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Piezoelectric Membranes; Topic 3: Nanoparticles: Synthesis and Applications
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Analysis of Nanocrystalline Intermetallic Compounds from their X-Ray Diffraction PatternsStudy 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 Pb(Zr0.53 Ti0.47)O3 Thin-FilmsFormation of Si Nanocrystals in Thin SiO2 Films for Memory Device Applications; Fe2O3 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 HfxZr1-xO2 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