1. Record Nr. UNINA9911019415903321

Titolo	Biomaterials science-- processing, properties, and applications / / edited by Roger Narayan, Amit Bandyopadhyay, Susmita Bose
Pubbl/distr/stampa	Hoboken, N.J., : American Ceramic Society, : Wiley, 2011
ISBN	9786613298782 9781283298780 1283298783 9781118144558 1118144554 9781118144565 1118144562 9781118144534 1118144538
Descrizione fisica	1 online resource (206 p.)
Collana	Ceramic transactions, , 1042-1122 ; ; v. 228
Altri autori (Persone)	NarayanRoger BandyopadhyayAmit BoseSusmita <1969->
Disciplina	620.14
Soggetti	Biomedical materials Biomedical materials - Surfaces
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	Biomaterials Science- Processing, Properties, and Applications; Contents; Preface; NEXT GENERATION BIOMATERIALS; Ultrafine-Grained Commercially Pure Titanium and Microstructure Response to Hydroxyapatite Coating Methods; Preparation of Porous Hydroxyapatite Scaffolds using Yeast as a Pore Forming Agent; Understanding the Influence of SrO Doping on the Mechanical Properties of ß-TCP Ceramics; Dental Application Field Based on Nanostructural Chemically Bonded Ca-Aluminate; Freeze Extrusion Fabrication of 13-93 Bioactive Glass Scaffolds for Repair and Regeneration of Load-Bearing Bones Porous Biodegradable Scaffolds for Hard Tissue EngineeringSynthesis of Nano Hydroxyapatite by Chemical Precipitation Using Different

Surfactant Templates; Effect of TiB2 or Y2O3 Additions on Mechanical Biofunctionality of Ti-29Nb-13Ta-4.6Zr for Biomedical Applications; Apatite Nano-Rods Array Grown on Glass Substrates in Aqueous Systems; Dielectric Properties of Porous Calcium Titanate (CaTiO3); Nanocomposites of Poly(L-Lactic Acid) and Maghemite for Drug Delivery of Caffeine; SURFACE PROPERTIES OF BIOMATERIALS; Hard and Wear Resistant Surfaces for Load Bearing Metal Implants
Influence of Electro-Thermal Polarization on Surface Properties of HydroxyapatiteCalcium Phosphate Ceramics in Drug Delivery and Bone Tissue Engineering; Nanoscale Hydroxyapatite Coatings on Ti: Simultaneous Enhancement of Mechanical and Biological Properties; Thermal Sprayed Bioceramics Coatings for Metallic Implants; Role of Reinforced Materials in Thermal Sprayed Hydroxyapatite Coating on Bio Implants: A Review; Selective Laser Sintering Fabrication of 13-93 Bioactive Glass Bone Scaffolds; Author Index

Sommario/riassunto

This book contains 18 papers from the Next Generation Biomaterials and Surface Properties of Biomaterials symposia held during the 2010 Materials Science and Technology (MS&T'10) meeting, October 17-21, 2010, Houston, Texas. Topics include: Biocompatible Coatings; Drug Delivery and Anti-Microbial Coatings; Ceramic and Metallic Biomaterials; Biomaterials for Tissue Engineering; and Surface Modification.