High Resolution Electron Microscopy Copy

John C. H. Spence

Electron Diffraction and High-Resolution Electron Microscopy of Mineral Structures Victor A. Drits.2012-12-06 The decision of Springer-Verlag to publish this book in English came as a pleasant surprise. The fact is that I started writing the first version of the book back in 1978. I wished to attract attention to potentialities inherent in selected-area electron diffraction (SAED) which, for various reasons, were not being put to use. By that time, I had at my disposal certain structural data on natural and synthetic minerals obtained using SAED and high-resolution electron microscopy (HREM), and this stimulated my writing this book. There were several aspects concerning these data that I wished to emphasize. First, it was mostly new and understudied minerals that possess the peculiar structural features studied by SAED and HREM. This could interest mineralogists, crystallo chemists, and crystallographers. Second, the results obtained indi cated that, under certain conditions, SAED could be an effective, and sometimes the only possible, method for structure analysis of minerals. This inference was of primary importance, since fine dispersion and poor crystallinity of numerous natural and synthe tic minerals makes their structure study by conventional diffrac tion methods hardly possible. Third, it was demonstrated that in many cases X-ray powder diffraction analysis of dispersed miner als ought to be combined with SAED and local energy dispersion analysis. This was important, since researchers in structural min eralogy quite often ignored, and still ignore even the simplest in formation which is readily available from geometrical analysis of SAED patterns obtained from microcrystals.

Advances in Imaging and Electron Physics .2009-06-12 The invention of the electron microscope more than 70 years ago made it possible to visualize a new world, far smaller than anything that could be seen with the traditional microscope. The biologist could study viruses and the components of cells, the materials scientist could study the structure of metals and alloys and many other substances, and especially their defects. But even the electron microscope had limits, and truly atomic structure was still too small to be observed directly. The so-called limit of resolution of the microscope was well understood, but attempts to use the necessary correctors were unsuccessful until the late 1990s. Such correctors now equip many microscopes in Europe, the USA and Japan and the results are extremely impressive. Moreover, microscopists feel that they are only at the beginning of a new era of subatomic microscopic imaging. In the present volume, we have brought together the principal contributors, instrument designers and microscopists to discuss this topic in depth. * First book on the subject of correctors * Well known contributors from academia and microscope manufacturers * Provides an ideal starting point for

preparing funding proposals

High Resolution Electron Microscopy of Defects in Materials: Volume 183 Materials Research Society.1990-08-10 The MRS Symposium Proceeding series is an internationally recognised reference suitable for researchers and practitioners.

Scanning Electron Microscopy for the Life Sciences Heide Schatten.2013 A guide to modern scanning electron microscopy instrumentation, methodology and techniques, highlighting novel applications to cell and molecular biology.

Transmission Electron Microscopy C. Barry Carter,David B. Williams.2016-08-24 This text is a companion volume to Transmission Electron Microscopy: A Textbook for Materials Science by Williams and Carter. The aim is to extend the discussion of certain topics that are either rapidly changing at this time or that would benefit from more detailed discussion than space allowed in the primary text. World-renowned researchers have contributed chapters in their area of expertise, and the editors have carefully prepared these chapters to provide a uniform tone and treatment for this exciting material. The book features an unparalleled collection of color figures showcasing the quality and variety of chemical data that can be obtained from today’s instruments, as well as key pitfalls to avoid. As with the previous TEM text, each chapter contains two sets of questions, one for self assessment and a second more suitable for homework assignments. Throughout the book, the style follows that of Williams & Carter even when the subject matter becomes challenging—the aim is always to make the topic understandable by first-year graduate students and others who are working in the field of Materials Science Topics covered include sources, in-situ experiments, electron diffraction, Digital Micrograph, waves and holography, focal-series reconstruction and direct methods, STEM and tomography, energy-filtered TEM (EFTEM) imaging, and spectrum imaging. The range and depth of material makes this companion volume essential reading for the budding microscopist and a key reference for practicing researchers using these and related techniques.

