CMOS Imaging. *Proceedings of SPIE*, **2415**, 285–91.
- [Deutsch, 1985] Deutsch, D. (1985). Quantum Theory, the Church–Turing Principle and the Universal Quantum Computer. *Proceedings of the Royal Society of London Series A*, **A400**, 97–117.
- [Dickinson & Denker, 1995] Dickinson, A.G., & Denker, J.S. (1995). Adiabatic Dynamic Logic. *IEEE Journal of Solid-State Circuits*, **30**, 311–5.
- [Dieny *et al.*, 1991] Dieny, B., Speriosu, V.S., Parkin, S.S.P., Gurney, B.A., Wilhoit, D.R., & Mauri, D. (1991). Giant Magnetoresistive in Soft Ferromagnetic Multilayers. *Phys. Rev. B*, **43**, 1297–1300.
- [Diffie & Hellman, 1976] Diffie, W., & Hellman, M. (1976). New Directions in Cryptography. *IEEE Transactions on Information Theory*, **IT-22**, 644–54.
- [DiVincenzo & Steinhardt, 1991] DiVincenzo, David P., & Steinhardt, Paul J. (eds). (1991). *Quasicrystals: The State of the Art*. Singapore: World Scientific.
- [Dixon, 1984] Dixon, R.C. (1984). *Spread Spectrum Systems*. New York: John Wiley & Sons.
- [Dolling *et al.*, 2006] Dolling, Gunnar, Enkrich, Christian, Wegener, Martin, Soukoulis, Costas M., & Linden, Stefan. (2006). Simultaneous Negative Phase and Group Velocity of Light in a Metamaterial. *Science*, **312**, 892–894.
- [Drexler, 1992] Drexler, K. Eric. (1992). *Nanosystems: Molecular Machinery, Manufacturing, and Computation*. New York: John Wiley & Sons.
- [Durrani *et al.*, 1999] Durrani, Z.A.K., Irvine, A.C., Ahmed, H., & Nakazato, K. (1999). A Memory Cell with Single-Electron and Metal-Oxide-Semiconductor Transistor Integration. *Applied Physics Letters*, **74**, 1293–5.
- [Dutta & Horn, 1981] Dutta, P., & Horn, P.M. (1981). Low-Frequency Fluctuations in Solids: $1/f$ Noise. *Reviews of Modern Physics*, **53**, 497–516.
- [*Economist*, 1993] *Economist*. (1993). **326**, 49 (January 30th).
- [Edelstein *et al.*, 1997] Edelstein, D., Heidenreich, J., Goldblatt, R., Cote, W., Uzoh, C., Lustig, N., Roper, P., McDevitt, T., Motsiff, W., Simon, A., Dukovic, J., Wachnik, R., Rathore, H., Schulz, R., Su, L., Luce, S., & Slattery, J. (1997). Full Copper Wiring in a Sub-0.25 μm CMOS ULSI Technology. Pages 773–776 of: *Proceedings of the IEEE International Electron Devices Meeting*. New York: IEEE.
- [Einstein, 1905] Einstein, A. (1905). Zur Elektrodynamik bewegter Körper. *Annalen der Physik*, **17**, 891–921.
- [Einstein, 1916] Einstein, A. (1916). Grundlagen der allgemeinen Relativitätstheorie. *Annalen der Physik*, **49**, 769–822.
- [Einstein *et al.*, 1935] Einstein, A., Podolsky, B., & Rosen, N. (1935). Can Quantum-Mechanical Description of Physical Reality be Considered Complete? *Physical Review*, **47**, 777–80.
- [Ekert & Jozsa, 1996] Ekert, Artur, & Jozsa, Richard. (1996). Quantum Computation and Shor's Factoring Algorithm. *Reviews of Modern Physics*, **68**(3), 733–53.
- [Ernst *et al.*, 1994] Ernst, R.R., Bodenhausen, G., & Wokaun, A. (1994). *Principles of Nuclear Magnetic Resonance in One and Two Dimensions*. Oxford: Oxford University Press.
- [Everett, 1957] Everett, Hugh. (1957). Relative State Formulation of Quantum Mechanics. *Reviews of Modern Physics*, **29**, 454–62.
- [Farhi *et al.*, 1998] Farhi, E., Goldstone, J., Gutmann, S., & Sipser, M. (1998). Limit on

- the Speed of Quantum Computation in Determining Parity. *Physical Review Letters*, **81**, 5442–4.
- [Fauchet, 1998] Fauchet, P.M. (1998). Progress Toward Nanoscale Silicon Light Emitters. *IEEE Journal of Selected Topics in Quantum Electronics*, **4**, 1020–8.
- [Feller, 1968] Feller, William. (1968). *An Introduction to Probability Theory and Its Applications*. 3rd edn. New York: Wiley.
- [Feller, 1974] Feller, William. (1974). *An Introduction to Probability Theory and Its Applications*. 2nd edn. Vol. II. New York: Wiley.
- [Fercher *et al.*, 2003] Fercher, A.F., Drexler, W., Hitzinger, C.K., & Lasser, T. (2003). Optical Coherence Tomography—Principles and Applications. *Rep. Prog. Phys.*, **66**, 239–303.
- [Ferguson, 1985] Ferguson, J.L. (1985). Polymer Encapsulated Nematic Liquid Crystals for Display and Light Control Applications. Pages 68–70 of: *1985 SID International Symposium*. New York: Palisades Institute for Research Services.
- [Feynman, 1982] Feynman, R.P. (1982). Simulating Physics with Computers. *International Journal of Theoretical Physics*, **21**, 467–88.
- [Feynman, 1992] Feynman, R.P. (1992). There's Plenty of Room at the Bottom (Data Storage). *Journal of Microelectromechanical Systems*, **1**, 60–6.
- [Fink *et al.*, 1998] Fink, Y., Winn, J.N., Shanhui, Fan, Chiping, Chen, Michel, J., Joannopoulos, J.D., & Thomas, E.L. (1998). A Dielectric Omnidirectional Reflector. *Science*, **282**, 1679–82.
- [Fischer *et al.*, 1972] Fischer, A.G., Brody, T.P., & Escott, W.S. (1972). Design of a Liquid Crystal Color TV Panel. Pages 64–6 of: *Conference on Display Devices*. IEEE Conference Record of 1972. Piscataway: IEEE.
- [Fitch, 1988] Fitch, J. Patrick. (1988). *Synthetic Aperture Radar*. New York: Springer-Verlag.
- [Fleischhauer *et al.*, 2005] Fleischhauer, Michael, Imamoglu, Atac, & Marangos, Jonathan P. (2005). Electromagnetically Induced Transparency: Optics in Coherent Media. *Reviews of Modern Physics*, **77**, 633–673.
- [Fletcher *et al.*, 1997] Fletcher, R., Levitan, J.A., Rosenberg, J., & Gershenfeld, N. (1997). Application of Smart Materials to Wireless ID Tags and Remote Sensors. George, E.P., Gotthardt, R., Otsuka, K., Trolrier-McKinstry, S., & Wun-Fogle, M. (eds), *Materials for Smart Systems II*. Pittsburgh: Materials Research Society.
- [Fletcher *et al.*, 1993] Fletcher, R.M., Kuo, K. Chihping, Osentowski, T.D., Jiann, G.Y., & Robbins, V.M. (1993). High-Efficiency Aluminum Indium Gallium Phosphide Light-Emitting Diodes. *Hewlett-Packard Journal*, **44**, 6–14.
- [Fowler & Nordheim, 1928] Fowler, R.H., & Nordheim, L. (1928). Electron Emission in Intense Electric Fields. *Proceedings of the Royal Society of London*, **119**, 173–81.
- [Fox *et al.*, 2001] Fox, G.R., Chu, F., & Davenport, T. (2001). Current and Future Ferroelectric Nonvolatile Memory Technology. *J. Vac. Sci. Technol. B*, **19**, 1967–1971.
- [Fraden, 1993] Fraden, Jacob. (1993). *AIP Handbook of Modern Sensors: Physics, Designs and Applications*. New York: American Institute of Physics.
