

BOOKS RECEIVED

Mathematics

Algebra Through Practice, 3 Vols. Book 1 Sets, Relations and Mappings. Book 2 Matrices and Vector Spaces. Book 3 Groups, Rings and Fields. By T.S. BLYTH and E.F. ROBERTSON. Cambridge University Press: 1984. Book 1: pp. 97, pbk ISBN 0-521-27285-8; Book 2: pp. 99, pbk ISBN 0-521-27286-6; Book 3: pp. 95, pbk ISBN 0-521-27288-2. Pbk £3.50 each.

Developments in Statistics, Vol. 4. PARUCHURI R. KRISHNAIAH (ed.). Academic: 1983. Pp. 287. ISBN 0-12-426604-5. £62.

Fundamentals of Mathematics. Vols 1 & 2. H. BEHNKE et al. (eds). MIT Press: 1984. Vol. 1: pp. 549, ISBN 0-262-52093-1; Vol. 2: pp. 685, ISBN 0-262-52094-X. £14.25 each.

Fundamentals of Mathematics. Vol. 3 Analysis. H. BEHNKE et al. (eds). MIT: 1983. Pp. 541. Pbk ISBN 0-262-52095-8. Np.

Mathematical Magic Show. By MARTIN GARDNER. Viking: 1984. Pp. 284. ISBN 0-670-80327-8. £9.95.

Methods of Numerical Integration, 2nd Edn. By PHILIP J. DAVIS and PHILIP RABINOWITZ. Academic: 1984. Pp. 612. ISBN 0-12-206360-0. £52, \$36.50.

Multilinear Algebra. By D.G. NORTHCOTT. Cambridge University Press: 1984. Pp. 198. ISBN 0-521-26269-0. £20, \$39.50.

Multivariate Analysis: Methods and Applications. By WILLIAM R. DILLON and MATTHEW GOLDSTEIN. Wiley: 1984. Pp. 587. ISBN 0-471-08317-8. £38.85.

Statistical Inference Based on Ranks. By THOMAS P. HETTMANSPERGER. Wiley: 1984. Pp. 323. ISBN 0-471-88474-X. £38.25.

Theory of Correspondences: Including Applications to Mathematical Economics. By ERWIN KLEIN and ANTHONY C. THOMPSON. Wiley: 1984. Pp. 256. ISBN 0-471-88016-7. £40.85.

Space Science

The Light-Hearted Astronomer. By KEN FULTON. Astro Media: 1984. Pp. 115. ISBN 0-913135-01-1. \$6.95.

Physics of Planetary Interiors. By G.H.A. COLE. Adam Hilger: 1984. Pp. 208. Hbk ISBN 0-85274-444-4; pbk ISBN 0-85274-445. Hbk £22; pbk £9.95.

The Universe of Galaxies: Readings from Scientific American. PAUL W. HODGE (ed.). W.H. Freeman: 1984. Pp. 113. Hbk ISBN 0-7167-1675-5; pbk ISBN 0-7167-1676-3. Hbk \$20.95; pbk \$10.95.

Physics

The Atomic Nucleus. By J.M. REID. Manchester University Press: 1984. Pp. 279. Pbk ISBN 0-7190-0978-2. Pbk £6.50.

Bosons in Nuclei. D.H. FENG, S. PITTEL and M. VALLIERES (eds). Wiley: 1984. Pp. 238. Hbk ISBN 0-9971-950-18-9; pbk ISBN 0-9971-950-19-7. £33.90.

Classical General Relativity. W.B. BONNOR, J.N. ISLAM and M.A.H. MacCALLUM (eds). Cambridge University Press: 1984. Pp. 269. ISBN 0-521-26747-1. £25, \$44.50.

Coaxial A.C. Bridges. By B.P. KIBBLE and G.H. RAYNER. Adam Hilger: 1984. Pp. 203. ISBN 0-85274-389-0. £25.

Coupled Mode Theory: As Applied to Microwave and Optical Transmission. By HUANG HUNG-CHIA. VNU Science Press: 1984. Pp. 364. ISBN 90-6764-03-6. DM 118.

Group Theory in Physics, Vol. 1. By J.F. CORNWELL. Academic: 1984. Pp. 371. ISBN 0-12-189801-6. \$75, £49.50.

Electrochemical Detectors: Fundamental Aspects and Analytical Applications. T.H. RYAN (ed.). Plenum: 1984. Pp. 172. ISBN 0-306-41727-8. \$39.50.

Electron-Molecule Interactions and their Applications, Vol. 2. L.G. CHRIOTOPHOROU (ed.). Academic: 1984. Pp. 678. ISBN 0-12-174402-7. \$85, £59.50.

The Excitation and Propagation of Elastic Waves. By J.A. HUDSON. Cambridge University Press: 1984. Pp. 224. Pbk ISBN 0-521-31867-X. Pbk £9.95, \$19.95.