The Beginnings of Electron Microscopy Peter W. Hawkes.2013-11-06 The Beginnings of Electron Microscopy presents the technical development of electron microscope. This book examines the mechanical as well as the technical problems arising from the physical properties of the electron. Organized into 19 chapters, this book begins with an overview of the history of scanning electron microscopy and electron beam microanalysis. This text then explains the applications and capabilities of electron microscopes during the war. Other chapters consider the classical techniques of light microscopy. This book presents as well the schematic outline of the preparation techniques for investigation of nerve cells by electron microscopy. The final chapter deals with the historical account of the beginnings of electron microscopy in Russia. This book is a valuable resource for scientists, technologists, physicists, electrical engineers, designers, and technicians. Graduate students as well as researcher workers who are interested in the history of electron microscopy will also find this book extremely useful.

High Resolution Electron Microscopy C. Hetherington,J. L. Hutchinson,T. Epicier.2001-06 Almost all researchers in

materials science, particularly those in the growth area of nanoscale materials, need to use high resolution electron microscopy (HREM). This work introduces novices to the technology and guides them through strategies for HREM investigations, specimen selection and preparation, equipment set-up, image simulation and quantification. The book then leads on to more advance issues such as aberration and reconstruction. Throughout the book, the authors provide practical guidance to help the reader improve their technique and so their results.

4D Electron Microscopy Ahmed H. Zewail,John Meurig Thomas.2010 Structural phase transitions, mechanical deformations, and the embryonic stages of melting and crystallization are examples of phenomena that can now be imaged in unprecedented structural detail with high spatial resolution, and ten orders of magnitude as fast as hitherto. No monograph in existence attempts to cover the revolutionary dimensions that EM in its various modes of operation nowadays makes possible. The authors of this book chart these developments, and also compare the merits of coherent electron waves with those of synchrotron radiation. They judge it prudent to recall some important basic procedural and theoretical aspects of imaging and diffraction so that the reader may better comprehend the significance of the new vistas and applications now afoot. This book is not a vade mecum - numerous other texts are available for the practitioner for that purpose.

Advanced Transmission Electron Microscopy Jian Min Zuo,John C.H. Spence.2016-10-26 This volume expands and updates the coverage in the authors' popular 1992 book, Electron Microdiffraction. As the title implies, the focus of the book has changed from electron microdiffraction and convergent beam electron diffraction to all forms of advanced transmission electron microscopy. Special attention is given to electron diffraction and imaging, including high-resolution TEM and STEM imaging, and the application of these methods to crystals, their defects, and nanostructures. The authoritative text summarizes and develops most of the useful knowledge which has been gained over the years from the study of the multiple electron scattering problem, the recent development of aberration correctors and their applications to materials structure characterization, as well as the authors' extensive teaching experience in these areas. Advanced Transmission Electron Microscopy: Imaging and Diffraction in Nanoscience is ideal for use as an advanced undergraduate or graduate level text in support of course materials in Materials Science, Physics or Chemistry departments.

Electron Microscopy In Material Science U Valdre.2012-12-02 Electron Microscopy in Material Science covers the proceedings of the International School of Electron Microscopy held in Erice, Itsaly, in 1970. The said conference is intended to the developments of electron optics and electron microscopy and its applications in material science. The book is divided into four parts. Part I discusses the impact of electron microscopy in the science of materials. Part II covers topics such as electron optics and instrumentation; geometric electron optics and its problems; and special electron microscope specimen stages. Part III explains the theory of electron diffraction image contrast and then elaborates on related areas such as the application of electron diffraction and of electron microscopy to radiation; computing methods; and problems in electron

microscopy. Part IV includes topics such as the transfer of image information in the electron microscope; phase contrast microscopy; and the magnetic phase contrast. The text is recommended for electron microscopists who are interested in the application of their field in material science, as well as for experts in the field of material science and would like to know about the importance of electron microscopy.

High-Resolution Electron Microscopy John C. H. Spence.2013-09-12 Revision of: Experimental high-resolution electron microscopy. 2nd ed. 1988.

High-Resolution Electron Microscopy for Materials Science Daisuke Shindo,Hiraga Kenji.1998-09-01

Experimental High-resolution Electron Microscopy John C. H. Spence.1988 The new edition of this highly practical microscopy guide covers a wider range of applications and includes a new chapter on associated techniques along with new material on high-resolution images of periodic structures.