- [Friend *et al.*, 1999] Friend, R.H., Gymer, R.W., Holmes, A.B., Burroughes, J.H., Marks, R.N., Taliani, C., Bradley, D.D.C., Santos, D.A. Dos, Bredas, J.L., Logdlund, M., & Salaneck, W.R. (1999). Electroluminescence in Conjugated Polymers. *Nature*, **397**, 121–8.
- [Fujimoto, 2001] Fujimoto, James G. (2001). Optical coherence tomography. *Comptes Rendus de l'Académie des Sciences - Series IV - Physics*, **2**, 1099–1111.
- [Fukada & Yasuda, 1957] Fukada, E., & Yasuda, L. (1957). On the Piezoelectric Effect of Bone. *Journal of the Physical Society of Japan*, **12**, 1158.

- [Fukuda, 1998] Fukuda, Y. (1998). Evidence for Oscillation of Atmospheric Neutrinos. *Physical Review Letters*, **81**, 1562–7.
- [Fukushima & Roeder, 1981] Fukushima, Eiichi, & Roeder, Stephen B.W. (1981). *Experimental Pulse NMR: A Nuts and Bolts Approach*. Reading: Addison-Wesley.
- [Furusawa *et al.*, 1998] Furusawa, A., Sorensen, J.L., Braunstein, S.L., Fuchs, C.A., Kimble, H.J., & Polzik, E.S. (1998). Unconditional Quantum Teleportation. *Science*, **282**, 706–9.
- [Gabor, 1948] Gabor, D. (1948). A New Microscopic Principle. *Nature*, **161**, 777–8.
- [Gabor, 1966] Gabor, D. (1966). Holography of the “Whole Picture”. *New Scientist*, **29**, 74–8.
- [Galtarossa *et al.*, 1994] Galtarossa, A., Smeda, C.G., Matera, F., & Schiano, M. (1994). Polarization Mode Dispersion in Long Single-Mode-Fiber Links: A Review. *Fiber & Integrated Optics*, **13**, 215–29.
- [Garey & Johnson, 1979] Garey, Michael R., & Johnson, David S. (1979). *Computers and Intractability: A Guide to the Theory of NP-completeness*. San Francisco: W.H. Freeman.
- [Garrett & McCumber, 1970] Garrett, C.G.B., & McCumber, D.E. (1970). Propagation of Gaussian Light Pulse through an Anomalous Dispersion Medium. *Physical Review A*, **1**, 305–313.
- [Geim & Novoselov, 2007] Geim, A.K., & Novoselov, K.S. (2007). The Rise of Graphene. *Nature Materials*, **6**, 183–191.
- [Gershenfeld, 1993] Gershenfeld, N.A. (1993). Information in Dynamics. Pages 276–80 of: Matzke, Doug (ed), *Proceedings of the Workshop on Physics of Computation*. Piscataway: IEEE Press.
- [Gershenfeld, 1996] Gershenfeld, N.A. (1996). Signal Entropy and the Thermodynamics of Computation. *IBM Systems Journal*, **35**, 577–86.
- [Gershenfeld, 1999a] Gershenfeld, N.A. (1999a). *The Nature of Mathematical Modeling*. Cambridge: Cambridge University Press.
- [Gershenfeld, 1999b] Gershenfeld, N.A. (1999b). *When Things Start To Think*. New York: Henry Holt and Company.
- [Gershenfeld & Chuang, 1997] Gershenfeld, N.A., & Chuang, I.L. (1997). Bulk Spin Resonance Quantum Computation. *Science*, **275**, 350–6.
- [Gershenfeld & Grinstein, 1995] Gershenfeld, N.A., & Grinstein, G. (1995). Entrainment and Communication with Dissipative Pseudorandom Dynamics. *Physical Review Letters*, **74**, 5024–7.
- [Gershenfeld *et al.*, 2010] Gershenfeld, Neil, Dalrymple, David, Chen, Kailiang, Knaian, Ara, Green, Forrest, Demaine, Erik D., Greenwald, Scott, & Schmidt-Nielsen, Peter. (2010). Reconfigurable asynchronous logic automata: (RALA). *SIGPLAN Not.*, **45**, 1–6.
- [Ghrayeb *et al.*, 1997] Ghrayeb, J., Jackson, T.W., Daniels, R., & Hopper, D.G. (1997). Review of Field Emission Display Potential as a Future (Leap-Frog) Flat Panel Technology. *Proceedings of SPIE*, **3057**, 237–48.
- [Giacomo, 1984] Giacomo, P. (1984). The new definition of the meter. *American Journal of Physics*, **52**(7), 607–613.
- [Gibble & Chu, 1993] Gibble, K., & Chu, S. (1993). Laser-Cooled Cs Frequency Standard and a Measurement of the Frequency Shift due to Ultracold Collisions. *Physical Review Letters*, **70**, 1771–4.
- [Gilbert, 1975] Gilbert, B. (1975). A New Technique for Analog Multiplication. *IEEE Journal of Solid-State Circuits*, **SC-10**, 437–47.
- [Ginger *et al.*, 2004] Ginger, David S., Zhang, Hua, & Mirkin, Chad A. (2004). The Evolution of Dip-Pen Nanolithography. *Angew. Chem. Int. Ed.*
- [Ginzburg & Landau, 1950] Ginzburg, V.L., & Landau, L.D. (1950). Concerning the Theory of Superconductivity. *Soviet Physics JETP*, **20**, 1064–82.

- [Girard, 1994] Girard, G. (1994). The Third Periodic Verification of National Prototypes of the Kilogram (1988–1992). *Metrologia*, **31**, 317–36.
- [Giveon & Kutasov, 1999] Giveon, A., & Kutasov, D. (1999). Brane Dynamics and Gauge Theory. *Reviews of Modern Physics*, **71**, 983–1084.
- [Goldstein, 1980] Goldstein, Herbert. (1980). *Classical Mechanics*. 2nd edn. Reading: Addison-Wesley.
- [Goodsell, 2009] Goodsell, David S. (2009). *The machinery of life*. Springer Science & Business Media.
- [Grabert & Devoret, 1992] Grabert, Hermann, & Devoret, Michel H. (eds). (1992). *Single Charge Tunneling: Coulomb Blockade Phenomena in Nanostructures*. New York: Plenum Press.
- [Greenberger *et al.*, 1990] Greenberger, D.M., Horne, M.A., Shimony, A., & Zeilinger, A. (1990). Bell's Theorem Without Inequalities. *American Journal of Physics*, **58**, 1131–43.
- [Grochowski *et al.*, 1993] Grochowski, E.G., Hoyt, R.F., & Heath, J.S. (1993). Magnetic Hard Disk Drive Form Factor Evolution. *IEEE Transactions on Magnetics*, **29**, 4065–7. Part 2.
- [Grover, 1997] Grover, L.K. (1997). Quantum Mechanics Helps in Searching for a Needle in a Haystack. *Physical Review Letters*, **79**, 325–8.
- [Grover, 1998] Grover, L.K. (1998). Quantum Computers Can Search Rapidly by Using Almost Any Transformation. *Physical Review Letters*, **80**, 4329–32.
- [Gruetter *et al.*, 1995] Gruetter, P., Mamin, H.J., & Rugar, D. (1995). Magnetic Force Microscopy (MFM). Pages 151–207 of: *Scanning Tunneling Microscopy II*. Berlin: Springer-Verlag.
- [Gundlach *et al.*, 1996] Gundlach, J.H., Adelberger, E.G., Heckel, B.R., & Swanson, H.E. (1996). New Technique for Measuring Newton's Constant G. *Physical Review D*, **54**, 1256.
- [Hagen, 1996] Hagen, Jon B. (1996). *Radio-Frequency Electronics: Circuits and Applications*. Cambridge: Cambridge University Press.
- [Hammar *et al.*, 1999] Hammar, P.R., Bennett, B.R., Yang, M.J., & Johnson, Mark. (1999). Observation of Spin Injection at a Ferromagnet-Semiconductor Interface. *Physical Review Letters*, **83**, 203–206.
