1. Record Nr. UNINA9911018887503321

Titolo	Ceramic nanomaterials and nanotechnology II : proceedings of the Nanostructured Materials and Nanotechnology Symposium held at the 105th Annual Meeting of The American Ceramic Society, April 27-30, in Nashville, Tennessee / / edited by Mark R. De Guire ... [et al.]
Pubbl/distr/stampa	Westerville, Ohio, : American Ceramic Society, c2004
ISBN	9786613651266 9781280674334 1280674334 9781118406083 1118406087 9781118406090 1118406095 9781417501564 1417501561
Descrizione fisica	1 online resource (214 p.)
Collana	Ceramic transactions, , 1042-1122 ; ; v. 148
Altri autori (Persone)	De GuireMark R
Disciplina	620.1/4
Soggetti	Ceramic materials 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 index.
Nota di contenuto	Ceramic Nanomaterials and Nanotechnology II; Contents; Synthesis and Processing of Nanoparticles and Nanostructured Assemblies; Structural and Optical Properties of CdSe Nanoparticles Prepared by Mechanical and Chemical Alloying; Nano-Sized Silicon Nitride Powder Synthesis via Ammonolysis of SiO Vapor; Ambient Condition Synthesis and Characterization of Nanocrystalline BaTiO3; Ferroelectric Lithography of Multicomponent Nanostructure; Influence of Additives on the Formation of Thin ZnO Films on Self-Assembled Monolayers Fabrication of Metallic Nanocrystal Arrays for Nanoscale Nonlinear OpticsFabrication and Properties of Nanocomposites; Carbon Nanotubes-Ceramic Composites; Plasma Reaction Synthesis of

Alumina-Aluminum Oxynitride Nanocomposite Powders; Nanophase Decomposition in Plasma Sprayed ZrO2(Y2O3)/Al2O3 Coatings; Raman Image of the SiC Fibers Nanostructure; Structure of Nanocrystalline BN and BN/C Coatings on SiC; Preparation of Iron Oxide and Iron Oxide/Silicon Oxide Nanoparticles via Water-in-Oil Microemulsion; Characterization and Properties of Nanomaterials; Synthesis of Si-Based Nanowires
Characterization of Nanometer-Scale Columnar and Low-Density Boundary Network Structures in Hydrogenated Amorphous Carbon FilmsProperties of Transparent Conducting Coatings (TCO) Made by Chemical Nanotechnology Process; Microstructure of N-Implanted Ti Thin Films Prepared by Ion Beam Sputtering Deposition; Novel Nanotechnology of Usable Superconductor Ceramics; Industrial Development and Applications of Nanomaterials; Ceramic Nanoparticle Technologies for Ceramics and Composites; The Commercialization of Nanomaterials; Panel Discussion: Commercialization of Nanomaterials; Index

Sommario/riassunto

In a relatively short time, the field of nanostructured materials has expanded from a novel area of research to a technology with a significant and rapidly growing commercial sector. This proceedings contains papers on the following topics: Synthesis and Processing of Nanoparticles and Nanostructured Assemblies; Fabrication and Properties of Nanocomposites; Characterization and Properties of Nanomaterials; and Industrial Development and Applications of Nanomaterials.