APPENDIX I

BIBLIOGRAPHY

HISTORY OF ELECTRONICS

- L. Berlin, The Man Behind the Microchip: Robert Noyce and the Invention of Silicon Valley, New York: Oxford University Press, 2005.
- J. Gertner, The Idea Factory: Bell Labs and the Great Age of American Innovation, New York: The Penguin Press, 2012.
- IEEE Solid-State Circuits Magazine, and its predecessor, IEEE Solid-State Circuits Newsletter, published quarterly by the IEEE Solid-State Circuits Society
- T.R. Reid, The Chip, New York: Random House, 2001.
- J.N. Shurkin, Broken Genius: The Rise and Fall of William Shockley, Creator of the Electronic Age, New York, Macmillan, 2008.
- J. Williams, editor, Analog Circuit Design: Art, Science, and Personalities, Boston: Butterworth-Heinemann, 1991.

GENERAL TEXTBOOKS ON ELECTRONIC CIRCUITS

- E.F. Angelo Jr., *Electronics: BJTs, FETs, and Microcircuits*, New York: McGraw-Hill, 1969.
- S.B. Burns and P.R. Bond, *Principles of Electronic Circuits*, St. Paul: West, 1987.
- M.S. Ghausi, Electronic Devices and Circuits: Discrete and Integrated, New York: Holt, Rinehart and Winston, 1985.
- P.E. Gray and C.L. Searle, *Electronic Principles*, New York: Wiley, 1969.
- A.R. Hambley, *Electronics, 2nd ed.*, Upper Saddle River, NJ: Prentice-Hall, 1999.
- W.H. Hayt and G.W. Neudeck, *Electronic Circuit Analysis and Design*, 2nd ed., Boston: Houghton Mifflin Co., 1984.
- C.A. Holt, Electronic Circuits, New York: Wiley, 1978.
 M.N. Horenstein, Microelectronic Circuits and Devices, 2nd ed., Englewood Cliffs, NJ: Prentice-Hall, 1995.
- R.T. Howe and C.G. Sodini, Microelectronics—An Integrated Approach, Englewood Cliffs, NJ: Prentice-Hall, 1997.
- R.C. Jaeger and T.N. Blalock, *Microelectronic Circuit Design*, *4th ed.*, New York: McGraw-Hill, 2011.
- N.R. Malik, Electronic Circuits: Analysis, Simulation, and Design, Englewood Cliffs, NJ: Prentice-Hall, 1995.

- J. Millman and A. Grabel, Microelectronics, 2nd ed., New York: McGraw-Hill, 1987.
- D.A. Neamen, Electronic Circuit Analysis and Design, 4th ed., New York: McGraw-Hill, 2010.
- M.H. Rashid, Microelectronic Circuits: Analysis and Design, Boston: PWS, 1999.
- B. Ravazi, Fundamentals of Microelectronics, 2nd ed. Hoboken, NJ: Wiley, 2014.
- D.L. Schilling and C. Belove, *Electronic Circuits, 2nd ed.*, New York: McGraw-Hill, 1979.
- R.A. Spencer and M.S. Ghausi, Introduction to Electronic Circuit Design, Upper Saddle River, NJ: Pearson Education Inc. (Prentice-Hall), 2003.

CIRCUIT AND SYSTEM ANALYSIS

- L.S. Bobrow, Elementary Linear Circuit Analysis, 2nd ed., New York: Holt, Rinehart and Winston, 1987.
- A.M. Davis, *Linear Circuit Analysis*, Boston, PWS Publishing Company, 1998.
- S.S. Haykin, *Active Network Theory*, Reading, MA: Addison-Wesley, 1970.
- W.H. Hayt, G.E. Kemmerly, and S.M. Durbin, Engineering Circuit Analysis, 6th ed., New York: McGraw-Hill, 2003.
- D. Irwin, *Basic Engineering Circuit Analysis*, 7th ed., New York: Wiley, 2001.
- B.P. Lathi, *Linear Systems and Signals*, New York: Oxford University Press, 1992.
- J.W. Nilsson and S. Riedel, *Electronic Circuits, 7th ed.*, Upper Saddle River, NJ: Prentice-Hall, 2005.

DEVICES AND IC FABRICATION

- R.S.C. Cobbold, *Theory and Applications of Field Effect Transistors*, New York: Wiley, 1969.
- I. Getreu, Modeling the Bipolar Transistor, Beaverton, OR: Tektronix, Inc., 1976.
- R.S. Muller and T.I. Kamins, Device Electronics for Integrated Circuits, 3rd ed., New York: Wiley, 2003.
- J.D. Plummer, M.D. Deal, and P.B. Griffin, Silicon VLSI Technology, Upper Saddle River, NJ: Prentice-Hall, 2000.
- D.L. Pulfrey and N.G. Tarr, Introduction to Microelectronic Devices, Englewood Cliffs, NJ: Prentice-Hall, 1989.

