1. Record Nr. UNINA9911020082803321

Titolo	Innovative Processing and Synthesis of Ceramics, Glasses and Composites IX : proceedings of the 107th Annual Meeting of the American Ceramic Society : Baltimore, Maryland, USA (2005) / / editors, J.P. Singh ... [et al.]
Pubbl/distr/stampa	Westerville, Ohio, : American Ceramic Society, c2006
ISBN	9786613651662 9781280674730 1280674733 9781118408391 111840839X 9781118408407 1118408403
Descrizione fisica	1 online resource (166 p.)
Collana	Ceramic transactions ; ; v. 177
Altri autori (Persone)	SinghJitendra Prasad <1946->
Disciplina	666
Soggetti	Ceramics Ceramic materials Glass Composite materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"This volume contains papers presented at the symposium on Innovative Processing and Synthesis of Ceramics, Glasses, and Composites held during the 107th Annual Meeting, Exposition, and Technology Fair of the American Ceramic Society at Baltimore Marriott Waterfront, Baltimore, MD, April 10-13, 2005."--Pref.
Nota di bibliografia	Includes bibliographical references and author index.
Nota di contenuto	Innovative Processing and Synthesis ofCeramics, Glasses and Composites IX; Contents; Preface; Novel Processing and Microstructure-Property Relationships; Effect of Aluminon Aqueous Solution Chemistry on the Homogeneity of Compacts by Colloidal Filtration of Al2O3 Dispersions; HfC Structural Foams Synthesizing from Polymer Precursors; Adhesion-Non Adhesion Behavior of Non-Polar Solvent Based SiC Slurries for Electro-Photographic Solid Freeform Fabrication Applications; Advanced Robot Assisted Process for the

Series Production of Optimized Oxide Ceramic Coatings on Textile Surfaces
ElectrophoresisEngineering the Composition Profile in Functionally Graded Materials Processed by Electrophoretic Deposition; Fabrication of Colored Glasses by Incorporation of a Secondary Nanosized Phase into a Silica Green Body by Means of Reactive Electrophoretic Deposition (REPD); Mechanisms and Kinetics of Processes; Microstructural Evolution and Creep Properties of Plasma Sprayed Nanocomposite Zirconia-Alumina Materials; Densification of Single-Grain versus Multi-Grain Zirconia Powders; Measurement of the Internal Pressure in Green Multilayer Ceramic Bodies During Binder Removal Reaction FormingInfiltration and Reaction-Formation Mechanism and Microstructural Evolution of Biomorphic SiC Fabricated by Si-Melt Infiltration; Chemical Reactivity: In Search of Better Processing of HfB2/SiC UHTC Composites; Low Cost Preparation of High Quality Aluminum Nitride Powders and Whiskers; In-Situ and Porous Composites; In-Situ Synthesis and Characterization of SiC-Al203 Composites; A New Family of Uniformly Porous Composites with 3-D Network Structure (UPC-3D): Progress and Perspective; Index

Sommario/riassunto

This proceedings includes papers presented at the Innovative Processing and Synthesis of Ceramics, Glasses and Composites symposium. Topics include powders, films, coatings, fibers, composites, and functionally graded materials; sol-gel, polymer precursor, and soft chemistry techniques; novel processing and microstructure-property relationships; reaction forming, combustion synthesis, and CVD; oxidation of metals and mechanical alloying; electrophoresis and plasma processing; and mechanism and kinetics of processes.