

1. Record Nr.	UNINA9911019704903321
Titolo	26th Annual Conference on Composites, Advanced Ceramics, Materials, and Structures: A : January 13-18, 2002, Cocoa Beach, Florida / / Hua-Tay Lin, Mrityunjay Singh, editors
Pubbl/distr/stampa	Westerville, OH, : American Ceramic Society, c2002
ISBN	9786612313585 9781282313583 1282313584 9780470294741 0470294744 9780470295199 0470295198
Descrizione fisica	1 online resource (872 p.)
Collana	Ceramic engineering & science proceedings, , 0196-6219 ; ; v. 23, issue 3
Altri autori (Persone)	LinHua-Tay SinghM (Mrityunjay)
Disciplina	666 666.05
Soggetti	Ceramic materials Composite materials Structural analysis (Engineering)
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	26th Annual Conference on Composites, Advanced Ceramics, Materials, and Structures: A; Contents; Preface; Processing and Thermomechanical Property Characterization; Development in Water Based Processing of Silicon Nitride Materials; Liquid Phase Reactive Sintering of a Complex WCoB-TiC Cermet; A New Approach to Short Fiber Reinforced Reaction Bonded Silicon Nitride; Fabrication of Triangular Monolithic Ceramics for Water Treatment; Synthesis of Low-Firing Anorthite Powder by the Steric-Entrapment Route; Thermomechanical Stability of Mullite/Alumina Systems; Instrumented Hertzian Indentation of Armor Ceramics; Effect of Porosity on Hertzian Contact Damage in Silicon-Nitride Ceramics; Crack Growth

in Sapphire; Stress Rate Effects on Slow Crack Growth Parameters; Effect of Additives on Grain Size and Shape in TiC-Ni_xAl Composites; Parametric Study of Notch Geometry in Standardized Chevron Notched Fracture Test Specimens for Advanced Ceramics; Fracture Behavior of Ceramic Layered Systems with Weak Interlayers; An Analysis of the Mechanical Property Data Supplied in JACerS Papers with Respect to Independent Verification

Design, Modeling, and Reliability Influence on Cooling Hole Geometry and Material Conductivity on the Thermal Response of Cooled Silicon Nitride Plate; Design Conceptualization of Air-Cooled Coated Silicon Nitride Plates for Gas Turbine Applications; Prediction of the Failure Probability of High Strength Ceramics Subject to Thermal Shock Loading; Heat Transfer Coefficient Estimation from Thermal Shock Data; Thermal-Mechanical Stress Analysis of a PSZ Coated Piston through Finite Element Technique

Probabilistic Cumulative Damage Numerical Modeling of the Mechanical Response of a Ceramic Matrix Composite in FlexureImpact Testing and Damage; Pre-Impact Damage Assessment of DRA Metal Matrix Composite Encapsulated Sic Ceramics; Foreign Object Damage of Two Gas-Turbine Grade Silicon Nitrides at Ambient Temperature; Effect of Hot-Pressing Conditions on the Density and Microstructure of B4C/B5Si Composites; A Physically-Based Model for the Effect of Microstructure and Mechanical Properties on Ballistic Performance; On the 3-D Visualization of Impact Damage in Armor Ceramics

Mechanical Properties of Woven Glass Fiber Composite Laminates After ImpactResponse of Alumina-Titania (AT-13) Ceramic Composite Deposits to High-Frequency Impact Loading; Ceramic Matrix Composites; Fibers and Interphases; BN and Si-Doped BN Coatings on Woven Fabrics; New SiCN Fibers from the ABSE Polycarbosilazane; Effects of Air Leaks on the Phase Content, Microstructure, and Interfacial Behavior of CVD Zirconia on Sic Fiber; Strength and Oxidation Resistance of Sic Fibers Coated with Various Si-Containing Compositions; Ceramic Coatings on Fiber Woven Fabrics .

The Role of Interfaces in the Oxidation of 3D-Carbon|Carbon Composites

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.
