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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 Directed 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 Si₃N₄ 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 Al₂O₃/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 ZrO₂ 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 Al₂O₃ Ceramics with Low Organic Content The Formation of Reaction Bonded Si₃N₄ at Low Temperatures and in Short Times; Nitridation Mechanisms of Silicon Powder Compacts; The Effect of Grain Size on the Toughness of Sintered Si₃N₄; 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 Pre-ceramic 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 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.