High-Resolution Transmission Electron Microscopy Peter Buseck,John Cowley,LeRoy Eyring.1989-02-02 This book provides an introduction to the fundamental concepts, techniques, and methods used for electron microscopy at high resolution in space, energy, and even in time. It delineates the theory of elastic scattering, which is most useful for spectroscopic and chemical analyses. There are also discussions of the theory and practice of image calculations, and applications of HRTEM to the study of solid surfaces, highly disordered materials, solid state chemistry, mineralogy, semiconductors and metals. Contributors include J. Cowley, J. Spence, P. Buseck, P. Self, and M.A. O'Keefe. Compiled by experts in the fields of geology, physics and chemistry, this comprehensive text will be the standard reference for years to come.

Handbook of Microscopy for Nanotechnology Nan Yao,Zhong Lin Wang.2006-07-12 Nanostructured materials take on an enormously rich variety of properties and promise exciting new advances in micromechanical, electronic, and magnetic devices as well as in molecular fabrications. The structure-composition-processing-property relationships for these sub 100 nm-sized materials can only be understood by employing an array of modern microscopy and microanalysis tools. Handbook of Microscopy for Nanotechnology aims to provide an overview of the basics and applications of various microscopy techniques for nanotechnology. This handbook highlights various key microcopic techniques and their applications in this fast-growing field. Topics to be covered include the following: scanning near field optical microscopy, confocal optical microscopy, atomic force microscopy, magnetic force microscopy, scanning turning microscopy, high-resolution scanning electron microscopy, orientational imaging microscopy, high-resolution transmission electron microscopy, scanning transmission electron microscopy, environmental transmission electron microscopy, quantitative electron diffraction, Lorentz microscopy, electron holography, 3-D transmission electron microscopy, high-spatial resolution quantitative microanalysis, electron-energy-loss spectroscopy and spectral imaging, focused ion beam, secondary ion microscopy, and field ion

microscopy.

High resolution electron microscopy .1983

In-situ Electron Microscopy at High Resolution Florian Banhart.2008 In-situ high-resolution electron microscopy is a modern and powerful technique in materials research, physics, and chemistry. In-situ techniques are hardly treated in textbooks of electron microscopy. Thus, there is a need to collect the present knowledge about the techniques and achievements of in-situ electron microscopy in one book. Since high-resolution electron microscopes are available in most modern laboratories of materials science, more and more scientists or students are starting to work on this subject.In this comprehensive volume, the most important techniques and achievements of in-situ high-resolution electron microscopy will be reviewed by renowned experts. Applications in several fields of materials science will also be demonstrated.

High-Resolution Electron Microscopy for Materials Science Daisuke Shindo,Hiraga Kenji.2012-12-06 High-resolution electron microscopy (HREM) has become a most powerful method for investigating the internal structure of materials on an atomic scale of around 0.1 nm. The authors clearly explain both the theory and practice of HREM for materials science. In addition to a fundamental formulation of the imaging process of HREM, there is detailed explanation of image simulationindispensable for interpretation of high-resolution images. Essential information on appropriate imaging conditions for observing lattice images and structure images is presented, and methods for extracting structural information from these observations are clearly shown, including examples in advanced materials. Dislocations, interfaces, and surfaces are dealt with, and materials such as composite ceramics, high-Tc superconductors, and quasicrystals are also considered. Included are sections on the latest instruments and techniques, such as the imaging plate and quantitative HREM.

In-situ Electron Microscopy Gerhard Dehm,James M. Howe,Josef Zweck.2012-05-29 Adopting a didactical approach from fundamentals to actual experiments and applications, this handbook and ready reference covers real-time observations using modern scanning electron microscopy and transmission electron microscopy, while also providing information on the required stages and samples. The text begins with introductory material and the basics, before describing advancements and applications in dynamic transmission electron microscopy and reflection electron microscopy. Subsequently, the techniques needed to determine growth processes, chemical reactions and oxidation, irradiation effects, mechanical, magnetic, and ferroelectric properties as well as cathodoluminiscence and electromigration are discussed.

Scanning Transmission Electron Microscopy Stephen J. Pennycook,Peter D. Nellist.2011-03-24 Scanning transmission electron microscopy has become a mainstream technique for imaging and analysis at atomic resolution and sensitivity, and the authors of this book are widely credited with bringing the field to its present popularity. Scanning Transmission Electron Microscopy(STEM): Imaging and Analysis will provide a comprehensive explanation of the theory and practice of STEM from introductory to advanced levels, covering the instrument, image formation and scattering theory, and

definition and measurement of resolution for both imaging and analysis. The authors will present examples of the use of combined imaging and spectroscopy for solving materials problems in a variety of fields, including condensed matter physics, materials science, catalysis, biology, and nanoscience. Therefore this will be a comprehensive reference for those working in applied fields wishing to use the technique, for graduate students learning microscopy for the first time, and for specialists in other fields of microscopy.

