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Fracture Toughness of Thin Plates by the Double-Torsion Test Method
Fracture Toughness of Porous Cordierite; The Mechanical Properties and Hydrothermal Stability of Porous, Partially (Biscuit-) Sintered Y-TZP Ceramics; Improvement in Working Limit for Ceramic Components by Using Crack-Heal; High Temperature Creep Deformation of Al,O,-Based Eutectic Ceramics Grown by the Laser Heated Float Zone Method;
Joining and Brazing; Finite Element Analysis of Mechanical Test Methods for Evaluating Shear Strength of Ceramic Composite Joints Using Interface Element
Adhesive Bonding of Titanium to Carbon-Carbon Composites for Heat Rejection Systems Diffusion Bonding of Silicon Carbide Ceramics Using Titanium lnterlayers; The Effects of 304L Stainless Steel Pre-Oxidation on Bonding to Alkali Barium Silicate Glass; Brazing of Ceramic-Matrix Composites to Titanium Using Metallic Glass lnterlayers; Structure and Properties of Grain Boundaries, Interfaces and Composites; Grain-Boundary Atomic Structures in Zirconia Ceramics; The Effect of the Fiber/Matrix Interface on the Mechanical Properties of Ceramic-Reinforced Zirconia Phosphate-Based Matrix Composites
Fiber Push-Out Nanoindentation Study of BN Interface in SIC/SIC Composites Exposed to High Temperatures Determination of Interface Opening Strength; Measurement of the Matrix/Fiber Interfacial Strength of Carbon/Carbon Composites; Oxidation of 3D-C/C Composites in Presence (or not) of Catalytic Impurities: Kinetics and Effect on Mechanical Properties; Microstructure and Thermal Properties of 2 Directional and 3 Directional C/C Composites; Influence of R-ratio on the Fatigue Behavior of a Woven SiC/SiC Composite; Microstructure and Mechanical Properties of Non-Oxide Laminated Composites
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Sommario/riassunto

This volume contains over 70 papers on advanced research and development of processing, mechanical properties and mechanics of ceramics and composites from the proceedings of the 30th International Conference on Advanced Ceramics and Composites, January 22-27, 2006, in Cocoa Beach, Florida. The conference was organized and sponsored by The American Ceramic Society and The American Ceramic Society's Engineering Ceramics Division in conjunction with the Nuclear and Environmental Technology Division. It covers underlying fundamental links between microstructure and properties, and the ability to