

1. Record Nr.	UNISA996212927103316
Titolo	Advances in ceramic matrix composites X [[electronic resource]] : proceedings of the 106th Annual Meeting of the American Ceramic Society : Indianapolis, Indiana, USA (2004) / / editors, J.P. Singh, Narottam P. Bansal, Waltraud M. Kriven
Pubbl/distr/stampa	Westerville, Ohio, : American Ceramic Society, c2005
ISBN	1-280-67317-6 9786613650108 1-118-40835-7 1-118-40836-5
Descrizione fisica	1 online resource (194 p.)
Collana	Ceramic transactions ; ; v. 165
Altri autori (Persone)	SinghJitendra Prasad <1946-> BansalNarottam P KrivenWaltraud P
Disciplina	620.14
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 indexes.
Nota di contenuto	Advances in Ceramic Matrix Composites X; Contents; Preface; Ceramic Fibers; Sol-Gel Processing of Alumina-Zirconia Fibers; Oxide and Non-Oxide Ceramics and Composites; Fabrication of Transparent Polycrystalline Silicon Nitride Ceramic; A Model Cerium Oxide Matrix Composite Reinforced with a Homogeneous Dispersion of Silver Particulate-Prepared Using the Glycine-Nitrate Process; Electrical and Mechanical Properties of K, Ca Ionic-Conductive Silicon Nitride Ceramics; Electrical Resistance Measurements of Conductive Oxide Dispersed Glass Composites for Self Diagnosis; Geopolymers A Conceptual Model for Solid-Gel Transformations in Partially Reacted Geopolymeric SystemsMicrostructural Characterization of Metakaolin-Based Geopolymers; The Effect of Heat on Geopolymers Made Using Fly Ash and Metakaolinite; Comparison of Naturally and Synthetically-Derived, Potassium-Based Geopolymers; Chemically Bonded Phosphate Ceramics-A Novel Class of Geopolymers; Mechanical Properties and Micromechanical Modeling; Fracture and Crack Growth in Ceramic

Composites at High Temperatures; Shear Strength Behaviors of Ceramic Matrix Composites at Elevated Temperatures
High Temperature Bending Strength and Fracture Energies of the Tape-Cast Silicon Nitride with β -Si₃N₄ Seed Addition
Superplasticity of the Nanostructured Binary Systems of Zirconia-Alumina- Spinel Ceramics by Spark Plasma Sintering Process; Initiation of Matrix Cracking in Woven Ceramic Matrix Composites; Author Index; Keyword Index

Sommario/riassunto

Ceramic matrix composites are likely candidates for high-temperature structural applications in industries such as aerospace, utilities, and transportation. This volume includes papers on advances in basic science and technology of ceramic matrix composites and how these advances can be used to address technological issues faced by industry.
