Record Nr. UNINA9910146111303321 Advances in bioceramics and porous ceramics [[electronic resource]]: a **Titolo** 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** 1-282-02221-0 9786612022210 0-470-45626-4 0-470-45625-6 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 Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Advances in Bioceramics and Porous Ceramics; Contents; Preface; Nota di contenuto 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.