- [Hardy & Wright, 1998] Hardy, G.H., & Wright, E.M. (1998). *An Introduction to the Theory of Numbers*. 5th edn. New York: Oxford University Press.
- [Hastings *et al.*, 1994] Hastings, M.B., Stone, A.D., & Baranger, H.U. (1994). Inequivalence of Weak Localization and Coherent Backscattering. *Physical Review B*, **50**, 8230–44.
- [Hawking, 1993] Hawking, S.W. (1993). *Hawking on the Big Bang and Black Holes*. Singapore: World Scientific.
- [Heald & Marion, 1995] Heald, Mark A., & Marion, Jerry B. (1995). *Classical Electromagnetic Radiation*. 3rd edn. Fort Worth: Saunders.
- [Heath *et al.*, 1998] Heath, J.R., Kuekes, P.J., Snider, G.S., & Williams, R.S. (1998). A Defect-Tolerant Computer Architecture: Opportunities for Nanotechnology. *Science*, **280**, 1716–21.
- [Herring, 1999] Herring, T.A. (1999). Geodetic Applications of GPS. *Proceedings of the IEEE*, **87**, 92–110.
- [Herzig & Dandliker, 1987] Herzig, H.P., & Dandliker, R. (1987). Holographic Optical Scanning Elements: Analytical Method for Determining the Phase Function. *Journal of the Optical Society of America A*, **4**, 1063–70.
- [Hill & Peterson, 1993] Hill, Fredrick J., & Peterson, Gerald R. (1993). *Computer Aided Logical Design with Emphasis on VLSI*. 4th edn. New York: Wiley.
- [Hoffmann, 1988] Hoffmann, Roald. (1988). *Solids and Surfaces: A Chemist's View of Bonding in Extended Structures*. New York: VCH Publishers.

- [Hollister, 1987] Hollister, D.D. (1987). Overview of Advances in Light Sources. *Proceedings of SPIE*, **692**, 170–7.
- [Hornbeck, 1998] Hornbeck, Larry J. (1998). From Cathode Rays to Digital Micromirrors: A History of Electronic Projection Display Technology. *Texas Instruments Technical Journal*, **15**.
- [Horowitz & Hill, 1993] Horowitz, Paul, & Hill, Winfield. (1993). *The Art of Electronics*. 2nd edn. Cambridge: Cambridge University Press.
- [Huang *et al.*, 1991] Huang, D., Swanson, E.A., Lin, C.P., Schuman, J.S., Stinson, W.G., Chang, W., Hee, M.R., Flotte, T., Gregory, K., Puliafito, C.A., & Fujimoto, J.G. (1991). Optical Coherence Tomography. *Science*, **254**, 1178–81.
- [Hughes *et al.*, 2000] Hughes, R.J., Buttler, W.T., Kwiat, P.G., Lamoreaux, S.K., Morgan, G.L., Nordholt, J.E., & Peterson, C.G. (2000). Free-Space Quantum Key Distribution in Daylight. *Journal of Modern Optics*, **47**, 549–62.
- [Hummel, 1993] Hummel, Rolf E. (1993). *Electronic Properties of Materials*. 2nd edn. Berlin: Springer-Verlag.
- [Hunt & Fisher, 1990] Hunt, G.R., & Fisher, W.G. (1990). EMP Ship Trial, Planning, Execution and Result. Pages 308–17 of: *Seventh International Conference on Electromagnetic Compatibility*. IEE, London.
- [Jackman *et al.*, 1998] Jackman, R.J., Brittain, S.T., Adams, A., Prentiss, M.G., & Whitesides, G.M. (1998). Design and Fabrication of Topologically Complex, Three-Dimensional Microstructures. *Science*, **280**, 2089–91.
- [Jackson, 1999] Jackson, John David. (1999). *Classical Electrodynamics*. 3rd edn. New York: Wiley.
- [Jedema *et al.*, 2001] Jedema, F.J., Filip, A.T., & van Wees, B.J. (2001). Electrical Spin Injection and Accumulation at Room Temperature in an All-Metal Mesoscopic Spin Valve. *Nature*, **410**, 345–348.
- [Joannopoulos *et al.*, 1997] Joannopoulos, J.D., Villeneuve, P.R., & Fan, S. (1997). Photonic Crystals: Putting a New Twist on Light. *Nature*, **386**, 143–149.
- [Johnson & Rahmat-Samii, 1997] Johnson, J.M., & Rahmat-Samii, V. (1997). Genetic Algorithms in Engineering Electromagnetics. *IEEE Antennas & Propagation Magazine*, **39**, 7–21.
- [Johnson & Silsbee, 1985] Johnson, Mark, & Silsbee, R. H. (1985). Interfacial Charge-Spin Coupling: Injection and Detection of Spin Magnetization in Metals. *Phys. Rev. Lett.*, **55**, 1790–1793.
- [Johnson & Jajodia, 1998] Johnson, N.F., & Jajodia, S. (1998). Steganography: Seeing the Unseen. *IEEE Computer*, **31**, 26–34.
- [Jones & Mosca, 1998] Jones, J.A., & Mosca, M. (1998). Implementation of a Quantum Algorithm on a Nuclear Magnetic Resonance Quantum Computer. *Journal of Chemical Physics*, **109**, 1648–53.
- [Josephson, 1962] Josephson, B.D. (1962). Possible New Effects in Superconductive Tunnelling. *Physics Letters*, **1**, 251.
- [Jozsa & Schumacher, 1994] Jozsa, R., & Schumacher, B. (1994). A New Proof of the Quantum Noiseless Coding Theorem. *Journal of Modern Optics*, **41**, 2343–9.
- [Jungman *et al.*, 1996] Jungman, G., Kamionkowski, M., Kosowsky, A., & Spergel, D.N. (1996). Weighing the Universe with the Cosmic Microwave Background. *Physical Review Letters*, **76**, 1007–10.
- [Kak & Slaney, 1988] Kak, A.C., & Slaney, M. (1988). *Principles of Computerized Tomographic Imaging*. New York: IEEE Press.
- [Kane, 1998] Kane, B.E. (1998). A Silicon-Based Nuclear Spin Quantum Computer. *Nature*, **393**, 133–7.
- [Kastner, 1992] Kastner, M.A. (1992). The Single-Electron Transistor. *Reviews of Modern Physics*, **64**, 849–858.
- [Kawai, 1969] Kawai, H. (1969). The Piezoelectricity of Poly(vinylidene Fluoride). *Japanese Journal of Applied Physics*, **8**, 975–6.

- [Keyes, 1987] Keyes, R.W. (1987). *The Physics of VLSI Systems*. Reading: Addison-Wesley.
- [Kino, 1987] Kino, Gordon S. (1987). *Acoustic Waves: Devices, Imaging, and Analog Signal Processing*. Englewood Cliffs: Prentice-Hall.
- [Knill *et al.*, 1998a] Knill, E., I., & Laflamme, R. (1998a). Effective Pure States for Bulk Quantum Computation. *Physical Review A*, **57**, 3348–63.
- [Knill *et al.*, 1998b] Knill, E., Laflamme, R., & Zurek, W.H. (1998b). Resilient Quantum Computation. *Science*, **279**, 342–5.
- [Koblitz, 1994] Koblitz, N. (1994). *A Course in Number Theory and Cryptography*. New York: Springer-Verlag.
- [Koenen, 1999] Koenen, R. (1999). MPEG-4: Multimedia For Our Time. *IEEE Spectrum*, **36**, 26–33.
- [Kusch, 1949] Kusch, P. (1949). Some Design Considerations of an Atomic Clock using Atomic Beam Techniques. *Physical Review*, **76**, 161.
- [Kwong, 1995] Kwong, K.K. (1995). Functional Magnetic Resonance Imaging with Echo Planar Imaging. *Magnetic Resonance Quarterly*, **11**, 1–20.
- [Land, 1951] Land, E.H. (1951). Some Aspects of the Development of Sheet Polarizers. *Journal of the Optical Society of America*, **41**, 956–63.