- C.L. Searle, A.R. Boothroyd, E.J. Angelo, Jr., P.E. Gray, and D.O. Pederson, Elementary Circuit Properties of Transistors, Vol. 3 of the SEEC Series, New York: Wiley, 1964.
- B.G. Streetman and S. Banerjee, Solid-State Electronic Devices, 5th ed., Upper Saddle River, NJ: Prentice-Hall, 2000.
- Y. Tsividis, Operation and Modeling of the MOS Transistor, 3rd ed., New York: Oxford University Press, 2011.

OPERATIONAL AMPLIFIERS

- G.B. Clayton, Experimenting with Operational Amplifiers, London: Macmillan, 1975.
- G.B. Clayton, Operational Amplifiers, 2nd ed., London: Newnes-Butterworths, 1979.
- S. Franco, Design with Operational Amplifiers and Analog Integrated Circuits, 3rd ed., New York: McGraw-Hill, 2001.
- J.G. Graeme, G.E. Tobey, and L.P. Huelsman, Operational Amplifiers: Design and Applications, New York: McGraw-Hill, 1971.
- W. Jung, IC Op Amp Cookbook, Indianapolis: Howard Sams, 1974.
- E.J. Kennedy, Operational Amplifier Circuits: Theory and Applications, New York: Holt, Rinehart and Winston, 1988.
- J.K. Roberge, Operational Amplifiers: Theory and Practice, New York: Wiley, 1975.
- J.L. Smith, Modern Operational Circuit Design, New York: Wiley-Interscience, 1971.
- J.V. Wait, L.P. Huelsman, and G.A. Korn, Introduction to Operational Amplifiers: Theory and Applications, New York: McGraw-Hill, 1975.

ANALOG CIRCUITS

- P.E. Allen and D.R. Holberg, CMOS Analog Circuit Design, 3rd ed., New York: Oxford University Press, 2012.
- R. Jacob Baker, CMOS: Circuit Design, Layout and Simulation, 3rd ed. Hoboken, N.J.: Wiley,
- K. Bult, Transistor-Level Analog IC Design. Notes for a short course organized by Mead, Ecole Polytechnique Féderal de Lausanne, 2002.
- T. Chan Carusone, D.A. Johns, and K. Martin, Analog Integrated Circuit Design, 2nd ed. New York: Wiley, 2012.
- M.J. Fonderic and J.H. Huising, Design of Low-Voltage Bipolar Operational Amplifiers, Boston: Kluwer Academic Publishers, 1993.
- R.L. Geiger, P.E. Allen, and N.R. Strader, VLSI Design Techniques for Analog and Digital Circuits, New York: McGraw-Hill, 1990.
- P.R. Gray, P.J. Hurst, S.H. Lewis, and R.G. Meyer, Analysis and Design of Analog Integrated Circuits, 5th ed., Hoboken, NJ: Wiley, 2008.
- A.B. Grebene, Bipolar and MOS Analog Integrated Circuit Design, New York: Wiley, 1984.

- R. Gregorian and G.C. Temes, Analog MOS Integrated Circuits for Signal Processing, New York: Wiley,
- J.H. Huising, Operational Amplifiers, Boston: Kluwer Academic Publishers, 2001.
- IEEE Journal of Solid-State Circuits, a monthly publication of the IEEE.
- K. Laker and W. Sansen, Design for Analog Integrated Circuits and Systems, New York: McGraw-Hill,
- H.S. Lee, "Analog Design," Chapter 8 in BiCMOS Technology and Applications, A.R. Alvarez, editor, Boston: Kluwer Academic Publishers, 1989.
- National Semiconductor Corporation, Audio/Radio Handbook, Santa Clara, CA: National Semiconductor Corporation, 1980.
- B. Razavi, Design of Analog CMOS Integrated Circuits, New York: McGraw-Hill, 2001.
- J.K. Roberge, Operational Amplifiers: Theory and Practice, New York: Wiley, 1975.
- S. Rosenstark, Feedback Amplifier Principles, New York: Macmillan, 1986.
- W.M.C. Sansen, Analog Design Essentials, Dordrecht, The Netherlands: Springer, 2006.
- A.S. Sedra and G.W. Roberts, "Current Conveyor Theory and Practice," Chapter 3 in Analogue IC Design: The Current-Mode Approach, C. Toumazou, F.J. Lidgey, and D.G. Haigh, editors, London: Peter Peregrinus, 1990.
- Severns, editor, MOSPOWER Applications Handbook, Santa Clara, CA: Siliconix, 1984.
- Texas Instruments, Inc., Power Transistor and TTL Integrated-Circuit Applications, New York: McGraw-Hill, 1977.
- S. Soclof, Applications of Analog Integrated Circuits, Englewood Cliffs, NJ: Prentice-Hall, 1985.
- J.M. Steininger, "Understanding wideband MOS transistors," IEEE Circuits and Devices, Vol. 6, No. 3, pp. 26-31, May 1990.

