1.	Record Nr.	UNISA996209751303316
	Titolo	Developments in advanced ceramics and composites [[electronic resource]] : a collection of papers presented at the 29th International Conference on Advanced Ceramics and Composites, January 23-28, 2005, Cocoa Beach, Florida / / editors, Manuel E. Brito ... [et al.] ; general editors, Dongming Zhu, Waltraud M. Kriven
	Pubbl/distr/stampa	Westerville, OH, : American Ceramic Society, c2005
	ISBN	1-282-31374-6 9786612313745 0-470-29128-1 0-470-29167-2
	Descrizione fisica	1 online resource (409 p.)
	Collana	Ceramic engineering and science proceedings, , 0196-6219 ; ; v. 26/8
	Altri autori (Persone)	BritoManuel E ZhuDongming KrivenWaltraud M
	Disciplina	620.14
	Soggetti	Ceramic materials Ceramics Composite materials
	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	Developments in Advanced Ceramics and Composites; Contents; Preface; Ceramics in Environmental Applications; Characterization of MnO-Doped Lanthanum Hexaluminate (LaMnAlil 019) in Terms of Selective Catalytic Reduction of NOx by Addition of Hydrocarbon Reductant (HC-SCR); High Porosity Cordierite Filter Development for NOdPM Reduction; Thermal Stability of Cordierite Supported V205-WO3-TiO2 SCR Catalyst for Diesel NOx Reduction; A New Family of Uniformly Porous Composites with 3-0 Network Structure (UPC-3D): A Porous A120dLaP04 In Situ Composite Novel, Alkali-Bonded, Ceramic Filtration MembranesControlling Microstructural Anisotropy During Forming; Characterization of USA Glass Ceramics Filters Obtained by the Replication Method; Fracture Behavior and Microstructure of the Porous Alumina Tube; Tensile

Testing of Sic-Based Hot Gas Filters at 600% Water Vapor; Quasi-Ductile Behavior of Diesel Particulate Filter Axial Strength Test Bars with Ridges; Multifunctional Material Systems Based on Ceramics; Multifunctional Electroceramic Composite Processing by Electrophoretic Depositon
Transparent Alumina Ceramics with Sub-Microstructure by Means of Electrophoretic DepositionFunctional Nanoceramic Coatings on Microstructured Surfaces via Electrophoretic Deposition; High Damping in Piezoelectric Reinforced Metal Matrix Composites; CarbodCarbon and Ceramic Composite Materials in Friction; Preparation Of Large-Scale Carbon Fiber Reinforced Carbon Matrix Composites (C-C) By Thermal Gradient Chemical Vapor Infiltration (TGCVI); Frictional Performance and Local Properties of C/C Composites; Humidity and Frictional Performance of C/C Composites
Study of ""Adsorption/Desorption"" Phenomena on Friction Debris of Aircraft BrakesFriction and Wear of Carbon Brake Materials; Processing and Friction Properties of 3D-C/C-SiC Model Composites with a Multilayered C-Sic Matrix Engineered at the Nanometer Scale; Carbon Fiber-Reinforced Boron Carbide Friction Materials; Thermal Shock Impact on C/C and Si Melt Infiltrated C/C Materials (SiMI); Reliability of Ceramic and Composite Components; Post Engine Test Characterization of Self Sealing Ceramic Matrix Composites for Nozzle Seals in Gas Turbine Engines
Dimension Stability Analysis of NITE SiC/SiC Composite Using Ion Bombardments for the Investigation of Reliability as Fusion MaterialsFracture Strength Simulation of SIC Microtensile Specimens - Accounting for Stochastic Variables; Design and Reliability of Ceramics: Do Modelers, Designers, and Fractographers See the Same World?; The Effects of Incorporating System Level Variability into the Reliability Analysis for Ceramic Components; Finite-Element-Based Electronic Structure Calculation in MetaVCeramic Interface Problems; 30 FEM Simulation of MLCC Thermal Shock
Analysis of Firing and Fabrication Stresses and Failure in Ceramic-Lined CannonTubes

Sommario/riassunto

Over 40 papers are included in this volume from six symposia held during the 29th International Conference on Advanced Ceramics and Composites. Topics include ceramics and environmental applications, characterization tools for materials in extreme environments, functional nanomaterials, biomimetrics, carbon/carbon and ceramic composite materials in friction, multifunctional materials systems and reliability.