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Nota di contenuto	Nanostructured Materials and Nanotechnology III; Contents; Preface; Introduction; Nanowires as Building Blocks of New Devices: Present State and Prospects; Mechanistic Studies on Chemical Vapor Deposition Grown Tin Oxide Nanowires; Multifunctional Silicon Nitride Ceramic Nanocomposites Using Single-Walled Carbon Nanotubes; Simulation Based Design of Polymer Clay Nanocomposites Using Multiscale Modeling: An Overview; Preparation and Characteristic Control of Conducting Polymer/ Metal Oxide Nano-Hybrid Films for Solar Energy Conversion

Liquid Phase Morphology Control of Metal Oxides - Phase Transformation of Stand-Alone ZnO Films in Aqueous Solutions; Fabrication of the Finestructured Alumina Porous Materials with Nanoimprint Method; Structure Control of the Nanotube/Nanoparticle Hybrid Materials with Sonochemical Processing; Efficient Photocatalytic Degradation of Methylene Blue with CuO Loaded Nanocrystalline TiO₂; Constituent Phases of Nanosized Alumina Powders Synthesized by Pulsed Wire Discharge; The Formation of Nanostructure Compound Layer during Sulfur Plasma Nitriding and Its Mechanical Properties; Adhesion Improvement of Hard Boron Nitride Films by Insertion of Various Interlayers; Production of Alumina Matrix Nanocomposite by Solid State Precipitation; Nanostructured Alumina Coatings Formed by a Dissolution/ Precipitation Process Using AlN Powder Hydrolysis; Synthesis of Aluminum Nitride Nanosized Powder by Pulsed Wire Discharge without Ammonia; Ductile Deformation in Alumina/Silicon Carbide Nanocomposites; Author Index

Sommario/riassunto

This useful resource will help you understand the most valuable aspects of nanostructured materials and nanotechnology. Containing 16 peer-reviewed papers, this issue covers various aspects and the latest developments related to processing, modeling and manufacturing technologies of nanoscaled materials including CNT and clay-based composites, nanowire-based sensors, new generation photovoltaic cells, plasma processing of functional thin films, ceramic membranes and self-assembled functional nanostructures.
