1. Record Nr. UNINA9911020045303321

Titolo	Advances in ceramic matrix composites XI : proceedings of the 107th Annual Meeting of the American Ceramic Society : Baltimore, Maryland, USA (2005) / / editors, Narottam P. Bansal, J.P. Singh, Waltraud M. Kriven
Pubbl/distr/stampa	Westerville, Ohio, : American Ceramic Society, c2006
ISBN	9786613649478 9781280672545 1280672544 9781118407844 1118407849 9781118407851 1118407857
Descrizione fisica	1 online resource (278 p.)
Collana	Ceramic transactions ; ; v. 175
Altri autori (Persone)	BansalNarottam P SinghJitendra Prasad <1946-> KrivenWaltraud M
Disciplina	620.1/4
Soggetti	Ceramic-matrix composites
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 and index.
Nota di contenuto	Advances in Ceramic Matrix Composites XI; Contents; Preface; Ceramic Fibers; Poly[(Alkylamino)Borazine]-Derived Boron Nitride Fibers for Composite Applications; Processing; Multilayered Materials by ICV1 in Non-Oxide Self-Healing Ceramic Matrix Composites for High Temperature Applications; Processing of Oxide/Oxide Composite Components for Efficient Energy Conversion Applications; From Polysaccharides to SiSiC Composites by 3D Printing*; Characterization; Ultrasonic NDE of Reaction Bonded Ceramics On the Use of Digital Image Correlation to Analyze the Mechanical Properties of Brittle Matrix CompositesMultiscale X-Ray CMT of C/C Composite Preforms: A Tool for Properties Assessment*; Microstructural Investigations of Reinforcing Materials in Zinc Phosphate Composites; Oxide Composites; High-Temperature Thermal

Conductivity of Alumina-Reinforced Zirconia Composites; Dielectric Behavior in Ni0.93Co0.02Mn0.05Fe1.95O4-+PZT Composites; Mechanical Properties; Interlaminar Tension/Shear Properties and Stress Rupture in Shear of Various Continuous Fiber-Reinforced Ceramic Matrix Composites
Fatigue Behavior of NextelTM720/Alumina (N720/A) Continuous Fiber Ceramic Composite - Effects of Temperature and Steam EnvironmentMicrostructure and Mechanical Properties of Polymer-Derived Al203-SiC Micro-Nano Composites; High Temperature Creep of Yttria Tetragonal Zirconia Nanocrystals: The Role of Yttrium Segregation at the Grain Boundaries; Creep-Rupture Behavior of NextelTM720/Alumina (N720/A) Continuous Fiber Ceramic Composite - Effects of Temperature and Steam Environment; Damage Morphology of C/C-SiC Composites Under Impact Tests; Geopolymers and Geopolymer Matrix Composites
On Mix Compositions of Fly Ash Based Inorganic Polymeric MaterialsNanostructural Design of Multifunctional Geopolymeric Materials; Thermal Conversion and Microstructural Evaluation of Geopolymers or ""Alkali Bonded Ceramics"" (ABCs); Disposition of Water in Metakaolinite Based Geopolymers; High-Temperature Deformation of a Geopolymer; Modeling Si/Al Ordering in Metakaolin-Based Geopolymers; Matrix and Interphase Design of Geopolymer Composites; Index

Sommario/riassunto

Contained in this proceeding is a variety of papers that discuss recent advances in ceramic matrix composites. Topics include processing, characterization, geopolymers, evnironmental effects, coatings, and mechanical properties.