

1. Record Nr.	UNINA9910829170903321
Titolo	Synthesis and processing of nanostructured materials : a collection of papers presented at the 29th and 30th International Conference on Advanced Ceramics and Composites, January 2005 and 2006, Cocoa Beach, Florida / / editor, William M. Mullins; general editors, Andrew Wereszczak, Edgar Lara-Curzio
Pubbl/distr/stampa	Hoboken, NJ, : Wiley, c2007
ISBN	9786612314391 9781282314399 1282314394 9780470291375 0470291370 9780470291795 0470291796
Edizione	[1st ed.]
Descrizione fisica	1 online resource (150 p.)
Collana	Ceramic engineering and science proceedings, , 0196-6219 ; ; v. 27/8
Altri autori (Persone)	MullinsWilliam M WereszczakAndrew Lara-CurzioEdgar <1963->
Disciplina	620.14 620.5
Soggetti	Nanostructured materials Nanostructured materials - Design and construction
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	Synthesis and Processing of Nanostructured Materials; Contents; Preface; Introduction; Nanoparticle Colloidal Suspension Optimization and Freeze-Cast Forming; Synthesis, Characterization and Measurements of Electrical Properties; Synthesis and Characterization of Nanocrystalline Barium Strontium Titanate Ceramics; Nanoparticle Hydroxyapatite Crystallization Control by using Palyelectrolytes; Synthesis of Carbon Nanotubes and Silicon Carbide Nanofibers as Composite Reinforcing Materials 3-D Microparticles of BaTiO <sub>3</sub> and Zn <sub>2</sub> SiO <sub>4</sub> via the Chemical (Soi-Gel,

Acetate, or Hydrothermal) Conversion of Biological (Diatom) Templates; Polymer Fiber Assisted Processing of Ceramic Oxide Nano and Submicron Fibers; Phase Development in the Catalytic System V205/Ti02 under Oxidizing Conditions; Synthesis and Characterization of Cubic Silicon Carbide (-Sic) and Trigonal Silicon Nitride (-Si3N4) Nanowires; High Energy Milling Behavior of Alpha Silicon Carbide; Synthesis of Boron Nitride Nanotubes for Engineering Applications; Comparison of Electromagnetic Shielding in GFR-Nano Composites Densification Behavior of Zirconia Ceramics Sintered Using Manufacturing of Doped Glasses Using Reactive Electrophoretic Deposition (REPD); Shaping of Bulk Glasses and Ceramics with Nanosized Particles; Author Index

---

#### Sommario/riassunto

Advances in nanotechnology offer great new promise in new multifunctional systems that experts predict to be a major economic force within the next decade. Ceramic materials enable new developments in such areas as electronics and displays, portable power systems and personnel protection. This issue will present the results of current basic and applied research and potential commercial applications. This book is comprised of papers from the Proceedings of the 30th International Conference on Advanced Ceramics and Composites, January 22-27, 2006, Cocoa Beach, Florida. Organized and sponsored by the American Ceramic Society.

---