Record Nr. UNINA9911019208603321 Processing and properties of advanced ceramics and composites III // **Titolo** edited by Narottam P. Bansal ... [et al.] Pubbl/distr/stampa Hoboken, N.J.,: Wiley, 2011 **ISBN** 9786613240217 9781283240215 1283240211 9781118144435 1118144430 9781118144442 1118144449 9781118144411 1118144414 Descrizione fisica 1 online resource (220 p.) Collana Ceramic transactions, , 1042-1122;; v. 225 Altri autori (Persone) BansalNarottam P Disciplina 620.14 Soggetti Ceramic materials Composite materials Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Processing and Properties of Advanced Ceramics and Composites III; Contents; Preface; FIBER COMPOSITES; Influence of Fiber Orientation on the Mechanical Properties and Microstructure of C/C-SiC Composite Plates Produced by Wet Filament Winding Technique; High-Temperature Interlaminar Tension Test Method Development for Ceramic Matrix Composites; Life Limiting Behavior of Ceramic Matrix Composites Under Interlaminar Shear at Elevated Temperatures; NANO-CERAMICS AND COMPOSITES; Effect of Coating Parameters on the Electrodeposition of Nickel Containing Nano-Sized Alumina Particles Synthesis of Al2O3-TiC Nano-Composite Particles by a Novel Electro-Plasma ProcessTESTING, CHARACTERIZATION, AND MICROSTRUCTURE-

PROPERTY RELATIONSHIPS; Research on Tribological Properties of Reactive Sintered Si3N4-Based Composite Ceramic; Preparation of Nano and Micron Sized ZrO2 Dispersed Al2O3 Ceramic Composites and Study

Their Hardness and Fracture Toughnesses; Influence of Particle Size Distribution of Wollastonite on the Mechanical Properties of CBPCs (Chemically Bonded Phosphate Ceramics) Foreign Object Damage in an N720/Alumina Oxide/Oxide Ceramic Matrix Composite under Tensile LoadingFUNCTIONALLY GRADED MATERIALS; Thermally Sprayed Functionally Graded Materials; CERAMIC PROCESSING; Development of Ultra-High Temperature Stable Ceramics by Reactive Infiltration Processes*; Shape Evolution of Spanning Structures Fabricated by Direct-Write Assembly of Concentrated Colloidal Gels; COMPOSITES PROCESSING; Colloidal Processing of Ceramic-Ceramic and Ceramic-Metal Composites Processing of Nitride Porous Ceramic Composites via Hybrid Precursor System Chemical Vapor Deposition (HYSYCVD)/Direct Nitridation (DN) Effect of Nano-SiO2 on Microstructure, Interface and Mechanical Properties of Whisker-Reinforced Cement Composites; DIRECTIONAL SOLIDIFICATION AND MICROWAVE PROCESSING; Engineered Self-Organized Microstructures Using Directional Solidification of Eutectics;

Sommario/riassunto

This book contains 17 papers from the Innovative Processing and Synthesis of Ceramics, Glasses and Composites and Advances in Ceramic Matrix Composites symposia held during the 2010 Materials Science and Technology (MS&T'10) meeting, October 17-21, 2010, Houston, Texas. Topics include: Fiber Composites; Modeling and Characterization; Nanomaterials; Testing; Microstructure-Property Relationships; Advanced Coatings; and Processing Methods.

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