

1. Record Nr.	UNINA9910826569803321
Titolo	Advanced electron microscopy and nanomaterials : selected, peer reviewed papers from the First Joint Advanced Electron Microscopy School for Nanomaterials and the Workshop on Nanomaterials (AEM-NANOMAT '09), Saltillo (Coahuila) Mexico, September 29th-October 2nd, 2009 / / edited by Arturo Ponce and Dario Bueno
Pubbl/distr/stampa	Stafa-Zurich, Switzerland ; ; Enfield, New Hampshire : , : Trans Tech Publications, , [2010] ©2010
ISBN	3-03813-336-1
Descrizione fisica	1 online resource (147 p.)
Collana	Materials science forum, , 0255-5476 ; ; volume 644
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Disciplina	620.1129
Soggetti	Electron microscopy Nanostructured materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Advanced Electron Microscopy and Nanomaterials; Organizers; Invited Speakers; International Advisory Committee; Picture; Table of Contents; Topic 1: Multifunctional Nanocomposites; Precession Electron Diffraction Assisted Orientation Mapping in the Transmission Electron Microscope; TEM Characterization on the Nanocomposite Al 7075 and Silver Nanoparticles Synthesized by Powder Metallurgy; Synthesis of Plasticizer-Based Ferrofluid and its Use in the Preparation of Magnetic PVC Nanocomposite Effect of Type and Concentration of Ionomer Compatibilizer on the Hdpe/ Ionomer/ Clay Nanocomposites MorphologyElemental Analysis of a Heterogeneous Polymeric System by EDS: Detection of the Compatibilizer Agent Containing Si Atoms and Silver Nano-Particles (AgNP s) in High Impact Polystyrene; Dielectric Properties of PMMA-SiO2 Hybrid Films; Synthesis and Characterization of Magnetic Polyurethane Nanocomposite Foams; Topic 2: Smart Materials; Preparation of Electrospun Barium Titanate - Polyvinylidene Fluoride Piezoelectric Membranes; Topic 3: Nanoparticles: Synthesis and

Applications

Preparation and Properties of CoFe_2O_4 Synthesized by the Modified Citrate-Gel Method; Alumina-Copper Composites with High Fracture Toughness and Low Electrical Resistance ; Obtaining NiHCF Nanoparticles Using a Reverse Micellar System; Iron Oxide Nanoparticles Obtained from a Fe(II) - Chitosan Polymer Film; Synthesis and Characterization of Branched Gold Nanoparticles; Surface Modification of ZnO Nanoparticles; Topographical Characterization of Electrodeposited Nickel Nanoparticles on an Indium Tin Oxide on Glass Thin Film

Analysis of Nanocrystalline Intermetallic Compounds from their X-Ray Diffraction Patterns; Study of Hafnium (IV) Oxide Nanoparticles Synthesized by Polymerized Complex and Polymer Precursor Derived Sol-Gel Methods; Preparation of Nano-Ceramics via Aqueous Sol-Gel Method Modified with Surfactants: An Overview; On the Influence of Silver Nanoparticles Size in the Electrical Conductivity of PEDOT: PSS;

Topic 4: Structure Phenomena and Modeling; Electron Diffraction Study of Pentagonal Cross-Sections Nanowires; Topic 5: Growth of Thin Films Study on the Microstructure and Electrical Properties of $\text{Pb}(\text{Zr}_{0.53}\text{Ti}_{0.47})\text{O}_3$ Thin-Films; Formation of Si Nanocrystals in Thin SiO_2 Films for Memory Device Applications; Fe_2O_3 Thin Films Prepared by Ultrasonic Spray Pyrolysis; Synthesis and Atomic Force Microscopy Contact Current Images of Aluminum Doped ZnO Thin Films; Structural and Morphological Properties of $\text{Hf}_x\text{Zr}_{1-x}\text{O}_2$ Thin Films Prepared by Pechini Route; Topic 6: Semiconductors and Optoelectronic Materials; Extended Crystallographic Defects in Gallium Nitride

Structural Characterization of Poly(Sodium 4-Styrene Sulfonate)/ CdS Semiconductor Nanoparticle Composites

Sommario/riassunto

The aim of this special volume was to bring together scholars, from diverse regions of the world, whose scientific achievements bear witness to their outstanding contributions to current developments in, and applications of, electron microscopy as applied to materials science and nanomaterials research. The topics covered include: Multifunctional Nanocomposites, Smart materials, Nanoparticles: synthesis and applications, Structure phenomena and modeling, Growth of thin films, Semiconductors and optoelectronic materials, Other Nanomaterials and Interdisciplinary Topics. This edition thus provid
