Handbook of Modern Ion Beam Materials Analysis

Second Edition

EDITORS Yongqiang Wang and Michael Nastasi

JUST PUBLISHED

The most comprehensive database on ion beam analysis ever published revised and updated from the popular handbook released in 1995!



- Written and compiled by over 30 leading authorities in the field
 of ion beam analysis
- · Important reference tool for technicians, students and professionals
- A must for all accelerator labs
- Excellent introduction to the fundamentals and lab practices of ion beam analysis
- Useful as a teaching text for undergraduate senior or first-year graduate students
- For libraries, the most recent and comprehensive collection of nuclear and atomic data for the applications of ion beam materials analysis
- DVD includes bonus info—Ion Beam Analysis Nuclear Data Library (IBANDL) and GUPIX Subroutines (CSA and YLS) for X-ray Database

TWO VOLUME PRINT SET + DVD OF APPENDICES Order Code: IBH-2 • ISBN: 978-1-60511-217-6

\$ 200.00 Materials Research Society Members\$ 250.00 Nonmembers

VOLUME 1—PRINT CHAPTERS (441 PAGES) + DVD OF APPENDICES Order Code: IBH-2a • ISBN: 978-1-60511-215-2

\$ 125.00 Materials Research Society Members\$ 150.00 Nonmembers

VOLUME 2—PRINT APPENDICES ONLY (370 PAGES) Order Code: IBH-2b • ISBN: 978-1-60511-216-9

\$ 125.00 Materials Research Society Members\$ 150.00 Nonmembers

ORDER AT WWW.MRS.ORG/IBH2

MRS MATERIALS RESEARCH SOCIETY, Customer Services, 506 Keystone Drive, Warrendale, PA 15086 USA • Tel 724.779.3003 • info@mrs.org

MATERIALS RESEARCH SOCIETY

2011 Board of Directors

Officers

J.J. De Yoreo, *President* D.S. Ginley, *Immediate Past President* B.M. Clemens, *Vice President and President-Elect* S.J. Hearne, *Secretary* M.R. Fitzsimmons, *Treasurer*

Directors

- W. Adams A.C. Arias T. Benson Tolle F. Besenbacher E. Bodenschatz D.B. Dimos J.M. Gibson
- O. Kraft H. Matsumura C.A. Orme M.F. Rubner T. Someya S.E. Trolier-McKinstry P. Wiltzius

2011 Publications Committee

P.C. McIntyre, *Chair* P.B. Messersmith, *Editors Subcommittee*

J.C. Bravman, Publications Review Subcommittee

2011 MRS Committee Chairs

M.S. Whittingham, *Academic Affairs* J.R. Weertman, *Awards* A.J. Hurd, *Government Affairs* J.W.P. Hsu, *International Relations* S. Jasty, *Membership* P.C. McIntyre, *Publications* G. Zenner Petersen, *Public Outreach* M. Aziz, *Technical Program*

MRS Headquarters

T.M. Osman, Executive Director

J.A. Dillen, Director of Finance and Infrastructure

P.A. Hastings, Director of Meeting Activities

- G.A. Oare, Director of Publications and Marketing
- S.D. Wolf, Director of Membership Development

Journal of Materials Research Founding Sponsors

Allied-Signal Inc. Xerox Corporation

About the Materials Research Society

The Materials Research Society (MRS) is a not-for-profit scientific association founded in 1973 to promote interdisciplinary goal-oriented basic research on materials of technological importance. Membership in the Society includes almost 16,000 scientists from industrial, government, and university research laboratories in the United States and abroad.

The Society's interdisciplinary approach to the exchange of technical information is qualitatively different from that provided by single-discipline professional societies because it promotes technical exchange across the various fields of science affecting materials development. MRS sponsors two major international annual meetings encompassing many topical symposia, as well as numerous single-topic scientific meetings each year. It recognizes professional and technical excellence, conducts tutorials, and fosters technical exchange in various local geographical regions through Section activities and Student Chapters on university campuses.

MRS publishes symposia proceedings, the *MRS Bulletin*, and other volumes on current scientific developments. The *Journal of Materials Research*, the archival journal spanning fundamental developments in materials science, is published twenty-four times a year by Cambridge University Press for the MRS.

MRS regular and student members may subscribe to *Journal of Materials Research*. See inside front cover for subscription rates for *Journal of Materials Research*.

MRS is an Affiliated Society of the American Institute of Physics and participates in the international arena of materials research through associations with professional organizations such as the International Union of Materials Research Societies.

For further information on the Society's activities, contact MRS Headquarters, 506 Keystone Drive, Warrendale, PA 15086-7573; telephone (724) 779-3003; fax (724) 779-8313.



A publication of the

MRS MATERIALS RESEARCH SOCIETY

Periodical Rate Postage Paid at New York, NY and Additional Mailing Offices

Postmaster—Send change of address notice to:

Cambridge University Press 100 Brook Hill Drive West Nyack, NY 10994-2113, USA

ISSN: 0884-2914