New Approaches in Correlative Studies of Biological Ultrastructure by High-resolution Electron Microscopy H. Fernandez-Moran.1964

Transmission Electron Microscopy Ludwig Reimer.2013-11-11 The aim of this book is to outline the physics of image formation, electron specimen interactions and image interpretation in transmission electron mic roscopy. The book evolved from lectures delivered at the University of Munster and is a revised version of the first part of my earlier book Elek tronenmikroskopische Untersuchungs- und Priiparationsmethoden, omitting the part which describes specimen-preparation methods. In the introductory chapter, the different types of electron microscope are compared, the various electron-specimen interactions and their applications are summarized and the most important aspects of high-resolution, analytical and high-voltage electron microscopy are discussed. The optics of electron lenses is discussed in Chapter 2 in order to bring out electron-lens properties that are important for an understanding of the function of an electron microscope. In Chapter 3, the wave optics of elec trons and the phase shifts by electrostatic and magnetic fields are introduced; Fresnel electron diffraction is treated using Huygens' principle. The recogni tion that the Fraunhofer-diffraction pattern is the Fourier transform of the wave amplitude behind a specimen is important because the influence of the imaging process on the contrast transfer of spatial frequencies can be described by introducing phase shifts and envelopes in the Fourier plane. In Chapter 4, the elements of an electron-optical column are described: the electron gun, the condenser and the imaging system. A thorough understanding of electron-specimen interactions is essential to explain image contrast.

High-resolution Electron Microscopy .1991

Aberration-Corrected Imaging in Transmission Electron Microscopy Rolf Erni.2015-03-23 Aberration-Corrected Imaging in Transmission Electron Microscopy provides an introduction to aberration-corrected atomic-resolution electron microscopy imaging in materials and physical sciences. It covers both the broad beam transmission mode (TEM; transmission electron microscopy) and the scanning transmission mode (STEM; scanning transmission electron microscopy). The book is structured in three parts. The first part introduces the basics of conventional atomic-resolution electron microscopy imaging in TEM and STEM modes. This part also describes limits of conventional electron microscopes and possible artefacts which are caused by the intrinsic lens aberrations that are unavoidable in such instruments. The second part introduces fundamental electron optical concepts and thus provides a brief introduction to electron optics. Based on the first and second

parts of the book, the third part focuses on aberration correction; it describes the various aberrations in electron microscopy and introduces the concepts of spherical aberration correctors and advanced aberration correctors, including correctors for chromatic aberration. This part also provides guidelines on how to optimize the imaging conditions for atomic-resolution STEM and TEM imaging. This second edition has been completely revised and updated in order to incorporate the very recent technological and scientific achievements that have been realized since the first edition appeared in 2010.

A Beginners' Guide to Scanning Electron Microscopy Anwar Ul-Hamid.2018-10-26 This book was developed with the goal of providing an easily understood text for those users of the scanning electron microscope (SEM) who have little or no background in the area. The SEM is routinely used to study the surface structure and chemistry of a wide range of biological and synthetic materials at the micrometer to nanometer scale. Ease-of-use, typically facile sample preparation, and straightforward image interpretation, combined with high resolution, high depth of field, and the ability to undertake microchemical and crystallographic analysis, has made scanning electron microscopy one of the most powerful and versatile techniques for characterization today. Indeed, the SEM is a vital tool for the characterization of nanostructured materials and the development of nanotechnology. However, its wide use by professionals with diverse technical backgrounds—including life science, materials science, engineering, forensics, mineralogy, etc., and in various sectors of government, industry, and academia—emphasizes the need for an introductory text providing the basics of effective SEM imaging.A Beginners’ Guide to Scanning Electron Microscopy explains instrumentation, operation, image interpretation and sample preparation in a wide ranging yet succinct and practical text, treating the essential theory of specimen-beam interaction and image formation in a manner that can be effortlessly comprehended by the novice SEM user. This book provides a concise and accessible introduction to the essentials of SEM includes a large number of illustrations specifically chosen to aid readers' understanding of key concepts highlights recent advances in instrumentation, imaging and sample preparation techniques offers examples drawn from a variety of applications that appeal to professionals from diverse backgrounds.