From Falling Bodies to Radio Waves: Classical Physicists and Their Discoveries. By EMILIO SEGRE. W.H. Freeman: 1984. Pp. 298. Hbk ISBN 0-7167-1481-7; pbk ISBN 0-7167-1482-5. Hbk £24.95; pbk £13.95.

Frontiers in Particle Physics. D. SIJACKI et al. (eds). Wiley: 1984. Pp. 416. ISBN 9971-950-57-X. £52.90.

Optical Radiation Detectors. By EUSTACE L. DERENIAK and DEVON G. CROWE. Wiley: 1984. Pp. 300. ISBN 0-471-89797-3. £49.

Optics and Lasers. By MATT YOUNG. Springer-Verlag: 1984. Pp. 269. ISBN 3-540-13014-4. DM 64, \$22.50.

Phase Transitions and Critical Phenomena. C. DOMB and J.L. LEBOVITZ (eds). Academic: 1984. Pp. 318. ISBN 0-12-220309-7. £60, £38.50.

The Physics of Submicron Structures. H.L. GRUBIN et al. (eds). Plenum: 1984. Pp. 360. ISBN 0-306-41715-4. Np.

Power Semiconductors. By MILAN KUBAT. Springer-Verlag: 1984. Pp. 507. ISBN 3-540-12569-8/0-387-12569-8. DM 99, \$38.50.

Pulsed Light Sources. By I.S. MARSHAK. Consultants Bureau: 1984. Pp. 461. ISBN 0-306-10976-X. Np.

Relativity and Engineering. By J. VAN BLADEL. Springer-Verlag: 1984. Pp. 402. ISBN 3-540-12561-2/0-387-12561-2. DM 80, \$28.10.

Solutions of Einstein's Equations: Techniques and Results. C. HOENSELLAERS and W. DIETZ (eds). Springer-Verlag: 1984. Pp. 439. Pbk ISBN 3-540-13366-6/0-387-13366-6. DM 59, \$20.70.

Superconductivity in Magnetic and Exotic Materials. T. MATSUBARA and A. KOTANI (eds). Springer-Verlag: 1984. Pp. 211. ISBN 3-540-13324-0. DM 65, \$23.70.

Symmetries in Particle Physics. ITZHAK BARS, ALAN CHODOS and CHIA-HSIUNG TZE (eds). Plenum: 1984. Pp. 309. ISBN 0-306-41801-0. \$75.

Theory of NMR Parameters. By I. ANDO and G.A. WEBB. Academic: 1983. Pp. 217. ISBN 0-12-056820-9. £52, £30.

Treatise on Heavy-Ion Science, Vol. 1: Elastic and Quasi-Elastic Phenomena. D. ALLAN BROMLEY (ed.). Plenum: 1984. Pp. 753. ISBN 0-306-41571-2. \$95.

Vibronic Coupling: The Interaction Between the Electronic and Nuclear Motions. By GAD FISCHER. Academic: 1984. Pp. 222. ISBN 0-12-2572408. £28.50, \$42.

Chemistry

Activation of Saturated Hydrocarbons by Transition Metal Complexes. By A.E. SHILOV. Reidel: 1984. Pp. 203. ISBN 90-277-1628-5. Np.

Azides and Nitrenes: Reactivity and Utility. ERIC F.V. SCRIVEN (ed.). Academic: 1984. Pp. 542. ISBN 0-12-633480-3. \$99.50, £70.

The Chemistry of Optically Active Sulfur Compounds. By ABRAHAM NUDELMAN. Gordon and Breach: 1984. Pp. 253. Pbk ISBN 0-677-16390-8. Pbk £58.

Comprehensive Treatise of Electrochemistry. RALPH E. WHITE et al. (eds). Plenum: 1984. Pp. 620. ISBN 0-306-41448-1. \$89.50.

Comprehensive Treatise of Electrochemistry. Electrodes: Experimental Techniques. ERNEST YEAGER et al. (eds). Plenum: 1984. Pp. 451. ISBN 0-306-41570-4. Np.

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Dynamics of First-Order Phase Transitions in Equilibrium and Nonequilibrium Systems. By S.W. KOCH. Springer-Verlag: 1984. Pp. 148. Pbk ISBN 3-540-13379-8/0-387-13379-8. DM 19, \$7.

Growth of Crystals, Vol. 12. A.A. CHERNOV (ed.). Consultants Bureau: 1984. Pp. 355. ISBN 0-306-18112-6. \$55.

Kinetics of Heterogeneous Catalytic Reactions. By MICHAEL BOUDART and G. DJEGA-MARIADASSOU. Princeton University Press: 1984. Pp. 222. ISBN 0-691-08346-0. £32.40.

