

The following recently published books, relevant to materials science, have come to *MRS Bulletin's* attention. Some of the books listed here may be reviewed in future issues of *MRS Bulletin*.

**Books**

**Aluminum Rolling: Process Principles and Their Applications**, R.V. Singh, TMS Publishing, Warrendale, 2000, 574 pp., \$94.00, ISBN 0-87339-474-7.

**Characterization by Radiation Damage by Transmission Electron Microscopy**, M.L. Jenkins and M. A. Kirk, Institute of Physics Publishing, Bristol, 2001, 224 pp., \$110.00, ISBN 0-7503-0748-x.

**The Coming of Materials Science**, Robert Cahn, Pergamon/Elsevier Science, Oxford, 2001, 568 pp., \$64.00, ISBN 0-08-042679-4.

**Compositional and Failure Analysis of Polymers**, John Schiers, John Wiley & Sons, New York, 2000, 806 pp., \$185.00, ISBN 0-471-62534-5.

**Crystal Field Handbook**, D.J. Newman and B.K.C. Ng, Cambridge University Press, Cambridge, 2000, 290 pp., \$95.00, ISBN 0-521-59124-4.

**Designing Safer Polymers**, Paul Anastas, Paul Bickart, and Mary Kirchoff, John Wiley & Sons, New York, 2000, 128 pp., \$59.95, ISBN 0-471-39733-4.

**Electrolytes at Interfaces**, S. Durand-Vidal and J.-P. Simonin, Kluwer Academic Publishers, Dordrecht, 2000, 370 pp., \$157.00, ISBN 0-7923-5922-4.

**Electron Spectroscopies Applied to Low-Dimensional Materials**, H.P. Hughes and H.I. Starnberg, Kluwer Academic Publishers, Dordrecht, 2000, 516 pp., \$210.00, ISBN 0-7923-6526-7.

**Equilibrium Statistical Mechanics**, Gene F. Mazenko, John Wiley & Sons, Cambridge, 2000, 613 pp., \$95.00, ISBN 0-471-32839-1.

**Fundamentals of Carrier Transport**, Mark Lundstrom, Cambridge University Press, New York, 2000, 425 pp., \$54.95, ISBN 0-521-63134-3.

**Gels Handbook 1, The Fundamentals**, Yoshihito Osada and Kanji Kajiwara, Academic Press, San Diego, 2001, 421pp., \$120.00/4-vol. set, ISBN 0-12-394961-0;

**Gels Handbook 2, Functions**, 420 pp., ISBN 0-12-394962-9;

**Gels Handbook 3, Applications**, 510 pp., ISBN 0-12-394963-7;

**Gels Handbook 4, Environment: Earth Environment and Gels**, 158 pp., ISBN 0-12-394964-5.

**Graphite and Precursors**, Pierre Delhaes, Gordon & Breach Science Publishers, Amsterdam, 2001, 297 pp., \$85.00, ISBN 90-5699-228-7.

**Handbook of Hydrothermal Technology**, K. Byrappa and Masahiro Yoshimura, William Andrew Publishing, Norwich, 2001, 870 pp., \$175.00, ISBN 0-8155-1445-x.

**Handbook of Thin Film Deposition Techniques**, Krishna Seshan, William Andrew Publishing, Norwich, 2000, 420 pp., \$145.00, ISBN 0-8155-1442-5.

**High Temperature Properties and Thermal Decomposition of Inorganic Salts with Oxyanions**, Kurt H. Stern, CRC Press LLC, Boca Raton, 2001, 265 pp., \$179.95, ISBN 0-8493-0256-0.

**Hyper-Structured Molecules, Chemistry, Physics, and Applications**, Hiroyuki Sasabe, Gordon & Breach Science Publishers, Amsterdam, 2001, 259 pp., \$120.00, ISBN 90-5699-215-5.

**Industrial Polymer Handbook, 4 Volumes**, Edward Wilks, John Wiley & Sons, New York, 2001, 2500 pp., \$780.00, ISBN 3-527-30260-3.

**Inorganic and Organometallic Polymers**, Ronald Archer, John Wiley & Sons, New York, 2001, 264 pp., \$89.95, ISBN 0-471-24187-3.

**Integrated Design and Manufacture Using Fiber-Reinforced Polymeric Composites**, M.J. Owen, V. Middleton, and I.A. Jones, CRC Press, Boca Raton, 2000, 416 pp., \$169.95, ISBN 0-8493-0858-5.

**Introduction to Diffraction in Materials Science and Engineering**, Aaron D. Krawitz, John Wiley & Sons, New York, 2001, 408 pp., \$110.00, ISBN 0-471-24724-3.

