

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910810085103321 |
| Titolo | Developments in strategic materials : a collection of papers presented at the 32nd International Conference on Advanced Ceramics and Composites, January 27-February 1, 2008, Daytona Beach, Florida // editors Hua-Tay Lin ... [et al.] ; volume editors, Tatsuki Ohji, Andrew Wereszczak |
| Pubbl/distr/stampa | Hoboken, NJ, : Wiley, c2009 |
| ISBN | 1-282-11383-6 9786612113833 0-470-45620-5 0-470-45619-1 |
| Edizione | [1st ed.] |
| Descrizione fisica | 1 online resource (312 p.) |
| Collana | Ceramic engineering and science proceedings ; ; v. 29, issue 10 |
| Altri autori (Persone) | LinHua-Tay OhjiT (Tatsuki) WereszczakAndrew |
| Disciplina | 620.11 620.14 |
| Soggetti | Strategic materials Ceramic materials Composite materials |
| 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 | Developments in Strategic Materials; Contents; Preface; Introduction; OXYNITRIDE GLASSES; Developments in Oxynitride Glasses: Formation, Properties and Crystallization; THERMOELECTRIC MATERIALS FOR POWER CONVERSION APPLICATIONS; Thermoelectric Properties of Ge Doped In ₂ O ₃ ; Transition Metal Oxides for Thermoelectric Generation; Deformation and Texture Behaviors of Co-Oxides with Misfit Structure under High Temperature Compression; Fabrication of High-Performance Thermoelectric Modules Consisting of Oxide Materials; Influence of Grain Boundary on Textured Al-ZnO Evaluation on Thermo-Mechanical Integrity of Thermoelectric Module for Heat Recovery at Low TemperatureTransport Properties of Sn ₂₄ P ₁₉ . ₃ Br ₈ and Sn ₁₇ Zn ₇ P ₂₂ Br ₈ ; Temperature Impact on Electrical |

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 Na₂O-K₂O-Al₂O₃-SiO₂ 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 CaCu₃Ti₄O₁₂ 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 VO₂ by Tunneling Spectroscopy; Influence of Yb₂O₃ and Er₂O₃, on BaTiO₃ 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

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.
