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in Open Atmosphere

Processing Method for Interpenetrating Network Metal-Ceramic Composites with a Non-Linear Compositional Gradient3-D Simulation of Self-propagating High-Temperature Synthesis of Solid Oxide Fuel Cell Cathode Materials; Influence of Green Part Microstructure and Sintering Atmosphere on the Formation of Porous Silicon Nitride Ceramics with Yb-Silicate Matrix; R-SiC for Novel Gel-Cast Cross Flow Filter; Reaction Bonded Sic Processed with Two Different Types of Carbon Precursors; Evidence of Uniform Microstructure in Microwave Sintered Yttria Stabilized Zirconia (YSZ) by Impedance Analysis Modeling of Field Assisted Sintering Technology (FAST) and Its Application to Electro-Conductive SystemsPolydimethylsiloxane Derived Ceramics: Influence of Pyrolysis Temperature on Ceramic Phases; Freeform Fabrication of Alumina Dental-Crown Models by Using Stereolithography; Silicon Nitride Rapid Decomposition for Formation of Nanosized Powders for Shaping Microdevices; The Relation between Peierls and Mott-Hubbard Transition in VO₂ by Tunneling Spectroscopy; Localization of Terahertz Waves in Photonic Fractal Arrays of Alumina Fabricated by Micro-Stereolithography Anisotropic Varistor via Magnetic TexturingFaradayic Process for Electrophoretic Deposition of Thermal Barrier Coatings; Indium Tin Oxide Ceramic Rotary Sputtering Targets for Transparent Conductive Film Preparation; The Effect of Doping with Titania and Calcium Titanate on the Microstructure and Electrical Properties of the Giant Dielectric Constant Ceramic CaCu₃Ti₄O₁₂; Synthesis and Characterization of Electrodeposited Nickel Nanowires; Crystallization of Titania Films in Aqueous Solutions and Their Dye Adsorption Properties
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Sommario/riassunto

This volume provides a one-stop resource, compiling current research on advanced processing and manufacturing technologies for structural and multifunctional materials. It is a collection of papers from The American Ceramic Society's 32nd International Conference on Advanced Ceramics and Composites, January 27-February 1, 2008. Topics include advanced processing and manufacturing technologies for a wide variety of non-oxide and oxide based structural ceramics, ultra-high temperature ceramics and composites, particulate and fiber reinforced composites, and multifunctional materials. This is a v
