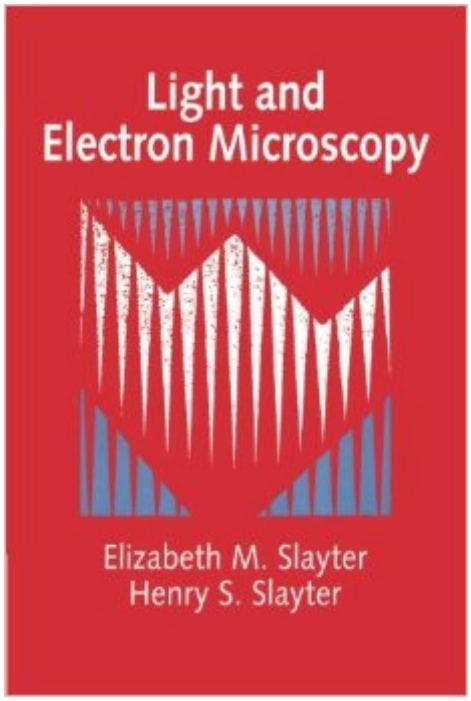
Light And Electron Microscopy



Synopsis

This book describes the principles of operation of each type of microscope currently available and of use to biomedical and materials scientists. It explains the mechanisms of image formation, contrast and its enhancement, and accounts for ultimate limits on the size of observable details (resolving power and resolution). Finally it provides an account of Fourier optical theory. Principles behind the photographic methods used in microscopy are also described and there is some discussion of image processing methods. Throughout, the text emphasizes the underlying similarity of all microscope systems and, recognizing that biologists may often be uncomfortable with mathematical approaches every effort has been made to present concepts verbally.

Book Information

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Customer Reviews

I have looked at many microscope books in vain, before this one, to find clear explanations of the key topics in optical microscopy for my graduate students. None come close to competing with the Slayters. Jerry Pine, Professor of Biophysics, Caltech

This is a good book for beginners. It explains some complicated principles in easy way and makes one to understand the complicated microscope more quickly.

This is a classic, I am glad I found an copy for my library. This is required reading for any serious

user of a microscope.

D. B. Williams's C. Barry Carter's Transmission Electron Microscopy 2nd(Second) edition (Transmission Electron Microscopy: A Textbook for Materials Science [Hardcover])(2009) Typical Electron Microscope Investigations (Monographs in Practical Electron Microscopy in Materials Sci) Electron Diffraction in the Transmission Electron Microscope (Microscopy Handbooks) Light and Electron Microscopy Scanning Electron Microscopy and X-Ray Microanalysis: A Text for Biologists, Materials Scientists, and Geologists Scanning Electron Microscopy and X-Ray Microanalysis Diagnostic Electron Microscopy: A Practical Guide to Interpretation and Technique Scanning Transmission Electron Microscopy: Imaging and Analysis Principles and Techniques of Electron Microscopy: Biological Applications Handbook of Transmission Electron Microscopy Practical Electron Microscopy: A Beginner's Illustrated Guide Electron Microscopy, 2nd Edition Transmission Electron Microscopy: A Textbook for Materials Science (4 Vol set) Scanning Transmission Electron Microscopy of Nanomaterials: Basics of Imaging Analysis Introduction to Electron Microscopy Sample Preparation Handbook for Transmission Electron Microscopy: Techniques Transmission Electron Microscopy: Physics of Image Formation (Springer Series in Optical Sciences) Understanding Physics (Motion, Sound, and Heat / Light, Magnetism, and Electricity / The Electron, Proton, and Neutron) Fundamentals of Light Microscopy and Electronic Imaging Polarized Light Microscopy