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Raman, and Infrared Spectroscopy

Transformation of Polysialate Matrixes from Al-Rich and Si-Rich Metakaolins: Polycondensation and Physico-Chemical PropertiesEffect of High Tensile Strength Polypropylene Chopped Fiber Reinforcements on the Mechanical Properties of Sodium Based Geopolymer Composites; Properties of Basalt Fiber Reinforced Geopolymer Composites; Novel Applications of Metal-Geopolymers; Making Foamed Concretes from Fly Ash Based on Geopolymer Method; Preparation of Electrically Conductive Materials Based on Geopolymers with Graphite
Effect of Synthesis Parameters and Post-Cure Temperature on the Mechanical Properties of Geopolymers Containing SlagCOMPUTATIONAL DESIGN, MODELING, SIMULATION AND CHARACTERIZATION; Electronic Structure and Band-Gaps of Eu-Doped LaSi3N5 Ternary Nitrides; First Principle Molecular Dynamic Simulations of Oxygen Plasma Etching of Organosilicate Low Dielectric Materials; Kinetic Monte Carlo Simulation of Cation Diffusion in Yttria-Stabilized Zirconia; Dynamic Neutron Diffraction Study of Thermal Stability and Self-Recovery in Aluminium Titanate; NANOLAMINATED TERNARY CARBIDES AND NITRIDES
Titanium and Aluminium Based Compounds as a Precursor for SHS of Ti2AlNInvestigations on the Oxidation Behavior of Max-Phase Based Ti2AlC Coatings on 7-TiAl; Study of High-Temperature Thermal Stability of Max Phases in Vacuum; Detection of Amorphous Silica in Oxidized Maxthal Ti3SiC2 at 500-1000°C; Author Index

Sommario/riassunto

Contributions from three Focused Sessions that were part of the 34th International Conference on Advanced Ceramics and Composites (ICACC), in Daytona Beach, FL, January 24-29, 2010 are presented in this volume. The broad range of topics is captured by the Focused Session titles, which are listed as follows: FS1 - Geopolymers and other Inorganic Polymers; FS3 - Computational Design, Modeling Simulation and Characterization of Ceramics and Composites; and FS4 - Nanolaminated Ternary Carbides and Nitrides (MAX Phases). The session on Geopolymers a