

1. Record Nr.	UNINA9911019186003321
Titolo	13th Annual Conference on Composites and Advanced Ceramic Materials : a collection of papers presented at the 13th Annual Conference on Composites and Advanced Ceramic Materials...January 15-18, 1989, Cocoa Beach Holiday Inn, Cocoa Beach, FLorida / / Ronald E. Barks, program chair
Pubbl/distr/stampa	Westerville, OH, : American Ceramic Society, 1989
ISBN	9786612313721 9781282313729 128231372X 9780470310557 0470310553 9780470315392 0470315393
Descrizione fisica	1 online resource (465 p.)
Collana	Ceramic engineering and science proceedings ; ; 10/7-8
Altri autori (Persone)	BarksR. E (Ronald E.)
Disciplina	666 666.05
Soggetti	Ceramics 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.
Nota di contenuto	13th Annual Conference on Composites and Advanced Ceramic Materials; Table of Contents; Review, Status, and Future of the Chemical Vapor Infiltration Process for Fabrication of Fiber-Reinforced Ceramic Composites; Improved Processing of CVI Composites; Mullite/Alumina Particulate Composites by an Infiltration Technique; Preparation and Processing of Platelet-Reinforced Ceramics by the Cirected Reaction of Zirconium with Boron Carbide; Microstructure and Properties of Platelet-Reinforced Ceramics Formed by the Directed Reaction of Zirconium with Boron Carbide Growth and Microstructure of Some Dense Ceramics Formed by Controlled Melt Oxidation High Temperature Mechanical Properties of a Continuous Fiber-Reinforced Composite Made by Melt Infiltration;

Microstructure and Properties of Al and Si Infiltrated RBSN Composites; Strength of Reaction Bonded Silicon Nitride After High Temperature Air Exposures; Super-Tough Silicon Nitride with R-Curve Behavior; Cyclic Fatigue of Silicon Nitrides; Investigation of Environmental Effects of the Mechanical Properties of Si<sub>3</sub>N<sub>4</sub> and SiC Ceramics  
 A Model for Structural Degradation of Y-TZP Ceramics in Humid Atmosphere High Temperature Tensile Testing of Advanced Ceramics; Formation and Removal of Crack-Interface Bridges in Ferrites; The Business of Technology: Integrating Marketing, R&D, Manufacturing, and Sales (Marketing Perspective); Properties of Pressureless Sintered Alumina Matrix Composites Containing up to 30 Vol% SiC Whiskers; Processing and Sintering of Sol-Gel Derived Lithium Aluminosilicate Powders; Pressureless Sintering of Al<sub>2</sub>O<sub>3</sub>/SiC Whisker Composites Stress Relaxation in Sintering of Fiber-Reinforced Composites Through Fiber Coating Effect of Processing Parameters on the Mechanical Properties of Hot-Pressed Alumina-SiC Whisker Composites; A New Type of Ceramic Matrix Composite Using Si-Ti-C-O Fiber; Toughening in Metal Particulate-Glass Ceramic Composites; Chemical Stability of Monoclinic and Tetragonal ZrO<sub>2</sub> Particles in a Cordierite Matrix; Polymer Derived Nicalon/Si-C-O Composites: Processing and Mechanical Behavior; Stability of a Sapphire/Yttrium Aluminum Garnet Composite System; Furnace For Use in Air Up To 2000°C  
 Extrusion of Al<sub>2</sub>O<sub>3</sub> Ceramics with Low Organic Content The Formation of Reaction Bonded Si<sub>3</sub>N<sub>4</sub> at Low Temperatures and in Short Times; Nitridation Mechanisms of Silicon Powder Compacts; The Effect of Grain Size on the Toughness of Sintered Si<sub>3</sub>N<sub>4</sub>; Dense Silicon Nitride Without Additives: Sintering and High Temperature Behaviors; Joining of Silicon Nitride for Heat Engine Applications; Injected-Molded, Pressureless-Sintered Silicon Carbide: Process and Mechanical Property Improvements; Silicon Carbide and Silicon Nitride Structural Ceramics Derived from a Preceramic Polymer Binder  
 Preparation, Characterization, and Pyrolysis of Decaborane( 14)-Based Polymers: B&C/BN and BN Procedures

## Sommario/riassunto

This volume is part of the Ceramic Engineering and Science Proceedings (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.