

1. Record Nr.	UNINA9911020193103321
Titolo	Ceramics in nuclear applications : a collection of papers presented at the 33rd International Conference on Advanced Ceramics and Composites, January 18-23, 2009, Daytona Beach, Florida // edited by Yutai Katoh, Alex Cozzi; volume editors, Dileep Singh, Jonathan Salem
Pubbl/distr/stampa	Hoboken, NJ, : Wiley, c2010
ISBN	9786612456404 9781282456402 1282456407 9780470584002 0470584009 9780470583999 0470583991
Descrizione fisica	1 online resource (218 p.)
Collana	Ceramic engineering and science proceedings ; ; 30/10
Altri autori (Persone)	KatohYutai CozziAlex SinghDilip SalemJ. A <1960-> (Jonathan A.)
Disciplina	620.19304
Soggetti	Ceramic materials Nuclear engineering - Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
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.
