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Altri autori (Persone)	ColomboPaolo <1960-> RajRishi SinghM (Mrityunjay)
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Method PROCESSING AND APPLICATIONS; Mullite Monoliths, Coatings and Composites from a Pre-ceramic Polymer Containing Alumina Nano-Sized Particles; Functionally Graded Ceramics Derived from Pre-ceramic Polymers; Generation of Ceramic Layers on Transition Metals via Reaction with SiCN-Precursors; Facile Ceramic Micro-Structure Generation Using Electrohydrodynamic Processing and Pyrolysis; Development of Si-N Based Hydrogen Separation Membrane; Porous Polymer Derived Ceramics Decorated with In-Situ Grown Nanowires Synthesis of Ceramic Nano Fiber from Precursor Polymer by Single Particle Nano-Fabrication Technique Synthesis of Novel SiBNC Fiber Precursor by a One-Pot Route; Preparation of SiC Ceramic Fibers Containing CNT; Preparation and Properties of Non-Circular Cross-Section SiC Fibers from a Pre-ceramic Polymer; Economy of Fuel Gas in a Combustion Furnace by Means of Si-C-Zr-O Tyranno-Fiber Mat Sheets Converting High Temperature Gas Enthalpy into Radiant Heat Rays; Author Index

Sommario/riassunto

This book collects some of papers presented at the very successful Symposium "Polymer Derived Ceramics and Composites" in the framework of the 8th Pacific Rim Conference on Ceramic and Glass Technology. There, over 70 researchers from around the world discussed their latest innovations over four full days. It covers all the main aspects of interdisciplinary research and development in the field of Polymer-Derived-Ceramics, from the precursor synthesis and characteristics to the polymer-to-ceramic conversion, from processing and shaping of pre-ceramic polymers into ceramic components to their