**Introduction to Ferroic Materials**, Vinod K. Wadhawan, Gordon & Breach Science Publishers, Amsterdam, 2000, 740 pp., \$95.00, ISBN 90-5699-286-4.

**Introduction to Physical Polymer Science**, L.H. Sperling, John Wiley & Sons, New York, 2001, 720 pp., \$89.95, ISBN 0-471-32921-5.

**Introduction to Surface and Thin Film Processes**, John A. Venables, Cambridge University Press, Cambridge, 2000, 372 pp., \$110.00, ISBN 0-521-78500-6.

**Latticed Mismatched Thin Films**, Eugene A. Fitzgerald, ed., TMS Publishing, Warrendale, 2000, 212 pp., \$76.00, ISBN 0-87339-444-5.

**Lectures on the Theory of Phase Transformations**, 2d ed., H.I. Aaronson, ed., TMS Publication, Warrendale, 2000, 308 pp., \$84.00, ISBN 0-87339-4763.

**Liquid Crystals**, Satyendra Kumar, Cambridge University Press, New York, 2000, 512 pp., \$110.00, ISBN 0-521-46132-4.

**Low Dimensional Semiconductor Structures, Fundamentals and Device Applications**, Keith Barnham and Dimitri Vvedensky, eds.,

Cambridge University Press, New York, 2000, 410 pp., \$59.95, ISBN 0-521-59103-1.

**Magnetic Reconnection in Plasmas**, Dieter Biskamp, Cambridge University Press, New York, 2000, 408 pp., \$110.00, ISBN 0-521-58288-1.

**Materials Modification by Electronic Excitation**, Noriaki Itoh and Marshall Stoneham, Cambridge University Press, Cambridge, 2000, 520 pp., \$150.00, ISBN 0-521-55498-5.

**Mathematical Physics of Quantum Wires and Devices, from Special Resonances to Anderson Localization**, Norman Hurt, Kluwer Academic Publishers, Dordrecht, 2000, 320 pp., \$127.00, ISBN 0-7923-6288-3.

**Mechatronic Systems, Techniques and Applications; Vol. 4, Electromechanical Systems**, Cornelius T. Leondes, Gordon & Breach Science Publishers, Amsterdam, 2000, 343 pp., \$139.00, ISBN 90-5699-670-3.

**Microhardness of Polymers**, Baltá Calleja and S. Fakirov, Cambridge University Press, Cambridge, 237 pp., \$95.00, ISBN 0-521-64218-3.

**Molecular Magnetism, New Magnetic Materials**, Koichi Itoh and Minoru Kinoshita, Gordon & Breach Science Publishers, Amsterdam, 2000, 347 pp., \$120.00, ISBN 90-5699-307-0.

**Nonlinear Random Vibration, Analytical Techniques and Applications (Advances in Engineering 3)**, W.S. Cho To, A.A. Balkema, Brookfield, 2000, 252 pp., \$87.00, ISBN 90-265-16371.

**Nuclear Reactor Physics**, Weston M. Stacey, John Wiley & Sons, New York, 2001, 707 pp., \$125.00, ISBN 0-471-39127-1.

**Optical Fiber Sensor Technology**, K.T.V. Grattan and B.T. Meggitt, Kluwer Academic Publishers, Boston, 2000, 352 pp., \$148.00, ISBN 0-7923-7852-0.

**Optical Fiber Sensor Technology: Advanced Applications—Bragg Gratings and Distributed Sensors**, K.T.V. Grattan and B.T. Meggitt, Kluwer Academic Publishers, Boston, 2000, 400 pp., \$145.00, ISBN 0-7923-7946-2.

**Optics of Liquid Crystal Displays**, Pochi Yeh and Claire Gu, John Wiley & Sons, New York, 1999, 438 pp., \$79.95, ISBN 0-471-18201-x.

**Orbitals in Chemistry, A Modern Guide for Students**, Victor Gil, Cambridge University Press, New York, 2000, 328 pp., \$90.00, ISBN 0-521-66167-6.

**Particle Characterization: Light Scattering Methods**, Renliang Xu, Kluwer Academic Publishers, Dordrecht, 2000, 432 pp., \$172.00, ISBN 0-7923-6300-0.

**Perovskite Oxides for Electronic, Energy Conversion, and Energy Efficient**

**Applications**, W. Wong-Ng, T. Holesinger, G. Riley, and R. Guo, The American Ceramic Society, Westerville, 2000, 284 pp., \$95.00, ISBN 1-57498-091-2.

**Physical Polymer Science**, L.H. Sperling, John Wiley & Sons, New York, 2001, 671 pp., \$80.05, ISBN 0-471-32921-5.

**Physical Vapor Deposition of Thin Films**, John E. Mahan, John Wiley & Sons, New York, 2000, 312 pp., \$84.95, ISBN 0-471-33001-9.