- [Landauer, 1961] Landauer, Rolf. (1961). Irreversibility and Heat Generation in the Computing Process. *IBM Journal of Research and Development*, **5**, 183–91.
- [Landman & Russo, 1971] Landman, E.S., & Russo, R.L. (1971). On a Pin Versus Block Relationships for Partitions of Logic Graphs. *IEEE Transactions on Computers*, **C20**, 1469–79.
- [Larsen, 1973] Larsen, K.J. (1973). Short Convolutional Codes with Maximal Free Distance for Rates 1/2, 1/3, and 1/4. *IEEE Transactions on Information Theory*, **IT-19**, 371–2.
- [Lauterbur, 1973] Lauterbur, P.C. (1973). Image Formation by Induced Local Interactions: Examples Employing Nuclear Magnetic Resonance. *Nature*, **242**, 190–1.
- [Leff & Rex, 1990] Leff, Harvey S. & Rex, Andrew F. (eds). (1990). *Maxwell's Demon: Entropy, Information, Computing*. Princeton: Princeton University Press.
- [Lehrman & Tully, 1993] Lehrman, Paul D., & Tully, Tim. (1993). *MIDI For The Professional*. New York: Amsco Publications.
- [Lenstra & Lenstra, Jr., 1993] Lenstra, A.K., & Lenstra, Jr., H.W. (eds). (1993). *The Development of the Number Field Sieve*. Lecture Notes in Math, 1554. New York: Springer-Verlag.
- [Leonhardt & Tyc, 2009] Leonhardt, Ulf, & Tyc, Tomáš. (2009). Broadband Invisibility by Non-Euclidean Cloaking. *Science*, **323**, 110–112.
- [Lerner & Trigg, 2005] Lerner, Rita G., & Trigg, George L. (eds). (2005). *Encyclopedia of Physics*. 3rd edn. New York: Wiley.
- [Lichtman, 1994] Lichtman, J.W. (1994). Confocal Microscopy. *Scientific American*, **271**, 30–5.
- [Likharev, 1999] Likharev, K. (1999). Superconductor Devices for Ultrafast Computing. Weinstock, H. (ed), *Applications of Superconductivity*. Dordrecht: Kluwer.
- [Likharev & Claeson, 1992] Likharev, K.K., & Claeson, T. (1992). Single Electronics. *Scientific American*, **266**, 50–5.
- [Lin *et al.*, 2009] Lin, Yu-Ming, and Alberto Valdes-Garcia, Keith A. Jenkins, Small, Joshua P., Farmer, Damon B., & Avouris, Phaedon. (2009). Operation of Graphene Transistors at Gigahertz Frequencies. *Nano Letters*, **9**, 422–426.
- [Lind & Marcus, 1995] Lind, Douglas, & Marcus, Brian. (1995). *An Introduction to Symbolic Dynamics and Coding*. Cambridge: Cambridge University Press.
- [Linden *et al.*, 1999] Linden, N., Barjat, H., Kupce, E., & Freeman, R. (1999). How to Exchange Information Between Two Coupled Nuclear Spins: the Universal SWAP Operation. *Chemical Physics Letters*, **307**, 198–204.
- [Liu *et al.*, 2001] Liu, C., Dutton, Z., Behroozi, C.H., & Hau, L.V. (2001). Observation of

- Coherent Optical Information Storage in an Atomic Medium using Halted Light Pulses. *Nature*, **409**, 490–493.
- [Lloyd, 1993] Lloyd, S. (1993). A Potentially Realizable Quantum Computer. *Science*, **261**, 1569–71.
- [Lloyd, 1996] Lloyd, S. (1996). Universal Quantum Simulators. *Science*, **273**, 1073–8.
- [Lloyd, 1997] Lloyd, S. (1997). Capacity of the Noisy Quantum Channel. *Physical Review A*, **55**, 1613–22.
- [Lloyd, 2000] Lloyd, S. (2000). Ultimate Physical Limits to Computation. *Nature*, **406**, 1047–1054.
- [Lo & Chau, 1999] Lo, H.K., & Chau, H.F. (1999). Unconditional Security of Quantum Key Distribution over Arbitrarily Long Distances. *Science*, **283**, 2050–6.
- [Lott *et al.*, 1993] Lott, J.A., Schneider, R.P., Choquette, K.D., Kilcoyne, S.P., & Figiel, J.J. (1993). Room Temperature Continuous Wave Operation of Red Vertical Cavity Surface Emitting Laser Diodes. *Electronics Letters*, **29**, 1693–4.
- [Lucente, 1997] Lucente, Mark. (1997). Interactive Three-Dimensional Holographic Displays: Seeing the Future in Depth. *Computer Graphics*, **31**, 63–7.
- [Luo *et al.*, 2002] Luo, C., Johnson, S.G., Joannopoulos, J.D., & Pendry, J.B. (2002). All-Angle Negative Refraction Without Negative Effective Index. *Physical Review B*, **65**, 201104.
- [Major, 1998] Major, Fouad G. (1998). *The Quantum Beat: The Physical Principles of Atomic Clocks*. New York: Springer.
- [Mallinson, 1993] Mallinson, J.C. (1993). *The Foundations of Magnetic Recording*. 2nd edn. Boston: Academic Press.
- [Mallinson, 1996] Mallinson, J.C. (1996). Scaling in Magnetic Recording. *IEEE Transactions on Magnetics*, **32**, 599–600.
- [Mandelbrot, 1983] Mandelbrot, Benoit B. (1983). *The Fractal Geometry of Nature*. New York: W.H. Freeman.
- [Marqués *et al.*, 2003] Marqués, R., Mesa, F., Martel, J., & Medina, F. (2003). Comparative Analysis of Edge- and Broadside-Coupled Split Ring Resonators for Metamaterial Design—Theory and Experiments. *IEEE Transactions on Antennas and Propagation*, **51**, 2572–2581.
- [Mattis, 1988] Mattis, Daniel C. (1988). *The Theory of Magnetism I: Statics and Dynamics*. New York: Springer-Verlag.
- [Maxwell, 1998] Maxwell, James Clerk. (1998). *A Treatise on Electricity and Magnetism*. 3rd edn. Oxford: Oxford University Press. First published in 1873.
- [McCluskey, 1956] McCluskey, E.J. (1956). Minimization of Boolean Functions. *Bell System Technical Journal*, **35**, 1417–44.
- [McKittrick *et al.*, 1999] McKittrick, J., Kassner, M.E., & Shea, L.E. (1999). Materials Issues in Flat Panel Displays: Phosphor Selection and Optimization. *Proceedings of SPIE*, **3582**, 565–70.
- [Mee & Daniel, 1996] Mee, C. Denis, & Daniel, Eric D. (eds). (1996). *Magnetic Storage Handbook*. 2nd edn. New York: McGraw-Hill.
- [Merkle, 1978] Merkle, R. (1978). Secure Communications over Insecure Channels. *Communications of the ACM*, **21**, 294–9.
- [Merkle, 1993] Merkle, R.C. (1993). Reversible electronic logic using switches. *Nanotechnology*, **4**, 21–40.
- [Merkle, 1998] Merkle, R.C. (1998). Making Smaller, Faster, Cheaper Computers. *Proceedings of the IEEE*, **86**, 2384–6.
- [Mermin, 1985] Mermin, N.D. (1985). Is the moon there when nobody looks? Reality and the quantum theory. *Physics Today*, **38**, 38–47.
- [Mermin, 1993] Mermin, N.D. (1993). Hidden Variables and the Two Theorems of John Bell. *Reviews of Modern Physics*, **65**, 803–15.
- [Merzbacher *et al.*, 1996] Merzbacher, C.I., Kersey, A.D., & Friebele, E.J. (1996). Fiber

- Optic Sensors in Concrete Structures: A Review. *Smart Materials & Structures*, **5**, 196–208.
- [Millman & Grabel, 1987] Millman, Jacob, & Grabel, Arvin. (1987). *Microelectronics*. 2nd edn. New York: McGraw-Hill.
