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Nota di contenuto	Ceramics in Nuclear Applications; Contents; Preface; Introduction; SILICON CARBIDE AND CARBON COMPOSITES; Single- and Multi-Layered Interphases in SiC/SiC Composites Exposed to Severe Conditions: An Overview; Research and Developments on C/C Composite for Very High Temperature Reactor (VHTR) Application; X-Ray Tomographic Characterization of the Macroscopic Porosity of CVI SiC/SiC Composites-Effects on the Elastic Behavior; Mechanical Strength of CTP Triplex Sic Fuel Clad Tubes after Irradiation in MIT Research Reactor under PWR Coolant Conditions; MECHANICAL PROPERTIES

Behaviors of SiC Fibers at High TemperatureFracture Resistance of Silicon Carbide Composites Using Various Notched Specimens; Optimization of an Interphase Thickness in Hot-Pressed SiCf/SiC Composites; Validation of Ring-on-Ring Flexural Test for Nuclear Ceramics Using Miniaturized Specimens; MATERIAL AND COMPONENT PROCESSING; Design, Fabrication, and Testing of Silicon Infiltrated Ceramic Plate-Type Heat Exchangers; Microstructural Studies of Hot Pressed Silicon Carbide Ceramic; Diffusion Bonding of Silicon Carbide to Ferritic Steel; CERAMICS FOR FUEL COATING Fracture Properties of SiC Layer in TRISO-Coated Fuel ParticlesOptimization of Fracture Strength Tests for the Sic Layer of Coated Fuel Particles by Finite Element Analysis; Laser Melting of Spark Plasma Sintered Zirconium Carbide: Thermophysical Properties of a Generation IV Very High Temperature Reactor Material; NUCLEAR FUELS AND WASTES; Development and Testing of a Cement Waste Form for TRU Effluent from the Savannah River Site Mixed Oxide Fuel Fabrication Facility; Frit Optimization for Sludge Batch Processing at the Defense Waste Processing Facility Ceramic Coated Particles for Safe Operation in HTRs and in Long-Term StorageAuthor Index

Sommario/riassunto

Provides a useful one-stop resource for understanding the most valuable aspects of ceramics in nuclear applications.
