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Microstructure on the High- Temperature Deformation Behavior of Sintered Silicon Nitride; Dynamic Fracture Toughness and Microstructural Fracture Mechanisms in Ceramics; Toughening in Ceramic Particulate and Whisker Composites  
 Ultrasonic Homogenization of Dense Colloidal Suspensions of SiC, /A1203 Composites  
 Mechanical Properties and Microstructure of Si<sub>3</sub>N<sub>4</sub>- Whisker-Reinforced Si<sub>3</sub>N<sub>4</sub> Matrix Composites; Effect of Fracture Temperature and Relative Crack Propagation Rate on the Fracture Behavior of Whisker-Reinforced Ceramic Matrix Composites; SiC Reinforced-MoSi<sub>2</sub>/WSi<sub>2</sub> Alloy Matrix Composites; Creep of SiC Whisker-Reinforced Alumina under Compressive Loading; Reaction-Based Processing Methods for Ceramics and Composites  
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 The Effect of Oxide Additives in Filler Materials during Directed Melt Oxidation Process; Tailoring of Reaction-Bonded Al<sub>2</sub>O<sub>3</sub> (RBAO) Ceramics.; Preparation and Characterization of Reaction-Bonded Aluminum Oxide (RBAO) Matrix SiC Particulate Filler Composites; Properties of RBSN and RBSN-SiC Composites; Development of Reaction-Bonded Electro-Conductive TiN-Si<sub>3</sub>N<sub>4</sub>, and Resistive Al<sub>2</sub>O<sub>3</sub>-Si<sub>3</sub>N<sub>4</sub> Composites  
 Status of Continuous Fiber-Reinforced Ceramic Matrix Composite Processing Technology  
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 Characterization of Alumina/Yttrium-Aluminum Garnet and Alumina/Yttrium-Aluminum Perovskite Eutectics

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#### 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.

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