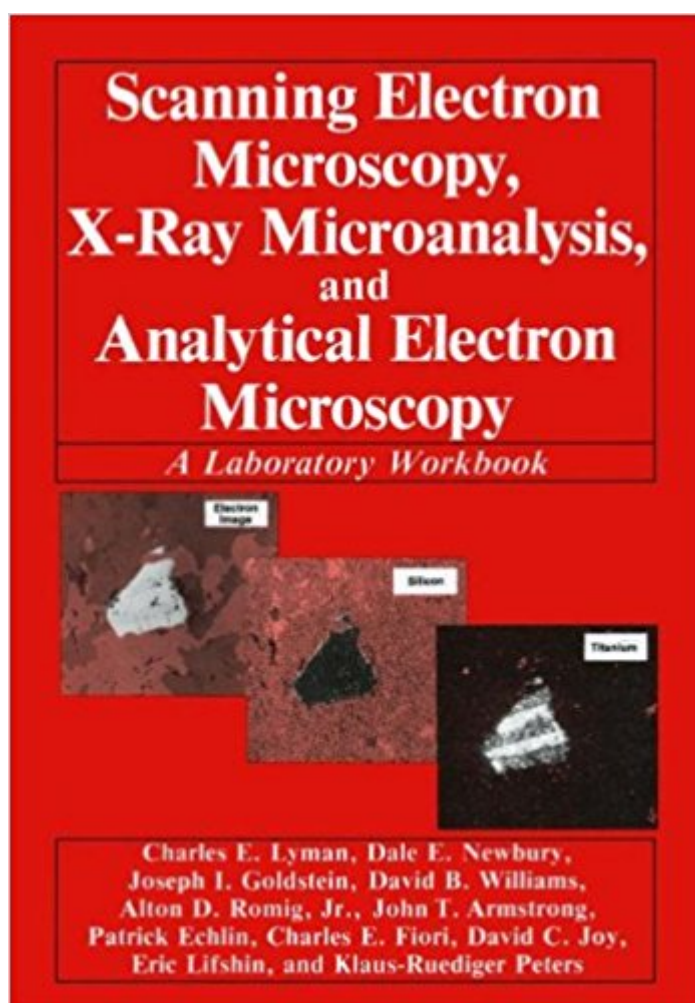


The book was found

# Scanning Electron Microscopy, X-Ray Microanalysis, And Analytical Electron Microscopy: A Laboratory Workbook



## Synopsis

During the last four decades remarkable developments have taken place in instrumentation and techniques for characterizing the microstructure and microcomposition of materials. Some of the most important of these instruments involve the use of electron beams because of the wealth of information that can be obtained from the interaction of electron beams with matter. The principal instruments include the scanning electron microscope, electron probe x-ray microanalyzer, and the analytical transmission electron microscope. The training of students to use these instruments and to apply the new techniques that are possible with them is an important function, which has been carried out by formal classes in universities and colleges and by special summer courses such as the ones offered for the past 19 years at Lehigh University. Laboratory work, which should be an integral part of such courses, is often hindered by the lack of a suitable laboratory workbook. While laboratory workbooks for transmission electron microscopy have been in existence for many years, the broad range of topics that must be dealt with in scanning electron microscopy and microanalysis has made it difficult for instructors to devise meaningful experiments. The present workbook provides a series of fundamental experiments to aid in "hands-on" learning of the use of the instrumentation and the techniques. It is written by a group of eminently qualified scientists and educators. The importance of hands-on learning cannot be overemphasized.

## Book Information

Paperback: 407 pages

Publisher: Springer; Softcover reprint of the original 1st ed. 1990 edition (August 31, 1990)

Language: English

ISBN-10: 0306435918

ISBN-13: 978-0306435911

Product Dimensions: 7.1 x 1 x 9.7 inches

Shipping Weight: 2 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #2,574,528 in Books (See Top 100 in Books) #74 in Books > Science & Math > Experiments, Instruments & Measurement > Electron Microscopes & Microscopy #273 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Testing #555 in Books > Science & Math > Biological Sciences > Biology > Developmental Biology

## Customer Reviews

Form the reviews of the third edition:â œThere is no other single volume that covers as much theory

and practice of SEM or X-ray microanalysis as Scanning Electron Microscopy and X-ray Microanalysis, 3rd Edition does. It is clearly written ... well organized. ... This is a reference text that no SEM or EPMA laboratory should be without.â • (Thomas J. Wilson, Scanning, Vol. 27 (4), July/August, 2005)â œAs the authors pointed out, the number of equations in the book is kept to a minimum, and important conceptions are also explained in a qualitative manner. A lot of very distinct images and schematic drawings make for a very interesting book and help readers who study scanning electron microscopy and X-ray microanalysis. The principal application and sample preparation given in this book are suitable for undergraduate students and technicians learning SEEM and EDS/WDS analyses. It is an excellent textbook for graduate students, and an outstanding reference for engineers, physical, and biological scientists.â • (Microscopy and Microanalysis, Vol. 9 (5), October, 2003) --This text refers to the Hardcover edition.

--This text refers to the Hardcover edition.

[Download to continue reading...](#)

Scanning Electron Microscopy, X-Ray Microanalysis, and Analytical Electron Microscopy: A Laboratory Workbook Scanning Electron Microscopy and X-Ray Microanalysis: A Text for Biologists, Materials Scientists, and Geologists Scanning Electron Microscopy and X-ray Microanalysis: Third Edition Scanning Electron Microscopy and X-Ray Microanalysis Handbook of Sample Preparation for Scanning Electron Microscopy and X-Ray Microanalysis Electron microscopy for beginners: Easy course for understanding and doing electron microscopy (Electron microscopy in Science) Scanning Electron Microscopy: Physics of Image Formation and Microanalysis (Springer Series in Optical Sciences) Liquid Cell Electron Microscopy (Advances in Microscopy and Microanalysis) Electron Microprobe Analysis and Scanning Electron Microscopy in Geology Monte Carlo Modeling for Electron Microscopy and Microanalysis (Oxford Series in Optical and Imaging Sciences) Transmission Electron Microscopy: Physics of Image Formation and Microanalysis (Springer Series in Optical Sciences,) Scanning and Transmission Electron Microscopy: An Introduction Fungal morphology and ecology: Mostly scanning electron microscopy Scanning Transmission Electron Microscopy: Imaging and Analysis Scanning Transmission Electron Microscopy of Nanomaterials : Basics of Imaging and Analysis Scanning Electron Microscopy: Applications to Materials and Device Science Normal, Transformed and Leukemic Leukocytes: A Scanning Electron Microscopy Atlas Principles and Practice of Variable Pressure: Environmental Scanning Electron Microscopy (VP-ESEM) Biological Low-Voltage Scanning Electron Microscopy New Horizons of Applied Scanning Electron Microscopy (Springer Series in

Surface Sciences)

Contact Us

DMCA

Privacy

FAQ & Help