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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Chapter 1: Introduction -- Chapter 2: Important Definitions and Concepts -- Chapter 3: Natural Bone and Tooth: Structure and Properties -- Chapter 4: Processing of Implantable Biomaterials -- Chapter 5: Fundamentals of Scaffolds Fabrication Using Low Temperature Additive Manufacturing -- Chapter 6: Mechanical Properties of Biomaterials -- Chapter 7: Friction and Wear Behavior -- Chapter 8: Corrosion and Degradation of Implantable Biomaterials -- Chapter 9: Probing Toxicity of Biomaterials and Biocompatibility Assessment -- Chapter 10: Three Dimensional Porous Scaffolds: Mechanical and Biocompatibility Properties -- Chapter 11: Introduction to Biomechanics and Orthopedic Device Testing -- Chapter 12: A Way Forward.
Sommario/riassunto	This book covers the basics of the biomaterials science its applications to bone tissue engineering. The introductory section describes the most necessary concepts and techniques related to the cell and molecular biology with a particular focus on evaluating the

biocompatibility property. The layout of this book facilitates easier understanding of the area of bone tissue engineering. The book integrates the Materials Science and Biological Science. It covers processing and basic material properties of various biocompatible metals and ceramics-based materials, in vitro and in vivo biocompatibility and toxicity assessment in the context of bone tissue engineering, and processing and properties of metal-, ceramic- and polymer-based biocomposites, including the fabrication of porous scaffold materials. The book can be used as a textbook for senior undergraduate and graduate coursework. It will also be a useful reference for researchers and professionals working in the area. .