

1. Record Nr.	UNINA9910816501503321
Autore	Goodhew Peter J
Titolo	Electron microscopy and analysis // Peter J. Goodhew, John Humphreys, Richard Beanland
Pubbl/distr/stampa	London, : Taylor & Francis, 2001
ISBN	0-429-17625-2 1-4822-8934-2 1-4200-1725-X 1-282-77797-1 9786612777974 0-203-18425-4
Edizione	[3rd ed.]
Descrizione fisica	1 online resource (262 p.)
Altri autori (Persone)	BeanlandR HumphreysF. J
Disciplina	502.825
Soggetti	Electron microscopy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previous ed.: 1988.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Book Cover; Title; Contents; Acronyms; Preface; Microscopy with light and electrons; Methods of image formation; Pixels; The light-optical microscope; Magnification; Resolution; Depth of field and depth of focus; Aberrations in optical systems; Electrons versus light; Questions; Electrons and their interaction with the specimen; Generating a beam of electrons; Deflection of electrons magnetic lenses; The scattering of electrons by atoms; Elastic scattering; Inelastic scattering; Secondary effects; The family of electron microscopes; Questions; Electron diffraction The geometry of electron diffractionDiffraction spot patterns; Use of the reciprocal lattice in diffraction analysis; Other types of diffraction pattern; Questions; The transmission electron microscope; Contrast mechanisms; High voltage electron microscopy (HVEM); Scanning transmission electron microscopy (STEM); Questions; The scanning electron microscope; Obtaining a signal in the SEM; The optics of the SEM; The performance of the SEM; The ultimate resolu
Sommario/riassunto	"Electron Microscopy and Analysis deals with several sophisticated

techniques for magnifying images of very small objects by large amounts - especially in a physical science context. It has been ten years since the last edition of Electron Microscopy and Analysis was published and there have been rapid changes in this field since then. The authors have vastly updated their very successful second edition, which is already established as an essential laboratory manual worldwide, and they have incorporated questions and answers in each chapter for ease of learning. Equally as relevant for material scientists and bioscientists, this third edition is an essential textbook."--Provided by publisher.