- [Mills *et al.*, 2005] Mills, Ian M, Mohr, Peter J, Quinn, Terry J, Taylor, Barry N, & Williams, Edwin R. (2005). Redefinition of the kilogram: a decision whose time has come. *Metrologia*, **42**(2), 71.
- [Minsky, 1957] Minsky, Marvin. (1957). *Microscopy Apparatus*. US Patent No. 3 013 467.
- [Misner *et al.*, 1973] Misner, C.W., Wheeler, J.A., & Thorne, K.S. (1973). *Gravitation*. New York: W.H. Freeman & Co.
- [Mitchell & George, 1998] Mitchell, S., & George, R. (1998). EMP Protection. *Electrotechnology*, **9**, 33–5.
- [Miya *et al.*, 1979] Miya, T., Terunuma, Y., Hosaka, T., & Miyashita, T. (1979). Ultimate Low-Loss Single-Mode Fibre at 1.55 μm . *Electronics Letters*, **15**, 106–8.
- [Mohr *et al.*, 2016] Mohr, Peter J, Newell, David B, & Taylor, Barry N. (2016). CODATA recommended values of the fundamental physical constants: 2014. *Journal of Physical and Chemical Reference Data*, **45**(4), 043102.
- [Mollenauer *et al.*, 1996] Mollenauer, L.F., Mamyshev, P.V., & Neubelt, M.J. (1996). Demonstration of Soliton WDM Transmission at 6 and 7*10 Gbit/s, Error Free Over Transoceanic Distances. *Electronics Letters*, **32**, 471–3.
- [Montroll & Lebowitz, 1987] Montroll, E.W., & Lebowitz, J.L. (eds). (1987). *Fluctuation Phenomena*. New York: North-Holland.
- [Mooij *et al.*, 1999] Mooij, J.E., Orlando, T.P., Levitov, L., Tian, L., van der Wal, C.H., & Lloyd, S. (1999). Josephson Persistent-Current Qubit. *Science*, **285**, 1036–9.
- [Moore, 1979] Moore, G. (1979). VLSI: Some Fundamental Challenges. *IEEE Spectrum*, **16**, 30.
- [Morrison & Morrison, 1982] Morrison, Philip, & Morrison, Phylis. (1982). *Powers Of Ten: A Book About the Relative Size of Things*. Redding: Scientific American Library.
- [Mukai *et al.*, 1999] Mukai, T., Yamada, M., & Nakamura, S. (1999). Characteristic of InGaN-based UV/Blue/Green/Amber/Red Light-Emitting Diodes. *Japanese Journal of Applied Physics*, **38**, 3976–81.
- [Muller *et al.*, 1996] Muller, A., Zbinden, H., & Gisin, N. (1996). Quantum Cryptography over 23 km in Installed Under-Lake Telecom Fibre. *Europhysics Letters*, **33**, 335–9.
- [Nachtmann, 1990] Nachtmann, Otto. (1990). *Elementary Particle Physics: Concepts and Phenomena*. New York: Springer-Verlag. Translated by A. Lahee and W. Wetzel.
- [Nakamura *et al.*, 2000] Nakamura, Shuji, Senoh, Masayuki, Ichi Nagahama, Shin, Iwasa, Naruhito, Matsushita, Toshio, & Mukai, Takashi. (2000). Blue InGaN-Based Laser Diodes with an Emission Wavelength of 450 nm. *Applied Physics Letters*, **76**, 22–24.
- [Nakashima, 1998] Nakashima, H. (1998). Present Status of Progress in MAGLEV Development. *Japanese Railway Engineering*, **37**, 6–8.
- [Nakazawa *et al.*, 1993] Nakazawa, M., Kimura, Y., & Suzuki, K. (1993). Nonlinear Optics in Optical Fibers and Future Prospects for Optical Soliton Communications Technologies. *NTT R&D*, **42**, 1317–26.
- [Nielsen & Chuang, 2000] Nielsen, M.A., & Chuang, I.L. (2000). *Quantum Computation and Quantum Information*. Cambridge: Cambridge University Press.
- [Ogawa *et al.*, 1990] Ogawa, S., Lee, T.M., Kay, A.R., & Tank, D.W. (1990). Brain Magnetic Resonance Imaging with Contrast Dependent on Blood Oxygenation. *Proceedings of the National Academy of Sciences*, **87**, 9868–72.
- [O’Handley, 1999] O’Handley, Robert C. (1999). *Modern Magnetic Materials: Principles and Applications*. Hoboken, NJ: Wiley-Interscience.

- [O'Mara, 1993] O'Mara, William C. (1993). *Liquid Crystal Flat Panel Displays: Manufacturing Science & Technology*. New York: Van Nostrand Reinhold.
- [Ono & Yano, 1998] Ono, T., & Yano, Y. (1998). Key Technologies for Terabit/Second WDM Systems with High Spectral Efficiency of over 1 bit/s/Hz. *IEEE Journal of Quantum Electronics*, **34**, 2080–8.
- [Onsager, 1931] Onsager, L. (1931). *Physical Review*, **38**, 2265.
- [Pai & Springett, 1993] Pai, D.M., & Springett, B.E. (1993). Physics of Electrophotography. *Reviews of Modern Physics*, **65**, 163–211.
- [Pappu *et al.*, 2002] Pappu, Ravikanth, Recht, Ben, Taylor, Jason, & Gershenfeld, Neil. (2002). Physical One-Way Functions. *Science*, **297**, 2026–2030.
- [Parkin, 1994] Parkin, S.S.P. (1994). Materials Update: Giant Magnetoresistance in Magnetic Multilayers and Granular Alloys. *Materials Letters*, **20**, 1–4.
- [Pavlidis, 1999] Pavlidis, D. (1999). HBT vs. PHEMT vs. MESFET: What's Best and Why. *Compound Semiconductor*, **5**, 56–9.
- [Pendry, 2000] Pendry, J.B. (2000). Negative Refraction Makes a Perfect Lens. *Physical Review Letters*, **85**, 3966–3969.
- [Pendry *et al.*, 1998] Pendry, J.B., Holden, A.J., Robbins, D.J., & Stewart, W.J. (1998). Low Frequency Plasmons in Thin-Wire Structures. *J. Phys. Condens. Matter*, **10**, 4785–4809.
- [Pendry *et al.*, 1999] Pendry, J.B., Holden, A.J., Robbins, D.J., & Stewart, W.J. (1999). Magnetism from Conductors and Enhanced Nonlinear Phenomena. *IEEE Transactions of Microwave Theory and Techniques*, **47**, 2075–2084.
- [Pendry *et al.*, 2006] Pendry, J.B., Schurig, D., & Smith, D.R. (2006). Controlling Electromagnetic Fields. *Science*, **312**, 1780–1782.
- [Peres, 1990] Peres, A. (1990). Incompatible Results of Quantum Measurements. *Physics Letters A*, **151**, 107–8.
- [Peres, 1993] Peres, Asher. (1993). *Quantum Theory: Concepts and Methods*. Boston: Kluwer Academic.
- [Peters *et al.*, 1999] Peters, A., Chung, K.Y., & Chu, S. (1999). Measurement of Gravitational Acceleration by Dropping Atoms. *Nature*, **400**, 849–52.
- [Phillips *et al.*, 2001] Phillips, D.F., Fleischhauer, A., Mair, A., Walsworth, R.L., & Lukin, M.D. (2001). Storage of Light in Atomic Vapor. *Physical Review Letters*, **86**, 783–786.
- [Phillips *et al.*, 1998] Phillips, P.M., Spindt, C.A., Holland, C.E., Schwoebel, P.R., & Brodie, I. (1998). Development of Spindt Cathodes for High Frequency Devices and Flat Panel Display Applications. *Proceedings of SPIE*, **3465**, 90–7.
- [Posner & Stevens, 1984] Posner, E.C., & Stevens, R. (1984). Deep Space Communication – Past, Present, and Future. *IEEE Communications Magazine*, **22**, 8–21.
