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Collana	Advanced materials research, , 1022-6680 ; ; volume 66
Altri autori (Persone)	GotoTakashi
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Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Advanced Synthesis and Processing Technology for Materials; Sponsors, Committees, Preface; Table of Contents; Ceramics; Investigation of Curing Process on Melt Spun Polymethylsilsesquioxane Fiber as Precursor for Silicon Oxycarbide Fibers; Synthesis of SiC Based Fibers with Continuous Pore Structure by Melt- Spinning and Controlled Curing Method; Effect of Nd ₂ O ₃ and Sm ₂ O ₃ on the Microstructure and Electrical Properties of WO ₃ Capacitor-Varistor Ceramics; The Effect of Particle Morphology and Particle Size Distribution on the Property of Slip Casting SiC Preparation and Thermoelectric Properties of Bi-Doped Mg ₂ Si Nanocomposites The Effect of Water-Soluble Plasticizer on Barren Raw Material Hard Plastic Extruding Course; Stoichiometric Controlling of Spark Plasma Sintered Boron-Carbon Ceramics; Optimal Design for Ceramic Radomes with A-Sandwich Structure; Effect of Bi Doping on the Thermoelectric Properties of Mg ₂ Si _{0.5} Sn _{0.5} Compound; Effect of CaO on Sintering and Crystallization of CaO-Al ₂ O ₃ -SiO ₂ System Phosphorus Slag Glass-Ceramic; Reinforcement of B ₄ C Ceramics with

Multi-Walled Carbon Nanotubes

Damping Properties and Mechanism of 0-3 PMN/CB/EP

CompositesField-Assisted Isothermal Oriented Crystallization of SrO-TiO₂-SiO₂ Polar Glass-Ceramics; Structure and Property of Ti-Al-C/TiB₂ Composite Ceramics; Synthesis, Characterization and Catalytic Properties of La₄BaCu₅-xNixO₁₃₊ (x=0, 1, 2, 3, 4, 5); Oxidation of ZrB₂/ZrO₂ and ZrB₂/ZrO₂/SiC Ceramics; Molten Salt Synthesis and Photoluminescence of YVO₄:Eu Microcrystalline Phosphors; Synthesis, Characterization and Electromagnetic Wave Absorption Properties of Z-Type Hexaferrites Prepared by Molten Salt Method

Carbothermal Reduction and Nitridation Synthesis of -AlON Powder under High Heating RateSynthesis of Ultra-Fine ZrB₂ Powder by Borothermal Reaction under High Heating Rate; Microstructure and Properties of Mullite-FeCr Multifunctional Composite; Effect of Sintering Temperature on the Properties of Porous Silicon Nitride Ceramics; Effects of Coated Nano-BN Particles on Microstructure and Properties of BN-AIN Composite ; Erosion Resistance of Al₂TiO₅/Al₂O₃ Composites to Molten Aluminum; Fabrication of Indium Tin Oxide Targets by Spark Plasma Sintering and Hot-Pressing Sintering

Superfast Sintering of Nanocrystalline Y₂O₃ CeramicsLow-Temperature Sintering and Microwave Dielectric Properties of the Zn₂SiO₄ Ceramics; Thermal Shock-Resistance Performance of Al₂TiO₅/Al₂O₃ Composites ; Effect of LaCl₃ on the Properties of LAS Ceramics; Preparation of Fine Mullite Powder in a SHS Chemical Furnace System; Low Dimensional Materials; Investigation of Bipolar Resistance Switching Properties in SrTiO₃ Thin Films with Symmetric Electrodes Structure; The Effect of Oxygen Annealing on the Resistance Switching Properties of the La0.7Ca0.3MnO₃ Films

Fabrication and Resistance-Switching Behaviors of NiO Thin Films by Thermal Oxidation of Evaporated Ni Films

Sommario/riassunto

This special collection of 73 papers covers the intriguing topic of the synthesis and processing of inorganic materials using non-traditional technologies such as SHS, SPS, mechanical alloying, wet chemistry and aerosol deposition; as well as techniques involving laser, microwave, plasma, electron beam and high-field magnetron exposure. It is divided into chapters covering: Ceramics, Low-Dimensional Materials and Materials with Designed Structure and provides an authoritative and useful introduction to the subject.
