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Altri autori (Persone)	NarayanRoger BandyopadhyayAmit BoseSusmita
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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 $\beta$ -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 TiB <sub>2</sub> or Y <sub>2</sub> O <sub>3</sub> 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 (CaTiO <sub>3</sub> ); 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 Hydroxyapatite/Calcium 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

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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.

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