- [Postma *et al.*, 2001] Postma, Henk W. Ch., Teepen, Tijs, Yao, Zhen, Grifoni, Milena, & Dekker, Cees. (2001). Carbon Nanotube Single-Electron Transistors at Room Temperature. *Science*, **293**, 76–79.
- [Press *et al.*, 2007] Press, William H., Teukolsky, Saul A., Vetterling, William T., & Flannery, Brian P. (2007). *Numerical Recipes in C: The Art of Scientific Computing*. 3rd edn. Cambridge: Cambridge University Press.
- [Pritchard & Gibson, 1980] Pritchard, D., & Gibson, J. (1980). Worldwide Color Television Standards. *J. Soc. Motion. Pict. Telev. Eng.*, **89**, 111–120.
- [Quine, 1952] Quine, W.V. (1952). The Problem of Simplifying Truth Functions. *American Mathematical Monthly*, **59**, 521–31.
- [Radon, 1917] Radon, J. (1917). On The Determination Of Functions From Their Integrals Along Certain Manifolds. *Berichte Saechsische Akademie der Wissenschaften*, **29**, 262–77.
- [Rallison, 1984] Rallison, R. (1984). Applications of Holographic Optical Elements. *Lasers & Applications*, **3**, 61–8.

- [Ramirez, 1997] Ramirez, A.P. (1997). Colossal Magnetoresistance. *J. Phys.: Condens. Matter*, **9**, 8171–8199.
- [Ramirez *et al.*, 1997] Ramirez, A.P., Cheong, S-W, & Schiffer, P. (1997). Colossal Magnetoresistance and Charge Order in $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$. *Journal of Applied Physics*, **81**, 5337–42.
- [Ramo *et al.*, 1994] Ramo, Simon, Whinnery, John R., & Duzer, Theodore Van. (1994). *Fields and Waves in Communication Electronics*. 3rd edn. New York: Wiley.
- [Ramsey, 1980] Ramsey, N.F. (1980). The Method of Successive Oscillatory Fields. *Physics Today*, **33**, 25–30.
- [Rauf & Kushner, 1999] Rauf, S., & Kushner, M.J. (1999). Dynamics of a Coplanar-Electrode Plasma Display Panel Cell. I. Basic Operation. *Journal of Applied Physics*, **85**, 3460–9.
- [Reichl, 1998] Reichl, L.E. (1998). *A Modern Course in Statistical Physics*. 2nd edn. New York: Wiley.
- [Reif, 1965] Reif, F. (1965). *Fundamentals of Statistical and Thermal Physics*. New York: McGraw-Hill.
- [R.Evans *et al.*, 2018] R.Evans, J.Jumper, J.Kirkpatrick, L.Sifre, T.F.G.Green, C.Qin, A.Zidek, A.Nelson, A.Bridgland, H.Penedones, S.Petersen, K.Simonyan, S.Crossan, D.T.Jones, D.Silver, K.Kavukcuoglu, D.Hassabis, & A.W.Senior. (2018). *De novo structure prediction with deep-learning based scoring*. In Thirteenth Critical Assessment of Techniques for Protein Structure Prediction.
- [Ridley *et al.*, 1999] Ridley, B., Nivi, B., & Jacobson, J. (1999). All-Inorganic Field Effect Transistors Fabricated by Printing. *Science*, **286**, 746–9.
- [Rivest *et al.*, 1978] Rivest, R.L., Shamir, A., & Adleman, L.M. (1978). A Method of Obtaining Digital Signatures and Public-Key Cryptosystems. *Communications of the ACM*, **21**, 120–6.
- [Rodgers *et al.*, 1997] Rodgers, M.S., Sniegowski, J.J., Miller, S.L., Barron, C., & P.J. McWhorter. (1997). Advanced Micromechanisms in a Multi-Level Polysilicon Technology. *Proceedings of SPIE*, **3224**, 120–30.
- [Rogers & Buhrman, 1984] Rogers, C.T., & Buhrman, R.A. (1984). Composition of $1/f$ Noise in Metal–Insulator–Metal Tunnel Junctions. *Physical Review Letters*, **53**, 1272–5.
- [Rogers & Nuzzo, 2005] Rogers, John A., & Nuzzo, Ralph G. (2005). Recent Progress in Soft Lithography. *Materials Today*, 50–56.
- [Rüeger, 1990] Rüeger, J.M. (1990). *Electronic Distance Measurement*. 3rd edn. New York: Springer-Verlag.
- [Sakurai, 1967] Sakurai, J.J. (1967). *Advanced Quantum Mechanics*. Reading: Addison-Wesley.
- [Schack & Caves, 1999] Schack, R., & Caves, C.M. (1999). Classical Model for Bulk-Ensemble NMR Quantum Computation. *Physical Review A*, **60**, 4354–62.
- [Schadt & Helfrich, 1971] Schadt, M., & Helfrich, W. (1971). Voltage-Dependent Optical Activity of a Twisted Nematic Liquid Crystal. *Applied Physics Letters*, **18**, 127–8.
- [Schroeder, 1990] Schroeder, M.R. (1990). *Number Theory in Science and Communication*. 2nd edn. New York: Springer-Verlag.
- [Schroeder *et al.*, 1979] Schroeder, M.R., Atal, B.S., & Hall, J.L. (1979). Optimizing digital speech coders by exploiting masking properties of the human ear. *Journal of the Acoustical Society of America*, **66**, 1647–52.
- [Schwarze *et al.*, 1993] Schwarze, V.S., Hartmann, T., Leins, M., & Soffel, M.H. (1993). Relativistic Effects in Satellite Positioning. *Manuscripta Geodaetica*, **18**, 306–16.
- [Scott, 1998] Scott, J.F. (1998). Status Report on Ferroelectric Memory Materials. *Integrated Ferroelectrics*, **20**, 15–23.

- [Sheats *et al.*, 1996] Sheats, J.R., Antoniadis, H., Hueschen, M., Leonard, W., Miller, J., Moon, R., Roitman, D., & Stocking, A. (1996). Organic Electroluminescent Devices. *Science*, **273**, 884–8.
- [Shepherd, 1990] Shepherd, G. (1990). *The Synaptic Organization of the Brain*. 3rd edn. New York: Oxford University Press.
- [Shor, 1995] Shor, P.W. (1995). Scheme for Reducing Decoherence in Quantum Computer Memory. *Physical Review A*, **52**, 2493–6.
- [Shor, 1996] Shor, P.W. (1996). Fault-Tolerant Quantum Computation. Pages 56–65 of: *Proceedings of the 37th Annual Symposium Foundations of Computer Science*. Los Alamitos: IEEE Computer Society Press.
- [Shor, 1997] Shor, P.W. (1997). Polynomial-Time Algorithms for Prime Factorization and Discrete Logarithms on a Quantum Computer. *SIAM Journal on Computing*, **26**, 1484–509.
- [Shung *et al.*, 1992] Shung, K. Kirk, Smith, Michael B., & Tsui, Benjamin. (1992). *Principles of Medical Imaging*. San Diego: Academic Press.
- [Sikora, 1997] Sikora, T. (1997). MPEG Digital Video-Coding Standards. *IEEE Signal Processing Magazine*, **14**, 82–100.
- [Simmons, 1992] Simmons, G.J. (ed). (1992). *Contemporary Cryptology: The Science of Information Integrity*. Piscataway: IEEE Press.
- [Simon *et al.*, 1994] Simon, M.K., Omura, J.K., Scholtz, R.A., & Levitt, B.K. (1994). *Spread Spectrum Communications Handbook*. New York: McGraw-Hill.
- [Sklar, 1988] Sklar, Bernard. (1988). *Digital Communications: Fundamentals and Applications*. Englewood Cliffs: Prentice Hall.
- [Skolnik, 1990] Skolnik, Merrill I. (ed). (1990). *Radar Handbook*. 2nd edn. New York: McGraw-Hill.
- [Slepian, 1974] Slepian, David (ed). (1974). *Key Papers in the Development of Information Theory*. New York: IEEE Press.
- [Slichter, 1992] Slichter, Charles P. (1992). *Principles of Magnetic Resonance*. 3rd edn. New York: Springer-Verlag.
