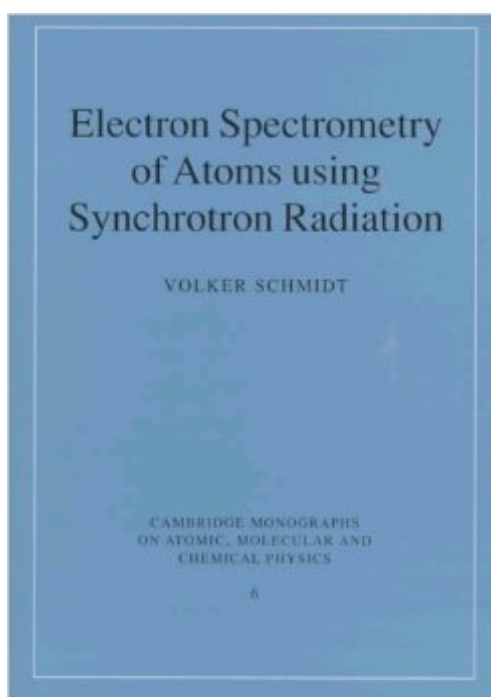


The book was found

# Electron Spectrometry Of Atoms Using Synchrotron Radiation (Cambridge Monographs On Atomic, Molecular And Chemical Physics)



## Synopsis

This book describes the theory and practice of electron spectrometry using synchrotron radiation. After a short review of background theory, neon is used to elucidate the principles of the photoelectron and Auger spectra. The second part of the book looks at experimental aspects, including characteristic features of electrostatic analyzers, detectors, lenses, disturbances, and optimization, and then illustrates theory and experiment with details of recent experiments. The third part provides useful reference data, including wavefunctions, special theory, polarization and special aspects of instrumentation. A detailed reference list completes the volume. The study of electron spectrometry using synchrotron radiation is a growing field of research driven by the increasing availability of advanced synchrotron radiation light sources and improved theoretical methods for solving the many-electron problem in atoms. This balanced account will be of value to both theorists and experimentalists working in this area.

## Book Information

Series: Cambridge Monographs on Atomic, Molecular and Chemical Physics (Book 6)

Hardcover: 445 pages

Publisher: Cambridge University Press (May 28, 1997)

Language: English

ISBN-10: 052155053X

ISBN-13: 978-0521550536

Product Dimensions: 6.8 x 1.1 x 9.7 inches

Shipping Weight: 2.1 pounds

Average Customer Review: 5.0 out of 5 stars [See all reviews](#) (1 customer review)

Best Sellers Rank: #5,400,284 in Books (See Top 100 in Books) #82 in [Books > Science & Math > Chemistry > Chemical Physics](#) #183 in [Books > Science & Math > Chemistry > Nuclear Chemistry](#) #482 in [Books > Science & Math > Experiments, Instruments & Measurement > Microscopes & Microscopy](#)

## Customer Reviews

I found this book an excellent introduction to basic electron spectrometry, providing a very clear description of both basic photoionization theory concepts and the relevant instrumental aspects of electron spectrometry such as electrostatic analysers and lenses, transmission functions, electron channelplate and channeltron detectors including some discussion of position-sensitive detection, basic principles of electron-electron coincidences and disturbances. Most of this information is

normally found in individual (very often highly technical) articles where a good understanding requires the assimilation of numerous associated and often hard to find references. By having all the basic principles and applications described in one coherent presentation a much quicker initiation into the practical details of the field is accomplished. The numerous concrete examples taken from recent experiments are of particular pedagogical value and make this book quite unique in its approach. I highly recommend this book both to the beginning post-graduate student as an efficient learning tool, as well as to the more experienced researcher as an invaluable source of reference.

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

Electron Spectrometry of Atoms using Synchrotron Radiation (Cambridge Monographs on Atomic, Molecular and Chemical Physics) Magnetism and Synchrotron Radiation: Towards the Fourth Generation Light Sources: Proceedings of the 6th International School "Synchrotron Radiation ... 2012 (Springer Proceedings in Physics) Insertion Devices for Synchrotron Radiat (Series on Synchrotron Radiation Techniques and Applications) Atoms, Radiation, and Radiation Protection Atoms, Radiation, and Radiation Protection, 2nd Edition The Chemical Physics of Ice (Cambridge Monographs on Physics) Fundamental Aspects of Plasma Chemical Physics: Transport (Springer Series on Atomic, Optical, and Plasma Physics) Transmission Electron Microscopy: Diffraction, Imaging, and Spectrometry Cell Biology of Tooth Enamel Formation: Functional Electron Microscopic Monographs (Monographs in Oral Science, Vol. 14) Behavior of Electrons in Atoms. Structure, Spectra, and Photochemistry of Atoms Atomic Spectra and Radiative Transitions (Springer Series in Chemical Physics, Vol. 1) Advances in Chemical Physics, Volume 15: Stochastic Processes in Chemical Physics (v. 15) Electron Microprobe Analysis and Scanning Electron Microscopy in Geology Scanning Electron Microscopy, X-Ray Microanalysis, and Analytical Electron Microscopy: A Laboratory Workbook Advanced Physics of Electron Transport in Semiconductors and Nanostructures (Graduate Texts in Physics) Density-Functional Theory of Atoms and Molecules (International Series of Monographs on Chemistry) The Physics and Mathematics of Adiabatic Shear Bands (Cambridge Monographs on Mechanics) Chemical Engineering Design and Analysis: An Introduction (Cambridge Series in Chemical Engineering) Quantum Physics of Atoms, Molecules, Solids, Nuclei, and Particles Physics of Atoms and Molecules (2nd Edition)

[Dmca](#)