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Titolo	Biological and biomedical coatings handbook : applications // edited by Sam Zhang
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Descrizione fisica	1 online resource (506 p.)
Collana	Advances in materials science and engineering
Altri autori (Persone)	ZhangSam
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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,

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