1. Record Nr. UNINA9910799921203321

Titolo	Biological and biomedical coatings handbook : applications / / edited by Sam Zhang
Pubbl/distr/stampa	Boca Raton, Fla. : , : CRC Press, , 2011
ISBN	0-429-10522-3 1-138-11439-1 1-4398-4997-8
Descrizione fisica	1 online resource (506 p.)
Collana	Advances in materials science and engineering
Altri autori (Persone)	ZhangSam
Disciplina	610.28
Soggetti	Biomedical engineering - Materials Biologicals Protective coatings
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.
Nota di contenuto	Front Cover; Contents; Series Preface; Preface; Editor; Contributors; Chapter 1: Sol-Gel Derived Hydroxyapatite Coatings on Metallic Implants: Characterization, In Vitro and In Vivo Analysis; Chapter 2: Amorphous Carbon Coatings for Biological Applications; Chapter 3: Biomedical Applications of Carbon-Based Materials; Chapter 4: Impedance Spectroscopy on Carbon-Based Materials for Biological Application; Chapter 5: Control of Drug Release from Coatings: : Theories and Methodologies; Chapter 6: Release-Controlled Coatings; Chapter 7: Orthopedic and Dental Implant Surfaces and Coatings Chapter 8: Piezoelectric Zinc Oxide and Aluminum Nitride Films for Microfluidic and Biosensing ApplicationsChapter 9: Medical Applications of Sputter-Deposited Shape Memory Alloy Thin Films; Chapter 10: Bioactive Coatings for Implanted Devices; Back Cover
Sommario/riassunto	Written in a versatile, contemporary style that will benefit both novice and expert alike, Biological and Biomedical Coatings Handbook, Two-Volume Set covers the state of the art in the development and implementation of advanced thin films and coatings in the biological field. Consisting of two volumes-Processing and Characterization and Applications-this handbook details the latest understanding of

advances in the design and performance of biological and biomedical coatings, covering a vast array of material types, including bio-ceramics, polymers,