Microscopy of Semiconducting Materials 1983, Third Oxford Conference on Microscopy of Semiconducting Materials, St Catherines College, March 1983 A.G. Cullis.2020-11-25 This volume contains invited and contributed papers at the conference on Microscopy of Semiconducting Materials which took place on 21–23 March 1983 in St Cathernine's College, Oxford. The conference was the third in the series devoted to advances in microscopical studies of semiconductors.

Electron Microscopy S. Amelinckx,Dirk van Dyck,J. van Landuyt,Gustaaf van Tendeloo.2008-09-26 Derived from the successful three-volume Handbook of Microscopy, this book provides a broad survey of the physical fundamentals and principles of all modern techniques of electron microscopy. This reference work on the method most often used for the characterization of surfaces offers a competent comparison of the feasibilities of the latest developments in this field of

research. Topics include: * Stationary Beam Methods: Transmission Electron Microscopy/ Electron Energy Loss Spectroscopy/ Convergent Electron Beam Diffraction/ Low Energy Electron Microscopy/ Electron Holographic Methods * Scanning Beam Methods: Scanning Transmission Electron Microscopy/ Scanning Auger and XPS Microscopy/ Scanning Microanalysis/ Imaging Secondary Ion Mass Spectrometry * Magnetic Microscopy: Scanning Electron Microscopy with Polarization Analysis/ Spin Polarized Low Energy Electron Microscopy Materials scientists as well as any surface scientist will find this book an invaluable source of information for the principles of electron microscopy.

In-Situ Electron Microscopy at High Resolution .

Advanced Computing in Electron Microscopy Earl J. Kirkland.2020-03-09 This updated and revised edition of a classic work provides a summary of methods for numerical computation of high resolution conventional and scanning transmission electron microscope images. At the limits of resolution, image artifacts due to the instrument and the specimen interaction can complicate image interpretation. Image calculations can help the user to interpret and understand high resolution information in recorded electron micrographs. The book contains expanded sections on aberration correction, including a detailed discussion of higher order (multipole) aberrations and their effect on high resolution imaging, new imaging modes such as ABF (annular bright field), and the latest developments in parallel processing using GPUs (graphic processing units), as well as updated references. Beginning and experienced users at the advanced undergraduate or graduate level will find the book to be a unique and essential guide to the theory and methods of computation in electron microscopy.

Physical Principles of Electron Microscopy Ray Egerton.2011-02-11 Scanning and stationary-beam electron microscopes are indispensable tools for both research and routine evaluation in materials science, the semiconductor industry, nanotechnology and the biological, forensic, and medical sciences. This book introduces current theory and practice of electron microscopy, primarily for undergraduates who need to understand how the principles of physics apply in an area of technology that has contributed greatly to our understanding of life processes and inner space. Physical Principles of Electron Microscopy will appeal to technologists who use electron microscopes and to graduate students, university teachers and researchers who need a concise reference on the basic principles of microscopy.

C, H, N and O in Si and Characterization and Simulation of Materials and Processes A. Borghesi,U.M. Gösele,J. Vanhellemont,A.M. Gué,M. Djafari-Rouhani.2012-12-02 Containing over 200 papers, this volume contains the proceedings of two symposia in the E-MRS series. Part I presents a state of the art review of the topic - Carbon, Hydrogen, Nitrogen and Oxygen in Silicon and in Other Elemental Semiconductors. There was strong representation from the industrial laboratories, illustrating that the topic is highly relevant for the semiconductor industry. The second part of the volume deals with a topic which is undergoing a process of convergence with two concerns that are more particularly application oriented. Firstly, the advanced instrumentation which, through the use of atomic force and tunnel microscopies, high resolution electron

microscopy and other high precision analysis instruments, now allows for direct access to atomic mechanisms. Secondly, the technological development which in all areas of applications, particularly in the field of microelectronics and microsystems, requires as a result of the miniaturisation race, a precise mastery of the microscopic mechanisms.

Liquid Cell Electron Microscopy Frances M. Ross.2017 2.6.2 Electrodes for Electrochemistry

High-Resolution Electron Microscopy John C. H. Spence.2009 This book describes how to see atoms using electron microscopes. This new edition includes updated sections on applications and new uses of atomic-resolution transmission electron microscopy. Several new chapters and sources of software for image interpretation and electron-optical design have also been added.

