

1. Record Nr.	UNINA9911019408103321
Titolo	Advances in biomedical and biomimetic materials : a collection of papers presented at the 2008 Materials Science and Technology Conference (MS&T08) October 5-9, 2008, Pittsburgh, Pennsylvania / / edited by R.J. Narayan, P.N. Kumta, W.R. Wagner
Pubbl/distr/stampa	Hoboken, N.J., : J. Wiley & Sons, c2009
ISBN	9786612279867 9781282279865 1282279866 9780470538357 047053835X 9780470538340 0470538341
Descrizione fisica	1 online resource (206 p.)
Collana	Ceramic transactions ; ; v. 206
Altri autori (Persone)	NarayanRoger KumtaPrashant N WagnerW. R
Disciplina	610.28 610.284
Soggetti	Biomedical materials Biomimetics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"This issue contains the proceedings of the 'Advances in Biomedical and Biomimetic Materials' symposium, which was held on October 5-9, 2008, ... in Pittsburgh, Pennsylvania, USA."--Pref.
Nota di bibliografia	Includes bibliographical references and author index.
Nota di contenuto	Advances in Biomedical and Biomimetic Materials; Contents; Preface; BIOCERAMICS; Biotribological Characterization of the Bilayer System: HA/ZrO <sub>2</sub> , on 316LSS; Bioinspired Ceramic Microstructures Prepared by Freezing of Suspensions; Mechanical Properties Modeling of Porous Calcium Phosphates Ceramics; Bone Cement Reinforced with Zirconium Oxide Particles; METALLIC IMPLANT MATERIALS; Characterization of New Nickel-Titanium Wire for Rotary Endodontic Instruments; Effect of Cold Work on the Behavior of NiTi Shape Memory Alloy

Microstructure and Mechanical Properties of Ti-6Al-4V for Biomedical and Related Applications Involving Rapid-Layer Powder Manufacturing; Mechanical Properties of Implant Rods Made of Low-Modulus -Type Titanium Alloy, Ti-29Nb-13Ta-4.6Zr, for Spinal Fixture; Functionality of Porous Titanium Improved by Biopolymer Filling; SCAFFOLDS FOR TISSUE ENGINEERING; Fracture Forces in Femurs Implanted with PMMA; Development, Synthesis and Characterization of Porous Biomaterial Scaffolds for Tissue Engineering; Engineered Nanofibers with Stem Cells for Biomimetic Tissue Engineering; Preclinic Test of Collagen Membranes; SURFACE MODIFICATION OF BIOMATERIALS; Polysiloxane Coatings Containing Tethered Antimicrobial Moieties; High-Throughput Microbial Biofilm Assay for the Rapid Discovery of Antimicrobial Coatings and Materials for Biomedical Applications; Chemical-Hydrothermal Combined Synthesis of Bioactive TiO<sub>2</sub> and CaTiO<sub>3</sub> Films on Ti Surfaces; Surface Modification of Hydroxyapatite: A Review; MATERIALS FOR DRUG DELIVERY; Nanophase Hydroxyapatite in Biodegradable Polymer Composites as Novel Drug-Carrying Implants for Treating Bone Diseases at Targeted Sites; Author Index

---

**Sommario/riassunto**

A collection of articles from the Advances in Biomedical and Biomimetic Materials symposium give insight into advances in biomedical and biomimetic materials. These selected articles cover such topics as scaffolds for tissue engineering, bioceramics, biomimetic materials, nanoparticles for medical diagnosis and treatment, and novel materials for drug delivery and biosensing.

---