

1. Record Nr.	UNINA9910144824503321
Titolo	Proceedings of the 16th Annual Conference on Composites and Advanced Ceramic Materials [[electronic resource]] : a collection of papers presented at the 16th Annual Conference on Composites and Advanced Ceramic Materials, January 7-10, 1992, Cocoa Beach, FL // Mel I. Mendelson, program chair
Pubbl/distr/stampa	Westerville, OH, : American Ceramic Society, c1992
ISBN	1-282-31297-9 9786612312977 0-470-31397-8 0-470-31616-0
Descrizione fisica	1 online resource (542 p.)
Collana	Ceramic engineering and science proceedings, , 0196-6219 ; ; v. 13, no. 9/10
Altri autori (Persone)	MendelsonMel I
Disciplina	666 666.05
Soggetti	Ceramic materials Composite materials 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	Ceramic Engineering & science Proceedings; Tabel of Contents; Composite Processing; Reinforced Si <sub>3</sub> N <sub>4</sub> Matrix Composites Formed by the Directed Metal OxidationPr o c e s s; Fabrication of ZnO/Al <sub>2</sub> O <sub>3</sub> Matrix Composites by Oxidation of Liquid Zn Alloys; Synthesis of Composites In Situ Using Displacement Reactions; A Process for the Fabrication of Ceramic Fiber Reinforced Titanium Aluminide .; Preparation of Carbon Fiber Reinforced Composite by Impregnation with Perhydropolysilazane Followed by Pressureless Firing; Sic Continuous Fiber Reinforced Si <sub>3</sub> N <sub>4</sub> by Infiltration and Reaction Bonding Slurry Infiltration of 3-D Woven CompositesThe Effect of Solid Particles Addition in Sol-Gel Processing of Ceramic Matrix Composites; Whisker Composites; Silicon Carbide Whisker Reinforced Alumina; Green Body Processing Effects on Sic Whisker Textures in Alumina Matrix

Composites; Fracture Behavior of Sic Whisker Reinforced A1203 with Modified Interfaces; Effects of SIC Whisker Treatments on the Performance of SIC Whisker/Alumba Matrix Composites; Property Optimization of A1203 Double Reinforced with ZrO<sub>2</sub> and SiCWhiskers Boron Carbide Whisker and Platelet Reinforced Ceramic Carbide Matrix CompositesFabrication of Sic Whisker Reinforced Sic Ceramics; Indentation Fracture of Silicon Carbide Whisker Reinforced Silicon Nitride Ceramic Matrix Composites; Whisker Growth and Composite Fabrication in the Si<sub>3</sub>N<sub>4</sub>-C System; Microstructure, Strength, and Toughness of Si<sub>3</sub>N<sub>4</sub>/SiC Whisker Composites; ComDosite Properties; Synthesis, Characterization, and Tensile Strength of CVI C/SiC, SiCBiC, SiC/B4C, and C/B4C Composites

Effect of Test Temperature, Oxygen Attack, Thermal Transients, and Protective Coatings on Tensile Strength of Silicon Carbide Matrix CompositesStrength of Nicalon Fiber Reinforced Glass-Ceramic Matrix Composites After Corrosion with NQO, Deposits; Mechanical Characterization of Unidirectional Carbon/Carbon Composites for Engine Valve Application; Fiber-Reword Al,Ti Composites; Mechanical Properties of Layered and Laminated Ceramic Matrix CompositeSyste m .; Effect of Sustained High-Temperature Exposure on the Mechanical Properties of Nicalon/&03 Composites

Covalent Ceramics and Diamond FilmsCovalent Ceramic Materials as Thin Films and Coatings; Oxidation Kinetics of CVD Silicon Carbide and Silicon Nitride; New 11-JY-V, Family of Periodic Compounds Synthesized Under High Pressure; ProcessindStructureProDerty Relationships; Microstructures and Interfaces in A1203-5 wt% Al CMC Synthesized by Plasma Sintering of Attrition-Milled Precursors; EFFECTS OF COMPOSITE PROCESSING ON THE PERFORMANCEOF CARBONFiber/Glass Matrix Composites; Tape Cast A1203/2r02 Composite Laminates

Microcracking and Elastic Moduli Reductions in Unidirectional Nicalon-CAS Composites Under cyclic Fatigue Loading

---

#### 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.

---