

1. Record Nr.	UNINA9910786399703321
Titolo	Near-surface depth profiling of solids by mono-energetic positrons // edited by B.N. Ganguly and G. Brauer
Pubbl/distr/stampa	Durnten-Zurich : , : Trans Tech Publications, , [2012] ©2012
ISBN	3-03813-450-3
Descrizione fisica	1 online resource (294 p.)
Collana	Defect and diffusion forum ; ; 331
Altri autori (Persone)	GangulyB. N (Bichitra Nandi) BrauerG (Gerhard)
Disciplina	620.1
Soggetti	Positrons Collisions (Physics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Special topic volume with invited peer reviewed papers only.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Near-Surface Depth Profiling of Solids by Mono-Energetic Positrons; Preface; Table of Contents; Chapter 1: Introduction; Remarks on Scientific Poetry; Positron Annihilation Spectroscopy: A Prelude to Modern Aspects; Chapter 2: Positron Beams and Advanced Techniques; Design and Construction of a Slow Positron Beam for Solid and Surface Investigations; Annihilation Lifetime Spectroscopy Using Positrons from Bremsstrahlung Production; Low Background Digital Coincidence Spectrometer - A Tool for Investigation of Positron Annihilation in Flight Production and Applications of Intense Pulsed, Slow Positron Beams Chapter 3: Applications: Materials, Chemistry and Life Science; Investigations of HAVAR® Alloy Using Positrons; Characterization of H-Plasma Treated ZnO Crystals by Positron Annihilation and Atomic Force Microscopy; Depth Resolved Positron Annihilation Studies of Si and Metal Silicides; Structural Studies of Nanocrystalline Thin Pd Films Electrochemically Doped with Hydrogen; Investigation of Dual-Beam-Implanted Oxide-Dispersed-Strengthened FeCrAl Alloy by Positron Annihilation Spectroscopy Application of Positron Annihilation Spectroscopy to the Study of Irradiated Fe-Cr Alloys Defect Behaviour in Yttria-Stabilised Zirconia Nanomaterials Studied by Positron Annihilation Techniques; Variable

Energy Positron Annihilation Spectroscopy of Perovskite Oxides; Application of Positron Beams to the Investigation of Memristive Materials and Diluted Magnetic Semiconductors; Positron Chemistry in Polymers; Applications of Positron Annihilation Spectroscopy to Life Science; Keywords Index; Authors Index

Sommario/riassunto

This work reflects the wide and fascinating range of fields to which positrons have made important contributions. This covers, in particular, the development of low-energy (eV-keV) beams of essentially mono-energetic positrons, in the late 1960's, which opened the door to an even wider range of fundamental and technological studies: from surface physics to polymer films. In her introduction Professor Ganguly offers some background knowledge on the extent to which positrons have influenced and contributed to work in numerous fields. Review from Book News Inc.: Physicists explain how beams of...
