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Conductivity And Dielectric Properties of HCl Doped Polyaniline; GEOPOLYMERS; Preparation of Ceramic Foams from Metakaolin-Based Geopolymer Gels; Preparation of Photocatalytic Layers Based on Geopolymer; Characterization of Raw Clay Materials in Serbia 0.063mm Sieved Residues; Fireproof Coatings on the Basis of Alkaline Aluminum Silicate Systems

Determining the Elastic Properties of Geopolymers Using Nondestructive Ultrasonic Techniques Bi-Axial Four Points Flexural and Compressive Strength of Geopolymer Materials Based Na<sub>2</sub>O-K<sub>2</sub>O-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> Systems; A Study on Alkaline Dissolution and Geopolymerisation of Hellenic Fly Ash; Role of Oxide Ratios on Engineering Performance of Fly-Ash Geopolymer Binder Systems; Alkaline Activation of Volcanic Ashes: A Preliminary Study;

#### MULTIFUNCTIONAL CERAMICS

The Effect of Doping with Titania and Calcium Titanate on the Microstructure and Electrical Properties of the Giant Dielectric Constant Ceramic CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> Diffuse Phase Transition in the La and Ga Doped Barium Titanate; Pressureless Sintering of Titanium Diboride Powders; The Relation between Peierls and Mott-Hubbard Transition in VO<sub>2</sub> by Tunneling Spectroscopy; Influence of Yb<sub>2</sub>O<sub>3</sub> and Er<sub>2</sub>O<sub>3</sub>, on BaTiO<sub>3</sub> Ceramics Microstructure and Corresponding Electrical Properties; Diffusion of Aluminum into Aluminum Oxide; SCIENCE OF CERAMIC INTERFACES

Evaluation of the Interfacial Bonding Between Cubic BN and Glass Oxidation Behaviour of Hetero-Modulus Ceramics Based on Titanium Carbide; MATERIALS FOR SOLID STATE LIGHTING; A Potential Red-Emitting Phosphor for UV-White LED and Fluorescent Lamp; Coprecipitation and Hydrothermal Synthesis of Praseodymium Doped Calcium Titanate Phosphors; Author Index

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#### Sommario/riassunto

This volume provides a one-stop resource, compiling current research on developments in strategic 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. Papers included in this issue come from five symposia: "Thermoelectric Materials for Power Conversion;" "Basic Science of Multifunctional Ceramics;" "Science of Ceramic Interfaces;" "Geopolymers;" and "Materials for Solid State Lighting." This is a valuable, up-to-date resource for researchers working in the field.

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