1. Record Nr. UNINA9911020133103321

Titolo	Advances in bioceramics and porous ceramics : a collection of papers presented at the 32nd International Conference on Advanced Ceramics and Composites, January 27-February 1, 2008, Daytona Beach, Florida / / editors Roger Narayan, Paolo Colombo
Pubbl/distr/stampa	Hoboken, N.J., : John Wiley & Sons, Inc., 2009
ISBN	9786612022210 9781282022218 1282022210 9780470456262 0470456264 9780470456255 0470456256
Descrizione fisica	1 online resource (374 p.)
Collana	Ceramic Engineering and Science Proceedings, 7 ; ; v.52
Altri autori (Persone)	NarayanRoger ColomboPaolo <1960->
Disciplina	620.14
Soggetti	Ceramics
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	Advances in Bioceramics and Porous Ceramics; Contents; Preface; Introduction; BIOCERAMICS; Thermal Interface Stresses Including 3D Microstructures in Layered Free-Form Ceramics; Preparation and Biomineralization of Silica-Based Organic-Inorganic Hybrid Hollow Nanoparticles for Bone Tissue Generation; Effect of Wollastonite on the In Vitro Bioactivity and Mechanical Properties of PMMA Bone Cements; Titanium Surface Modification to Titania Nanotube for Next Generation Orthopedic Applications; Calcium Phosphate Nanocarrier in BSA Delivery Machinable Tricalcium Phosphate/Lanthanum Phosphate CompositesLocation of Carbonate Ions in Structure of Biological Apatite; Nanoindentation of Yttria Doped Zirconia Under Hydrothermal Degradation; Influence of Sintering Conditions on the Microstructure of Chemically Precipitated Hydroxyapatite Nanopowder; Hydrothermal

Treatment of Alpha Tricalcium Phosphate Porous Ceramics in Various Aqueous Solutions; Electrochemical Deposition of Hydroxyapatite on Titanium Substrates in Metastable Calcium Phosphate Solution under Pulse Current; Hydroxyapatite/GEMOSIL Nanocomposite
Challenge Toward Microstructure Optimization of Irregular Porous Materials by Three-Dimentional Porous Structure SimulatorSynthesis of Rhenanite (-NaCaPO4)-Apatitic Calcium Phosphate Biphasics for Skeletal Repair; Nanomaterials as Improved Implants: A Review of Recent Studies; Apatite-Polyglutamic Acid Composites Prepared Through Biomimetic Process; Formation of Bone-Like Apatite on Tricalcium Phosphate Ceramics in a Solution Mimicking Body Fluid; Ultraviolet Irradiation Had Limited Effects on Enhancing In Vitro Apatite Formation on Sol-Gel Derived Titania Films
Nanostructured Bioactive Glass Scaffolds for Bone RepairDevelopment of Novel Biocompatible Hydroxyapatite Coated Nanotubular Titania for Implant Application; Low Temperature Degradation and Biomedical Properties of Y-TZP Ceramics; Nanoscale Hydroxyapatite for Bioceramic Applications; Rheology and Properties of Bioactive Orthopedic Cement; POROUS CERAMICS; Cellular Ceramics Made of Silicon Carbide Ceramics for Burner Technology; A Modified Gelcasting Procedure to Prepare Alumina Porous Components: Process Optimization and Preliminary Mechanical Tests
Experimental Investigation of the Oxidation Behavior of SiSiC FoamsNew Technology with Porous Materials: Progress in the Development of the Diesel Vehicle Business; Porous Alumina and Zirconia Bodies Obtained by a Novel Gel Casting Process; R-Curve Behavior in Porous Cordierite Honeycombs; Fabrication of Porous Silicon Nitride Ceramics with Gradient Microstructure

Sommario/riassunto

This volume provides a one-stop resource, compiling current research on bioceramics and porous ceramics. It is a collection of papers from The American Ceramic Society s 32nd International Conference on Advanced Ceramics and Composites, January 27-February 1, 2008. It includes papers from two symposia: ""Porous Ceramics: Novel Developments and Applications"" and ""Next Generation Bioceramics."" Articles are logically organized to provide insight into various aspects of bioceramics and porous ceramics. This is a valuable, up-to-date resource for researchers working in ceramics engineering.