

In The News

New Literature

Recrystallization and Related Annealing Phenomena

F.J. Humphreys and M. Hatherly

First published in hardback in 1995, *Recrystallization and Related Annealing Phenomena* was the first monograph to cover the subject of recrystallization in 20 years.

Chapter headings include: Introduction, The Deformed State, The Structure and Energy of Grain Boundaries, The Mobility and Migration of Boundaries, Recovery after Deformation, Recrystallization of Single-Phase Alloys, Recrystallization of Ordered Materials, Recrystallization of Two-Phase Alloys, Grain Growth Following Recrystallization, Recrystallization Textures, Recovery and Recrystallization during and after Hot Deformation, Control of Recrystallization, and Computer Modeling and Simulation of Annealing. *Recrystallization and Related Annealing Phenomena* is available in paperback for U.S. \$48.00 (Dutch Guilders 77.00).

Contact: <d.prosser@elsevier.co.uk>.

ICSM 96 on CD-ROM

The International Conference on Science and Technology of Synthetic Metals held at Snowbird, UT, on 28 July to 2 August 1996 was a gathering of the foremost scientists and engineers in this field. The full texts of articles, tables and figures, schemes, and references, are now available on one easy to operate CD-ROM disk. Hardware requirements are PC-compatible (Windows 3.1 or later) and Macintosh computers.

Edited by Z. Valy Vardeny, Physics Department, University of Utah, Salt Lake City, UT, and Arthur J. Epstein, Department of Physics, The Ohio State University, Columbus, OH, this CD-ROM is a powerful electronic archive with user-friendly search and retrieve functions allowing you easy access to more than 1000 articles in the proceedings. Cover-

ing: Part 1: Preface. Conference organization and acknowledgments, Tutorial Overview, Electronic Polymers 1; Part 2: Electronic Polymers 2, Molecule-Based Superconductors, Molecule-Based Magnetic Materials; Part 3: Molecule-Based Charge Transfer Salts, Molecule-Based Carbon Architectures.

The CD-ROM is set up to have: easy, intuitive navigation, a search function to quickly locate items with particular terms or names, search history to repeat complex queries, easy downloading to file or printing of text and illustrations, bookmark to mark important articles for further reading or to add annotations to the text, keyword index to quickly build citation lists, and on-line help showing all the features and options in detail.

Aimed specifically at material scientists, polymer scientists, chemists, physicists and engineers, ICSM 96 on CD-ROM costs: U.S. \$1320, DFL 2138. Also published in printed form as part of the 1997 subscription to the journal *Synthetic Metals*, Volumes 84 to 86.

Contact: Jonathan Roscoe, Elsevier Science, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB; tel: +44/0/1865 843000; fax: +44/0/1865843010; e-mail: <j.roscoe@elsevier.co.uk>.

Handbook of Materials Selection for Engineering Applications

Edited by G.T. Murray, July 1997, 632 pages. \$150.00. ISBN 0-8247-9910-0

This reference provides information on the properties and applications of various classes of metals, polymers, ceramics, and composites—simplifying the materials selection process and showing how to lower materials and manufacturing costs. Drawing from many sources, including vendor-supplied and quality-control test data, the *Handbook of Materials Selection for Engineering Applications* emphasizes the consideration of key factors in materials selection,

highlighting properties, manufacturability, cost analysis, ergonomics, and safety; presents and compares various classes of materials in an easy-to-read format, discussing classification, designation, and mechanical and physical properties; reviews process technologies from metal casting powder processing routes, pultrusion, and green forming to novel techniques such as glass ceramic, reaction combustion synthesis, and slurry infiltration processes; suggests consumer appliance, electronics, structural component, automotive, and aerospace applications for specific classes of materials and explains the effects of temperature and environment on materials.

Supplemented with bibliographic citations, tables, equations and figures, this practical guide is an essential source for materials, mechanical, manufacturing, product design, and industrial engineers; metallurgists; mechanical technologists; and graduate level students in these disciplines.

Contact: Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016; tel: 212/696-9000; www: <http://www.dekker.com>.

Materials Selection for Design and Manufacturing: Theory and Practice

Joseph Datsko, July 1997, 392 pages. \$125.00 (\$59.95 on orders of five or more copies, for classroom use only). ISBN: 0-8247-9844-9

This reference/text provides an analytical approach to selecting the best metal and obtaining optimal properties for and in a fabricated part—correlating weldability, formability, and machinability with a metals microstructure and chemical composition.

Contact: Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016; tel: 212/696-9000; www: <http://www.dekker.com>.