

1. Record Nr.	UNINA9910144840803321
Titolo	23rd Annual Conference on Composites, Advanced Ceramics, Materials, and Structures: A [[electronic resource]] : January 25-29, 1999, Cocoa Beach, Florida // Ersan Ustundag, Gary Fischman, editors
Pubbl/distr/stampa	Westerville, OH, : American Ceramic Society, c1999
ISBN	1-282-31318-5 9786612313189 0-470-29456-6 0-470-29502-3
Descrizione fisica	1 online resource (654 p.)
Collana	Ceramic engineering & science proceedings, , 0196-6219 ; ; v. 20, issue 3
Altri autori (Persone)	FischmanGary UstundagErsan
Disciplina	666 666.05
Soggetti	Ceramic materials Composite materials Structural analysis (Engineering) Electronic books.
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.
Nota di contenuto	23rd Annual Conference on Composites, Advanced Leramics, Materials, and Structures: A; Contents; Preface; Starting Materials and Processes; Synthesis and Properties of Erbium Oxide Single Crystals; Barium Titanate and Barium Orthotitanate Powders through an Ethylene Glycol Polymerization Route; Gelcast Forming of PZT Materials; A New Route to Hexaluminat Ceramics via a Novel Transmetalation Reaction; Rheological Properties of Ceramic Formulations for Extrusion Freeform Fabrication; Low-Temperature Carbonization of W-Co Salts Powder; Composites Development Processing and Properties of an Aluminum Oxidel Aluminum Nitride CompositeProcessing and Properties of a Nicalon-Reinforced Zirconium Phosphate Composite Radome Faceplate; A Submicron-Scale Duplex Zirconia and Alumina Composite by Polymer Complexation Processing;

Application-Specific CFCMC Design Using 20 Structural Simulations; Oxidative Degradation Behavior of Polycarbosilane-Derived Silicon Carbide Fibers; On the Way to Cost-Effective Oxidation Protection Techniques of CMCs. Case Study of Tyranno-Hex Materials Investigation of Microwave Behavior of Silicon Carbide/ High Alumina Cement Composites Microwave-Induced Combustion Synthesis of Tic-Al₂O₃ Composites; Methods for Joining Silicon Carbide Composites for High-Temperature Structural Applications; Coatings Development; Formation of Interface Coatings on SiC and Sapphire Fibers Using Metal Doped Carboxylate-Alumoxanes; The Growth and Structure of Nanocrystalline ZrO₂:Y Thin Films; Protective Coatings for Inframd Materials; Grain Growth and Tensile Strength of 3M Nextel 720TM after Thermal Exposure Sol-Gel Synthesis of Zircon-Carbon Precursors and Coatings of Nextel 720TM Fiber Tows Dissolution, Reactions, and Diffusion in the SiC/CiTiB, and SiC/C/TiB₂ + Liquid Silicon Systems at 1450°C; Microstructural Assessment; Evaluation of Microstructure for SiC/SiC Composites Using Mercury Intrusion Method; Mechanical and Microstructural Properties of NextelTM 720" Relating to Its Suitability for High-Temperature Application in CMCs; Effect of Dopants on Anisotropic Grain Growth in Oxide-Matrix Materials Advanced Materials Partnership: Gelcast Silicon Nitride Turbomachinery Technology to Commercialization Cost Modeling and Analysis for Advanced Structural Silicon Nitride Turbomachinery Ceramics; Gelcasting Advancement for Manufacturing Scale-up; Gelcasting Automation for High-Volume Production of Silicon Nitride Turbine Wheels; Gelcast Slurry Enhancement; Improved Gelcasting Systems; Structure-Property Relationships; Mechanical Behavior of a Hi-Nicalon" Sic Composite Having a Polycarbosilane Derived Matrix Comparison of the Tensile, Creep and Rupture Strength Properties of Stoichiometric Sic Fibers

Sommario/riassunto

This volume is part of the Ceramic Engineering and Science Proceeding (CESP) series. This series contains a collection of papers dealing with issues in both traditional ceramics (i.e., glass, whitewares, refractories, and porcelain enamel) and advanced ceramics. Topics covered in the area of advanced ceramic include bioceramics, nanomaterials, composites, solid oxide fuel cells, mechanical properties and structural design, advanced ceramic coatings, ceramic armor, porous ceramics, and more.