High Resolution Electron Microscopy .1977

Electron Diffraction and High-Resolution Electron Microscopy of Mineral Structures Victor A Drits,Bella B Smoliar.1987-07-08

Quantitative Atomic-Resolution Electron Microscopy .2021-03-31 Quantitative Atomic-Resolution Electron Microscopy, Volume 217, the latest release in the Advances in Imaging and Electron Physics series merges two long-running serials, Advances in Electronics and Electron Physics and Advances in Optical and Electron Microscopy. The series features extended articles on the physics of electron devices (especially semiconductor devices), particle optics at high and low energies, microlithography, image science, digital image processing, electromagnetic wave propagation, electron microscopy, and the computing methods. Chapters in this release include Statistical parameter estimation theory, Efficient fitting algorithm, Statistics-based atom counting , Atom column detection, Optimal experiment design for nanoparticle atom-counting from ADF STEM images, and more. Contains contributions from leading authorities on the subject matter Informs and updates on the latest developments in the field of imaging and electron physics Provides practitioners interested in microscopy, optics, image processing, mathematical morphology, electromagnetic fields, electrons and ion emission with a valuable resource

High-resolution Electron Microscopy .1985

Nanocharacterisation Angus I Kirkland,Sarah J Haigh.2015-08-10 Nanocharacterisation provides an overview of the main characterisation techniques that are currently used to study nanostructured materials. Following on from the success of the first edition, this new edition has been fully revised and updated to reflect the recent developments in instrumental characterisation methods. With contributions from internationally recognised experts, each chapter focuses on a different technique to characterise nanomaterials providing experimental procedures and applications. State of the art characterisation methods covered include Transmission Electron Microscopy, Scanning Transmission Electron Microscopy, Scanning Probe Microscopy, Electron Energy Loss Spectroscopy and Energy Dispersive X-ray Analysis, 3D Characterisation, Scanning Electron and Ion Microscopy and In situ Microscopy. Essentially a handbook to all working in the field this

indispensable resource will appeal to academics, professionals and anyone working fields related to the research and development of nanocharacterisation and nanotechnology.

Biological Field Emission Scanning Electron Microscopy Roland A. Fleck,Bruno M. Humbel.2019-01-31 The go-to resource for microscopists on biological applications of field emission gun scanning electron microscopy (FEGSEM) The evolution of scanning electron microscopy technologies and capability over the past few years has revolutionized the biological imaging capabilities of the microscope—giving it the capability to examine surface structures of cellular membranes to reveal the organization of individual proteins across a membrane bilayer and the arrangement of cell cytoskeleton at a nm scale. Most notable are their improvements for field emission scanning electron microscopy (FEGSEM), which when combined with cryo-preparation techniques, has provided insight into a wide range of biological questions including the functionality of bacteria and viruses. This full-colour, must-have book for microscopists traces the development of the biological field emission scanning electron microscopy (FEGSEM) and highlights its current value in biological research as well as its future worth. Biological Field Emission Scanning Electron Microscopy highlights the present capability of the technique and informs the wider biological science community of its application in basic biological research. Starting with the theory and history of FEGSEM, the book offers chapters covering: operation (strengths and weakness, sample selection, handling, limitations, and preparation); Commercial developments and principals from the major FEGSEM manufacturers (Thermo Scientific, JEOL, HITACHI, ZEISS, Tescan); technical developments essential to bioFEGSEM; cryobio FEGSEM; cryo-FIB; FEGSEM digital-tomography; array tomography; public health research; mammalian cells and tissues; digital challenges (image collection, storage, and automated data analysis); and more. Examines the creation of the biological field emission gun scanning electron microscopy (FEGSEM) and discusses its benefits to the biological research community and future value Provides insight into the design and development philosophy behind current instrument manufacturers Covers sample handling, applications, and key supporting techniques Focuses on the biological applications of field emission gun scanning electron microscopy (FEGSEM), covering both plant and animal research Presented in full colour An important part of the Wiley-Royal Microscopical Series, Biological Field Emission Scanning Electron Microscopy is an ideal general resource for experienced academic and industrial users of electron microscopy—specifically, those with a need to understand the application, limitations, and strengths of FEGSEM.

Advances in Electronics and Electron Physics .1991-12-02 Advances in Electronics and Electron Physics

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