1. Record Nr. UNINA9910139552903321

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Titolo	X-ray photoelectron spectroscopy : an introduction to principles and practices / / Paul van der Heide
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, c2012
ISBN	9786613332479 9781283332477 1283332477 9781118162903 1118162900 9781118162897 1118162897 9781118162927 1118162927
Descrizione fisica	1 online resource (262 p.)
Classificazione	SCI078000
Disciplina	543/.62
Soggetti	X-ray photoelectron spectroscopy Spectrum analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	X-RAY PHOTOELECTRON SPECTROSCOPY: An Introduction to Principles and Practices; CONTENTS; FOREWORD; PREFACE; ACKNOWLEDGMENTS; LIST OF CONSTANTS; CHAPTER 1: INTRODUCTION; 1.1 SURFACE ANALYSIS; 1.2 XPS/ESCA FOR SURFACE ANALYSIS; 1.3 HISTORICAL PERSPECTIVE; 1.4 PHYSICAL BASIS OF XPS; 1.5 SENSITIVITY AND SPECIFICITY OF XPS; 1.6 SUMMARY; CHAPTER 2: ATOMS, IONS, AND THEIR ELECTRONIC STRUCTURE; 2.1 ATOMS, IONS, AND MATTER; 2.1.1 Atomic Structure; 2.1.2 Electronic Structure; 2.1.2.1 Quantum Numbers; 2.1.2.2 Stationary-State Notation; 2.1.2.3 Stationary-State Transition Notation 2.1.2.4 Stationary States 2.1.2.5 Spin Orbit Splitting; 2.2 SUMMARY; CHAPTER 3: XPS INSTRUMENTATION; 3.1 PREREQUISITES OF X-RAY PHOTOELECTRON SPECTROSCOPY (XPS); 3.1.1 Vacuum; 3.1.1.1 Vacuum Systems; 3.1.2 X-ray Sources; 3.1.2.1 Standard Sources; 3.1.2.2

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Sommario/riassunto

"This book introduces readers interested in the field of X-ray Photoelectron Spectroscopy (XPS) to the practical concepts in this field. The book first introduces the reader to the language and concepts used in this field and then demonstrates how these concepts are applied. Including how the spectra are produced, factors that can influence the spectra (all initial and final state effects are discussed), how to derive speciation, volume analysed and how one controls this (includes depth profiling), and quantification along with background substraction and curve fitting methodologies. This is presented in a concise yet comprehensive manner and each section is prepared such that they can be read independently of each other, and all equations are presented using the most commonly used units. Greater emphasis has been placed on spectral understanding/interpretation. For completeness sake, a description of commonly used instrumentation is also presented. Finally, some complementary surface analytical techniques and associated concepts are reviewed for comparative purposes in stand-alone appendix sections"--