**Physics Meets Mineralogy, Condensed-Matter Physics in Geosciences**, Hideo Aoki, Yasuhiko Syono, and Russell J. Hemley, eds., Cambridge University Press, Cambridge, 2000, 397 pp., \$100.00, ISBN 0-521-64342-2.

**The Physics of Fullerene-Based and Fullerene-Related Materials**, Wanda Andreoni, ed., Kluwer Academic Publishers, Dordrecht, 2000, 464 pp., \$199.00, ISBN 0-7923-6234-9.

**Physics of Quantum Well Devices**, B.R. Nag, Kluwer Academic Publishers, Dordrecht, 2000, 308 pp., \$147.00, ISBN 0-7923-6576-3.

**Polymer-Clay Nanocomposites**, T.J. Pinnavaia and G. Beall, John Wiley & Sons, New York, 2001, 344 pp., \$235.00, ISBN 0-471-63700-9.

**Polymers from the Inside Out**, Alan E. Tonelli, John Wiley & Sons, New York, 2001, 249 pp., \$69.95, ISBN 0-471-38138-1.

**Preparative Methods of Polymer Chemistry**, Wayne Sorenson, Fred Sweeny, and Tod Campbell, John Wiley & Sons,

New York, 2001, 584 pp., \$74.95, ISBN 0-471-58992-6.

**Principles of Condensed Matter Physics**, P.M. Chaikin and T.C. Lubensky, Cambridge University Press, Cambridge, 2000, 699 pp., \$69.95, ISBN 0-521-79450-1.

**Properties of Advanced Semiconductor Materials GaN, AlN, InN, BN, SiC, SiGe**, Michael E. Levinstein, Sergey L. Rumyantsev, and Michael S. Shur, John Wiley & Sons, New York, 2001, 194 pp., \$74.95, ISBN 0-471-35827-4.

**Properties of Silicon, Geranium, and SiGe: Carbon**, Erich Kasper and Klara Lyutovich, eds., The Institution of Electrical Engineers, Edison, 2000, 358 pp., \$195.00, ISBN 0-85296-783-7.

**Quantum Mechanics: An Introduction for Device Physicists and Electrical Engineers**, David K. Ferry, Institute of Physics Publishing, Bristol, 2001, 345 pp., \$33.00, ISBN 0-7503-0725-0.

**Scalar Diffraction from a Circular Aperture**, Charles J. Daly, Kluwer Academic Publishers, Boston, 2000, 192 pp., \$125.00, ISBN 0-7923-7810-5.

**Science and Application of Nanotubes**, D. Tomanek and R.J. Enbody, Kluwer Academic Publishers, Dordrecht, 2000, 406 pp., \$150.00, ISBN 0-306-46372-5.

**The Science of Paintings**, W. Stanley Taft and James W. Mayer, Springer-Verlag, New York, 2000, 236 pp., \$59.95, ISBN 0-387-98722-3.

**Smart Structures, Analysis and Design**, A.V. Srinivasan and D. Michael McFarland, Cambridge University Press, Cambridge University Press, Cambridge, 2000, 228 pp., \$95.00, ISBN 0-521-65977-9.

**Statistical Thermodynamics and Properties of Matter**, Lucienne Couture and Robert Zitoun, Gordon & Breach Science Publishers, Amsterdam, 2000, 604 pp., \$55.00, ISBN 90-5699-196-5.

**Structure in Science and Art**, Wendy Pullan and Harshad Bhadesia, Cambridge University Press, Cambridge, 2000, 203 pp., \$34.95, ISBN 0-521-78258-9.

**Techniques of Tomographic Isodyne Stress Analysis**, Jerzy Tadeusz Pindera, Kluwer Academic Publishers, Dordrecht, 2000, 312 pp., \$134.00, ISBN 0-7923-6388-4.

**Texture and Anisotropy, Preferred Orientations in Polycrystals and their Effect on Materials Properties**, U.F. Kocks, C.N. Tomé, and H.-R. Wenk, Cambridge University Press, New York, 2000, 676 pp., \$105.00, ISBN 0-521-79420-x.

**Thin-Film Optical Filters**, Angus Macleod, Institute of Physics Publishing, Bristol, 2001, 641 pp., \$70.00, ISBN 0-7503-0688-2.

**Turbulent Flows**, Stephen Bailey Pope, Cambridge University Press, New York, 2000, 748 pp., \$130.00, ISBN 0-521-59125-2.

**Vibrations, Dynamics and Structural Systems**, Madhujit Mukhopadhyay, A.A. Balkema, Brookfield, 2000, 602 pp., \$95.00, ISBN 90-5410-7286.