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Nota di contenuto	Surfaces, Interfaces, and the Science of Ceramic Joining; Contents; Preface; Surface and Interfacial Phenomena; The Role of Interfacial Phenomena in Wetting-Bonding Relationship in Al/Ceramic Couples; Interface Structures and Diffusion Paths in SiC/Metal Couples; Photocatalytic Titania Coatings by a Low Temperature Sol-Gel Process; Effect of Surface Treatment on Chiral and Achiral SrTiO3 Surface Morphology and Metal Thin Film Growth; Surface Characterization of Low-Temperature Processed Titania Coatings Produced on Cotton Fabrics; Thermodynamics of Refractories for Black Liquor Gasification MechanicsAn Investigation of Wettability, and Microstructure in Alumina Joints Brazed with Ag-CuO-TiO2; An Engineering Test Useful in

Developing Glass Seals for Planar Solid Oxide Fuel Cells; Fracture in Nb/Al2O3 Particulate Composites; Practical Adhesion and Cohesion Assessments of Al2O3 (0.1 \m) Oxide Layer on Top of AIN Substrates by Microscratch Technique; Wetting and Mechanical Characteristics of the Reactive Air Braze for Yttria-Stabilized Zirconia (YSZ) Joining; Computational Analysis of Residual Stress for Si3N4-Al2O3 Joint Using Polytypoid Functional Gradients; Joining
Joining Si3N4 to an Iron Aluminide Alloy Using Soft InterlayersGlass Sealing in Planar SOFC Stacks and Chemical Stability of Seal Interfaces; Pd-Modified Reactive Air Braze for Increased Melting Temperature; Evaluation of Gold ABA Braze for Joining High Temperature Electrochemical Device Components; TiO2-Modified Ag-CuO Reactive Air Brazes for Improved Wettability on Mixed Ionic/Electronic Conductors; Microstructure, Melting and Wetting Properties of Pd-Ag-CuO Air Braze on Alumina; Author Index; Keyword Index

Sommario/riassunto

This proceedings offers information for those interested in the fundamental aspects of ceramic surface and interfacial phenomenon such as wetting, adhesion, chemical reactivity, and structure-property relationships, and the influence of these factors on the nature of bonding/joining of ceramic materials.