

1. Record Nr.	UNINA9910831194703321
Titolo	Advances in bioceramics and biotechnologies : a collection of papers presented at the 8th Pacific Rim Conference on Ceramic and Glass Technology, May 31-June 5, 2009, Vancouver, British Columbia // edited by Roger Narayan, Joanna McKittrick ; volume editor, Mrityunjay Singh
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2010 ©2010
ISBN	1-283-37264-9 0-470-90989-7 9786613372642 0-470-90988-9
Descrizione fisica	1 online resource (246 p.)
Collana	Ceramic Transactions ; ; Volume 218
Disciplina	666
Soggetti	Ceramics in medicine Biomedical materials Ceramic materials Ceramics - Biocompatibility Composite 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 at the end of each chapters and index.
Nota di contenuto	Advances in Bioceramics and Biotechnologies; Contents; Preface; Introduction; SYNTHESIS TECHNIQUES; A Role for Electrochemical Synthesis in Bioceramic Composite Materials; Electro Thermally Polarized Sintered Bulk-HAP and HAP-Coated Ti for Biomedical Applications; Freeze Casting of Porous Biomaterial Scaffolds for Bone Tissue Engineering; Hard Template Synthesis of Mesoporous Hydroxyapatite Materials for Controlled Protein Release; Immobilization of Heparin on Gelatin Modified Three-Dimensional Osteoconductive Ca-P/PHBV Nanocomposite Scaffolds Layered Double Hydroxide: A New Ceramic-Based Hemostatic Agent? Microwave-Assisted Synthesis and Characterization of Biphasic Calcium

Phosphate Nanopowders; Silicon-Substituted Hydroxyapatite Synthesized by a Hydrothermal Method; BIOGLASSES AND GLASS-CERAMICS; Antibacterial Ag-Doped Glass-Ceramic Scaffolds; Bioactive Glass for Bone and Joint Repair; Comparison of Reactions of Bioactive Glasses in Different Aqueous Solutions; Comparison of Self-Bonded Three Dimensional Bioactive Glass Fiber Scaffolds after In-Vivo Implantation in Rats; Enzyme Grafting to Bioactive Glasses Ferrimagnetic Glass-Ceramics for Magnetic Induction HyperthermiaRecent Research on Composition Dependence of the Properties of Bioactive Glasses; CALCIUM PHOSPHATES; Adsorption on Apatitic Calcium Phosphates: Applications to Drug Delivery; Bioactive Calcium Phosphates and Nanocomposite Scaffolds for Bone Tissue Engineering; Preparation of Hydroxyapatite Nanoparticles Applying the Micro Chemical Process; Synthesis, Mechanical and Bone Cell Materials Interaction Studies on SrO and MgO Doped Resorbable Tricalcium Phosphate for Bone Tissue Engineering; Al<sub>2</sub>O<sub>3</sub> AND TiO<sub>2</sub> Cell Proliferation on Nano-Structured Titanium Oxide Layer Prepared on Titanium SubstratesFreeform Fabrication and Structural Controls of Alumina Dental-Crown Models by Using Stereolithography; Moisture Effect on Tubular Alumina Toughened Zirconia Ceramic for Implant Casing; Author Index

---

Sommario/riassunto

This volume is a collection of twenty-two cutting edge research papers from the symposia on Nano-Biotechnology and Ceramics in Biomedical Applications and Advances in Biomineralized Ceramics, Bioceramics, and Bioinspired Designs, which were presented at the 8th Pacific Rim Conference on Ceramics and Glass Technology (PACRIM-8). The symposia was focused on several key areas, including novel synthesis techniques, bioglasses and glass-ceramics, calcium phosphates for bone tissue applications, and oxide ceramic implant applications. These papers cut across disciplines - ceramic science and technol

---