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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 Composites Location 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-Dimensional Porous Structure Simulator
Synthesis of Rhenanite (-NaCaPO_4)-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 Repair
Development 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
Foams
New 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.