- [Smith *et al.*, 2004] Smith, D.R., Pendry, J.B., & Wiltshire, M.C.K. (2004). Metamaterials and Negative Refractive Index. *Science*, **305**, 788–792.
- [Smith, 1996] Smith, J.R. (1996). Field Mice: Extracting Hand Geometry From Electric Field Measurements. *IBM Systems Journal*, **35**, 587–608.
- [Smith, 1999] Smith, J.R. (1999). *Electric Field Imaging*. Ph.D. thesis, MIT.
- [Snider & Williams, 2007] Snider, Gregory S., & Williams, R. Stanley. (2007). Nano/CMOS Architectures Using a Field-Programmable Nanowire Interconnect. *Nanotechnology*, **18**, 1–11.
- [Sobel, 1996] Sobel, Dava. (1996). *Longitude: The True Story of a Lone Genius Who Solved the Greatest Scientific Problem of His Time*. New York: McGraw-Hill.
- [Somaroo *et al.*, 1999] Somaroo, S., Tseng, C.H., Havel, T.F, Laflamme, R., & Cory, D.G. (1999). Quantum Simulations on a Quantum Computer. *Physical Review Letters*, **82**, 5381–4.
- [Someya *et al.*, 1999] Someya, T., Werner, R., Forchel, A., Catalano, M., Cingolani, R., & Arakawa, Y. (1999). Room Temperature Lasing at Blue Wavelengths in Gallium Nitride Microcavities. *Science*, **285**, 1905–6.
- [Song *et al.*, 1999] Song, Y.Q., Goodson, B.M., & Pines, A. (1999). NMR and MRI using Laser-Polarized Xenon. *Spectroscopy*, **14**, 26–33.
- [Sourlas, 1989] Sourlas, N. (1989). Spin-Glass Models as Error-Correcting Codes. *Nature*, **339**, 693–5.
- [Spuhler, 1983] Spuhler, H. (1983). Where Fluidics Still Makes Sense. *Machine Design*, **55**, 92–4.
- [Starkweather, 1980] Starkweather, G.K. (1980). High-Speed Laser Printing Systems. Pages 125–89 of: *Laser Applications*, vol. 4. New York: Academic Press.

- [Steane, 1996] Steane, A.M. (1996). Error Correcting Codes in Quantum Theory. *Physical Review Letters*, **77**, 793–7.
- [Stehling *et al.*, 1991] Stehling, M.K., Turner, R., & Mansfield, P. (1991). Echo-planar Imaging: Magnetic Resonance Imaging In A Fraction Of A Second. *Science*, **254**, 43–50.
- [Stern, 1996] Stern, M.B. (1996). Binary Optics: a VLSI-based microoptics Technology. *Microelectronic Engineering*, **32**, 369–88.
- [Stofan *et al.*, 1995] Stofan, E.R., Evans, D.L., Schmullius, C., Holt, B., Plaut, J.J., van Zyl, J., Wall, S.D., & Way, J. (1995). Overview of Results of Spaceborne Imaging Radar-C, X-Band Synthetic Aperture Radar (SIR-C/X-SAR). *IEEE Transactions on Geoscience & Remote Sensing*, **33**, 817–28.
- [Strang, 1988] Strang, Gilbert. (1988). *Linear Algebra and its Applications*. 3rd edn. San Diego: Harcourt, Brace, Jovanovich.
- [Streetman & Banerjee, 2005] Streetman, Ben, & Banerjee, Sanjay. (2005). *Solid State Electronic Devices*. 6th edn. Englewood Cliffs: Prentice-Hall.
- [Stroschio & Eigler, 1991] Stroschio, J.A., & Eigler, D.M. (1991). Atomic and Molecular Manipulation with the Scanning Tunneling Microscope. *Science*, **254**, 319–26.
- [Strukov & Likharev, 2005] Strukov, Dmitri B, & Likharev, Konstantin K. (2005). CMOS FPGA: a Reconfigurable Architecture for Hybrid Digital Circuits With Two-Terminal Nanodevices. *Nanotechnology*, **16**, 888–900.
- [Strukov *et al.*, 2008] Strukov, Dmitri B., Snider, Gregory S., Stewart, Duncan R., & Williams, R. Stanley. (2008). The Missing Memristor Found. *Nature*, **453**, 80–83.
- [Sun & Rogers, 2007] Sun, Yugang, & Rogers, John A. (2007). Inorganic Semiconductors for Flexible Electronics. *Adv. Mater.*, **19**, 1897–1916.
- [Surguy, 1993] Surguy, P.W.H. (1993). The Development of Ferroelectric LCDs for Display Applications. *Journal of the Society for Information Display*, **1**, 247–54.
- [Sweatt, 1979] Sweatt, W.C. (1979). Mathematical Equivalence Between a Holographic Optical Element and an Ultra-High Index Lens. *Journal of the Optical Society of America*, **69**, 486–7.
- [Sze, 1981] Sze, S.M. (1981). *Physics of Semiconductor Devices*. 2nd edn. New York: Wiley-Interscience.
- [Sze, 1998] Sze, S.M. (ed). (1998). *Modern Semiconductor Device Physics*. New York: Wiley-Interscience.
- [Szilard, 1929] Szilard, Leo. (1929). Über die Entropieverminderung in einem thermodynamischen System bei Eingriffen intelligenter Wesen. *Zeitschrift für Physik*, **53**(11-12), 840–856.
- [Takahashi, 1993] Takahashi, S. (1993). Fibers for Optical Communications. *Advanced Materials*, **5**, 187–91.
- [Takashi M. Ukai & Nakamura, 1999] Takashi M. Ukai, Motokazu Yamada, & Nakamura, Shuji. (1999). Characteristics of InGaN-Based UV/Blue/Green/Amber/Red Light-Emitting Diodes. *Jpn. J. Appl. Phys.*, **38**, 3976–3981.
- [Tans *et al.*, 1998] Tans, Sander J., Verschueren, Alwin R.M., & Dekker, Cees. (1998). Room-Temperature Transistor Based on a Single Carbon Nanotube. *Nature*, **393**, 49–52.
- [Taylor & Wheeler, 1992] Taylor, Edwin F., & Wheeler, John Archibald. (1992). *Spacetime Physics: Introduction to Special Relativity*. 2nd edn. New York: W.H. Freeman.
- [Tehrani *et al.*, 1999] Tehrani, S., Slaughter, J.M., Chen, E., Durlam, M., Shi, J., & DeHerren, M. (1999). Progress and Outlook for MRAM Technology. *IEEE Transactions on Magnetics*, **35**, 2814–2819.
- [Thomson, 1857] Thomson, W. (1857). On the Electro-Dynamic Qualities of Metals:

- Effects of Magnetization on the Electric Conductivity of Nickel and of Iron. *Proc. R. Soc. Lond.*, **8**, 546–550.
- [Tinkham, 1995] Tinkham, Michael. (1995). *Introduction to Superconductivity*. 2nd edn. New York: McGraw-Hill.
- [Tittel *et al.*, 1998] Tittel, W., Brendel, J., Zbinden, H., & Gisin, N. (1998). Violation of Bell Inequalities by Photons More than 10 km Apart. *Physical Review Letters*, **81**, 3563–6.
- [Todorovic *et al.*, 1999] Todorovic, M., Schultz, S., Wong, J., & Scherer, A. (1999). Writing and Reading of Single Magnetic Domain Per Bit Perpendicular Patterned Media. *Applied Physics Letters*, **74**, 2516–18.
- [Tsang & Psaltis, 2008] Tsang, M., & Psaltis, D. (2008). Magnifying Perfect Lens and Superlens Design by Coordinate Transformation. *Physical Review B*, **77**, 035122.
- [Turing, 1936] Turing, A.M. (1936). On Computable Numbers, with an Application to the *Entscheidungsproblem*. *Proc. London Math. Soc.*, **42**, 230–65.
- [Turing, 1950] Turing, A.M. (1950). Computing Machinery and Intelligence. *Mind*, **59**, 433–560.
