Record Nr. UNINA9910462532803321 **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.) Materials science forum, , 0255-5476 ; ; volume 644 Collana Altri autori (Persone) PonceArturo BuenoDario Disciplina 620.1129 Soggetti Electron microscopy Nanostructured materials Electronic books. 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

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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