DIGITAL CIRCUITS

- A.R. Alvarez, editor, BiCMOS Technology and Applications, 2nd ed., Boston: Kluwer Academic Publishers, 1993.
- M.I. Elmasry, editor, Digital MOS Integrated Circuits, New York: IEEE Press, 1981. Also, Digital MOS Integrated Circuits II, 1992.
- S.H.K Embabi, A. Bellaour, and M.I. Elmasry, Digital BiCMOS Integrated Circuit Design, Boston: Kluwer, 1993.
- D.A. Hodges, H.G. Jackson, and R.A. Saleh, Analysis and Design of Digital Integrated Circuits, 3rd ed., New York: McGraw-Hill, 2004.
- IEEE Journal of Solid-State Circuits, a monthly publication of the IEEE.
- S.M. Kang and Y. Leblebici, CMOS Digital Integrated Circuits, 3rd ed., New York: McGraw-Hill, 2003.
- R. Littauer, Pulse Electronics, New York: McGraw-Hill, 1965.

- K. Martin, Digital Integrated Circuit Design, New York: Oxford University Press, 2000.
- J. Millman and H. Taub, Pulse, Digital, and Switching Waveforms, New York: McGraw-Hill, 1965.
- Motorola, MECL Device Data, Phoenix, AZ: Motorola Semiconductor Products, Inc., 1989.
- Motorola, MECL System Design Handbook, Phoenix, AZ: Motorola Semiconductor Products, Inc.,
- J.M. Rabaey, Digital Integrated Circuits, Englewood Cliffs, NJ: Prentice-Hall, 1996. Note: A 2nd ed., with A. Chandrakasan and B. Nikolic, also appeared in 2003.
- L. Strauss, Wave Generation and Shaping, 2nd ed., New York: McGraw-Hill, 1970.
- H. Taub and D. Schilling, Digital Integrated Electronics, New York: McGraw-Hill, 1977.
- N. Weste and K. Eshraghian, Principles of CMOS VLSI Design, Reading, MA: Addison-Wesley, 1985 and 1993.

FILTERS AND TUNED AMPLIFIERS

- P.E. Allen and E. Sanchez-Sinencio, Switched-Capacitor Circuits, New York: Van Nostrand Reinhold, 1984.
- K.K. Clarke and D.T. Hess. Communication Circuits: Analysis and Design, Ch. 6, Reading, MA: Addison Wesley, 1971.
- G. Daryanani, Principles of Active Network Synthesis and Design, New York: Wiley, 1976.
- R. Gregorian and G.C. Temes, Analog MOS Integrated Circuits for Signal Processing, New York: Wiley-Interscience, 1986.
- S.K. Mitra and C.F. Kurth, editors, Miniaturized and Integrated Filters, New York: Wiley-Interscience, 1989.

- C. Ouslis and A. Sedra, "Designing custom filters," IEEE Circuits and Devices, May 1995, pp. 29-37.
- R. Schaumann, M.S. Ghausi, and K.R. Laker, Design of Analog Filters, Englewood Cliffs, NJ: Prentice-Hall, 1990.
- R. Schaumann, M. Soderstand, and K. Laker, editors, Modern Active Filter Design, New York: IEEE Press. 1981.
- R. Schaumann, H. Xiao, and M.E. Van Valkenburg, Design of Analog Filters, 2nd ed. New York: Oxford University Press, 2010.
- A.S. Sedra, "Switched-capacitor filter synthesis," in MOS VLSI Circuits for Telecommunications, Y. Tsividis and P. Antognetti, editors, Englewood Cliffs, NJ: Prentice-Hall, 1985.
- A.S. Sedra and P.O. Brackett, Filter Theory and Design: Active and Passive, Portland, OR: Matrix, 1978.
- M.E. Van Valkenburg, Analog Filter Design, New York: Holt, Rinehart and Winston, 1981.
- A.I. Zverev, Handbook of Filter Synthesis, New York: Wiley, 1967.

SPICE

- M.E. Herniter, Schematic Capture with Cadence PSpice, 2nd ed., Upper Saddle River, NJ: Prentice-Hall, 2003.
- G. Massobrio and P. Antognetti, Semiconductor Device Modeling with SPICE, 2nd ed., New York: McGraw-Hill, 1993.
- G.W. Roberts and A.S. Sedra, SPICE, New York: Oxford University Press, 1992 and 1997.
- J.A. Svoboda, PSpice for Linear Circuits, New York: Wiley, 2002.
- P.W. Tuinenga, SPICE: A Guide to Circuit Simulation Analysis Using PSpice, 2nd ed., Englewood Cliffs, NJ: Prentice-Hall, 1992.