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Nota di contenuto	Advanced Processing and Manufacturing Technologies for Structural and Multifunctional Materials VI; Contents; Preface; Introduction; Contribution to the Understanding of the Microstructure of First Generation Si-C-O Fibers; The Control of Interphases in Carbon and Ceramic Matrix Composites; High Volume Production for High Performance Ceramics; Low Pressure Injection Molding of Advanced Ceramic Components with Complex Shapes for Mass Production; Ceramic Injection Molding Using a Partially Water-Soluble Binder

System: Effect of Back-Bone Polymers on the Process  
Green-Conscious Ceramic Injection Molding Shaping of Large-Sized  
Sputtering Targets; TEM Observation of the Ti Interlayer between SiC  
Substrates during Diffusion Bonding; Joining of Alumina by Using of  
Polymer Blend and Aluminum; Diffusion Bonding of Rigid Alumina  
Pieces using Porous Alumina Interlayers; Influence of Joining Pressure  
and Surface Roughness on Flexural Strength of Joined Boron Carbide  
Ceramics; Laser Machining of Melt Infiltrated Ceramic Matrix  
Composite; Fabrication of Dendritic Electrodes for Solid Oxide Fuel  
Cells by using Micro Stereolithography  
Ion-Exchange Properties of Nano Zeolite a Prepared by Bead Milling and  
Post-Milling Recrystallization Method The Role of Milling Liquids in  
Processing of Metal-Ceramic- Precursor Powders; Quantitative  
Validation of a Multi-Scale Model of Pyrocarbon Chemical Vapor  
Infiltration from Propane; Numerical Analysis of Fracture Behavior in  
Anisotropic Microstructures; Author Index

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Sommario/riassunto

The 6th International Symposium on Advanced Processing and Manufacturing Technologies for Structural and Multifunctional Materials and Systems was held in January 2012 during the 36th International Conference and Exposition on Advanced Ceramics and Composites. This symposium examined progress resulting from the research and development of advanced processing and manufacturing technologies for a wide variety of non-oxide and oxide-based structural ceramics, particulate and fiber-reinforced composites, and multifunctional materials. This issue features seventeen of those papers, representing

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