1. Record Nr. UNINA9910146242703321 Autore **Bubert Henning** Titolo Surface and Thin Film Analysis: A Compendium of Principles, Instrumentation and Applications Pubbl/distr/stampa Hoboken, : Wiley, 2011 **ISBN** 1-280-55760-5 9786610557608 3-527-60016-7 Edizione [2nd ed.] Descrizione fisica 1 online resource (559 p.) Altri autori (Persone) JenettHolger Disciplina 530.4275 541.33 Soggetti Thin films - Analysis - Surfaces Electron spectroscopy Spectrum analysis Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di contenuto Surface and Thin Film Analysis: A Compendium of Principles. Instrumentation, and Applications; Contents; Preface to the First Edition: Preface to the Second Edition: List of Contributors: 1: Introduction; Part One: Electron Detection; 2: X-Ray Photoelectron Spectroscopy (XPS); 2.1 Principles; 2.2 Instrumentation; 2.2.1 Vacuum Requirements; 2.2.2 X-Ray Sources; 2.2.3 Synchrotron Radiation; 2.2.4 Electron Energy Analyzers; 2.2.5 Spatial Resolution; 2.3 Spectral Information and Chemical Shifts; 2.4 Quantification, Depth Profiling, and Imaging; 2.4.1 Quantification; 2.4.2 Depth Profiling 2.4.3 Imaging 2.5 The A uger Parameter; 2.6 Applications; 2.6.1 Catalysis; 2.6.2 Polymers; 2.6.3 Corrosion and Passivation; 2.6.4

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Surveying and comparing all techniques relevant for practical applications, this second edition of a bestseller is a vital guide to this hot topic in nano- and surface technology. Completely revised and updated, sections include electron, ion and photon detection, as well as scanning microscopy, while new chapters have been added to cover such recently developed techniques as SNOM, SERS, and laser ablation. Over 500 references and a list of equipment suppliers make this a rapid reference for materials scientists, analytical chemists, and those working in the biotechnological industry.