- [Underkoffler *et al.*, 1999] Underkoffler, J., Ullmer, B., & Ishii, H. (1999). Emancipated Pixels: Real-World Graphics in the Luminous Room. Pages 385–92 of: *Proceedings of SIGGRAPH '99*. New York: ACM Press.
- [Unruh, 1995] Unruh, W.G. (1995). Maintaining Coherence in Quantum Computers. *Physical Review A*, **51**, 992–7.
- [Žutić *et al.*, 2004] Žutić, Igor, Fabian, Jaroslav, & Sarma, S. Das. (2004). Spintronics: Fundamentals and Applications. *Reviews of Modern Physics*, **76**, 323–410.
- [van Kessel *et al.*, 1998] van Kessel, P.F., Hornbeck, L.J., RE, R.E. Meier, & Douglass, M.R. (1998). A MEMS-Based Projection Display. *Proceedings of the IEEE*, **86**, 1687–704.
- [Veselago, 1968] Veselago, V.G. (1968). The Electrodynamics of Substances with Simultaneously Negative Values of ϵ and μ . *Soviet Physics Uspekhi*, **10**, 509–514.
- [Vigoda *et al.*, 2006] Vigoda, B., Dauwels, H., Frey, M., Gershenfeld, N., Koch, T., Loeliger, H.-A., & Merkli, P. (2006). Synchronization of Pseudo-Random Signals by Forward-Only Message Passing with Application to Electronics Circuits. *IEEE Transactions of Information Theory*, **52**, 3843–3852.
- [Vilkelis, 1982] Vilkelis, W.V. (1982). Lead Reduction among Combinatorial Logic Circuits. *IBM Journal of Research and Development*, **26**, 342–348.
- [Viterbi & Omura, 1979] Viterbi, Andrew J., & Omura, Jim K. (1979). *Principles of Digital Communication and Coding*. New York: McGraw-Hill.
- [von Neumann, 1956] von Neumann, J. (1956). Probabilistic Logics and the Synthesis of Reliable Organisms from Unreliable Components. Pages 43–98 of: Shannon, C., & McCarthy, J. (eds), *Automata Studies*. Princeton: Princeton University Press.
- [Walls & Vig, 1995] Walls, F.L., & Vig, J.R. (1995). Fundamental Limits on the Frequency Stabilities of Crystal Oscillators. *IEEE Transactions on Ultrasonics Ferroelectrics & Frequency Control*, **42**, 576–89.
- [Wang, 1989] Wang, Shyh. (1989). *Fundamentals of Semiconductor Theory and Device Physics*. Englewood Cliffs: Prentice-Hall.
- [Weber *et al.*, 2000] Weber, M.F., Stover, C.A., Gilbert, L.R., Nevitt, T.J., & Ouderkerk, A.J. (2000). Giant Birefringent Optics in Multilayer Polymer Mirrors. *Science*, **287**, 2451–2455.
- [Weinacht *et al.*, 1999] Weinacht, T.C., Ahn, J., & Bucksbaum, P.H. (1999). Controlling the Shape of a Quantum Wavefunction. *Nature*, **397**, 233–5.
- [Weinberg, 1989] Weinberg, S. (1989). Testing Quantum Mechanics. *Annals of Physics*, **194**, 336–86.

- [Welch, 1984] Welch, Terry A. (1984). A Technique for High Performance Data Compression. *IEEE Computer*, **17**, 8–19.
- [Wieman *et al.*, 1999] Wieman, C.E., Pritchard, D.E., & Wineland, D.J. (1999). Atom Cooling, Trapping, and Quantum Manipulation. *Reviews of Modern Physics*, **71**, S253–62.
- [Wiesner, 1983] Wiesner, S. (1983). Conjugate Coding. *Sigact News*, **15**, 78–88.
- [Williams, 1993] Williams, Edgar M. (1993). *The Physics and Technology of Xerographic Processes*. Malabar: Krieger.
- [Winograd & Cowan, 1963] Winograd, S., & Cowan, J.D. (1963). *Reliable Computation in the Presence of Noise*. Cambridge: MIT Press.
- [Wojtkowski *et al.*, 2004] Wojtkowski, Maciej, Srinivasan, Vivek J., Ko, Tony H., Fujimoto, James G., Kowalczyk, Andrzej, & Duker, Jay S. (2004). Ultrahigh-Resolution, High-Speed, Fourier Domain Coherence Tomography and Methods for Dispersion Compensation. *Optics Express*, **12**, 2404–2422.
- [Wolaver, 1991] Wolaver, Dan H. (1991). *Phase-Locked Loop Circuit Design*. Englewood Cliffs: Prentice Hall.
- [Wolf *et al.*, 2001] Wolf, S.A., Awschalom, D.D., Buhrman, R.A., Daughton, J.M., von Molnar, S., Roukes, M.L., Chtchelkanova, A.Y., & Treger, D.M. (2001). Spintronics: A Spin-Based Electronics Vision for the Future. *Science*, **294**, 1488–1495.
- [Wooters & Zurek, 1982] Wooters, W.K., & Zurek, W.H. (1982). A Single Quantum Cannot Be Cloned. *Nature*, **299**, 802–3.
- [Wright, 1998] Wright, H. (1998). Observe Digital Modulation Through Diagrams. *Test and Measurement World*, 61–64.
- [Xia & Whitesides, 1998] Xia, Younan, & Whitesides, George M. (1998). Soft Lithography. *Annu. Rev. Mater. Sci.*, **28**, 153–84.
- [Yablonovitch, 1993] Yablonovitch, E. (1993). Photonic Band-Gap Structures. *J. Opt. Soc. Am. B*, **10**, 283–295.
- [Yariv, 1987] Yariv, A. (1987). Operator Algebra for Propagation Problems involving Phase Conjugation and Nonreciprocal Elements. *Applied Optics*, **26**, 4538–40.
- [Yariv, 1991] Yariv, A. (1991). *Optical Electronics*. 4th edn. Philadelphia: Saunders College Publishing.
- [Yariv & Pepper, 1977] Yariv, A., & Pepper, D.M. (1977). Amplified Reflection, Phase Conjugation, and Oscillation in Degenerate Four-Wave Mixing. *Optics Letters*, **1**, 16–18.
- [Yariv & Yeh, 2006] Yariv, Amnon, & Yeh, Pochi. (2006). *Photonics: Optical Electronics in Modern Communications*. New York: Oxford University Press.
- [Ye *et al.*, 1999] Ye, J., Vernooy, D.W., & Kimble, H.J. (1999). Trapping of Single Atoms in Cavity QED. *Physical Review Letters*, **83**, 4987–90.
- [Yoo *et al.*, 1989] Yoo, K.M., Takiguchi, Y., & Alfano, R.R. (1989). Dynamic Effect of Weak Localization on the Light Scattering from Random Media using Ultrafast Laser Technology. *Applied Optics*, **28**, 2343–9.
- [Younis & Knight, 1993] Younis, S., & Knight, T. (1993). Practical Implementation of Charge Recovering Asymptotically Zero Power CMOS. Pages 234–50 of: *Proceeding of the 1993 Symposium on Integrated Systems*. Cambridge: MIT Press.
- [Yourgrau *et al.*, 1982] Yourgrau, Wolfgang, van der Merwe, Alwyn, & Raw, Gough. (1982). *Treatise on Irreversible and Statistical Thermodynamics: An Introduction to Nonclassical Thermodynamics*. New York: Dover.
- [Zabusky, 1981] Zabusky, N.J. (1981). Computational Synergetics and Mathematical Innovation. *Journal of Computational Physics*, **43**, 195–249.
- [Zhua & Park, 2006] Zhua, Jian-Gang, & Park, Chando. (2006). Magnetic Tunnel Junctions. *Materials Today*, **9**, 36–45.

- [Zurek, 1998] Zurek, W.H. (1998). Decoherence, Einselection and the Existential Interpretation (The Rough Guide). *Philosophical Transactions of the Royal Society of London Series A*, **356**, 1793–821.