Methods and Applications in Crystallographic Computing. S.R. HALL and T. ASIDA (eds). Clarendon Press: 1984. Pp. 506. ISBN 0-19-855190-8. £25.

Polyimides: Synthesis, Characterization and Applications. K.L. MITTAL (ed.). Plenum: 1984. Pp. 614. ISBN 0-306-41670-0. Np.

Polymer Additives. JIRI E. KRESTA (ed.). Plenum: 1984. Pp. 408. ISBN 0-306-41807-X. £72.50.

Polymer Blends: Processing, Morphology and Properties. Vol. 2. M. KRYSZCZEWSKI, A. GALESKI and E. MARTYSCHELLI (eds). Plenum: 1984. Pp. 287. ISBN 0-306-41802-9. \$52.50.

Proton and Carbon NMR Spectra of Polymers, Vol. 3. By QUANG-THO PHAM et al. Wiley: 1984. Pp. 677. ISBN 0-471-90394-9. £75.

Reductions in Organic Chemistry. By MILOS HUDECKY. Ellis Horwood: 1984. Pp. 309. ISBN 0-85312-345-4. £35.

Biological Sciences

Evolutionary Biology, Vol. 18. MAX K. HECHT et al. (eds). Plenum: 1984. Pp. 267. ISBN 0-306-41760-X. £37.50.

A Field Guide to the Moths of Eastern North America. By CHARLES V. COVELL. Houghton Mifflin: 1984. Pp. 496. Hbk ISBN 0-393-26056-6; pbk ISBN 0-393-36100-1. Hbk £18.95; pbk £13.95.

Fish Reproduction: Strategies and Tactics. G.W. POTTS and R.J. WOOTTON (eds). Academic: 1984. Pp. 410. ISBN 0-12-563660-1. \$49, £29.50.

Flooding and Plant Growth. T.T. KOZLOWSKI (ed.). Academic: 1984. Pp. 356. ISBN 0-12-424120-4. \$55, £42.50.

Foreign Compound Metabolism. J. CALDWELL and G.D. PAULSON (eds). Taylor & Francis: 1984. Pp. 328. ISBN 0-85066-271-0. £32.

Forest Trees of Australia. By D.J. BOLAND et al. Nelson CSIRO: 1984. Pp. 687. ISBN 0-17-006264-3. \$39.95.

Foundations of Sensory Science. W.W. DAWSON and J.M. ENOCH (eds). Springer-Verlag: 1984. Pp. 577. ISBN 3-540-12967-7/0-387-12967-7. DM 288, \$104.90.

The Fragmented Forest: Island Biogeography Theory and the Preservation of Biotic Diversity. BY LARRY D. HARRIS. University of Chicago Press: 1984. Pp. 211. Pbk ISBN 0-226-31764-1. Pbk £11.

Freshwater Biological Monitoring. D. PASCOE and R.W. EDWARDS (eds). Pergamon: 1984. Pp. 167. ISBN 0-08-03231308. £22.50, \$35.

A Functional Biology of Sticklebacks. By R.J. WOOTON. Croom Helm: 1984. Pp. 265. ISBN 0-7099-2785-1. £17.95.

Fundamentals of Plant Pathology, 2nd Edn. By D.A. ROBERTS and C.W. BOOTHROYD. W.H. Freeman: 1984. Pp. 432. ISBN 0-7167-1505-8. £29.95.

General

Agreement and Anaphora: A Study of the Role of Pronouns in Syntax and Discourse. By PETER BOSCH. Academic: 1983. Pp. 260. ISBN 0-12-118820-5. Np.

Black Apollo of Science: The Life of Ernest Everett Just. By KENNETH R. MANNING. Oxford University Press: 1984. Pp. 397. ISBN 0-19-503299-3. £27.

Scientific Research and Social Goals: Towards a New Development Model. FEDERICO MAYOR (ed.). Pergamon: 1982. Pp. 236. ISBN 0-08-028118-4. Np.

Syntax and Semantics, Vol. 8. PETER COLE and JERROLD M. SADOCK (eds). Academic: 1984. Pp. 347. ISBN 0-12-613508-8. \$65.00, £50.50.

Tahoe: An Environmental History. By DOUGLAS H. STRONG. University of Nebraska Press: 1984. Pp. 252. ISBN 0-8032-4141-0. \$16.95.

Technological Innovation: University Roles. The Association of Commonwealth Universities, John Foster House, 36 Gordon Square, London WC1H 0PF: 1984. Pp. 431. Pbk ISBN 0-85143-087-2. Pbk £6.

Total Mean Curvature and Submanifolds of Finite Type. By BANG-YEN CHEN. World Scientific: 1984. Pp. 352. Hbk ISBN 9971-966-02-6; pbk ISBN 9971-966-03-4. Hbk £p; pbk £15.70.