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Edizione	[Second edition.]
Descrizione fisica	1 online resource (XII, 200 p. 104 illus., 60 illus. in color.)
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Nota di contenuto	Metallic and Ceramic Biomaterials: Current and Future Developments -- Polymers, Composites and Nano Biomaterials: Current and Future Developments -- Polyurethane Based Materials with Applications in Medical Devices -- Rapid Prototyping of Hydrogels to Guide Tissue Formation -- Engineered Scaffold Architecture Influences Soft Tissue Regeneration -- Customized Implants for Bone Replacement and Growth -- Direct Digital Manufacturing of Complex Dental Prostheses -- Digital Design and Fabrication in Dentistry -- The Development of an Artificial Finger Joint -- Computer-Aided Development of Mega Endo-Prostheses -- Smart Insoles -- Medical Applications of Additive Manufacturing -- Additive Manufacturing in Craniofacial Applications -- Additive Manufacturing in Hearing Aids.
Sommario/riassunto	This second edition maintains a focus on integrated biomaterials, computer-aided design, and physical prototyping techniques as examples of the materials and applications that are found in medical environments. All original chapters, written by renowned experts in the field, have been updated along with the addition of four new chapters on: Smart insoles Medical applications of additive manufacturing Additive manufacturing in craniofacial applications Additive manufacturing in hearing aids This wide-ranging treatise on

biomaterials and prototyping applications in medicine also focuses on solid freeform fabrication, rapid prototyping, layered manufacturing, and computer-aided design in the development of prosthetic devices. This book is a must-have for bioengineers seeking a comprehensive overview of this important subject and examples of medical applications, as well as researchers and academics in the same field. .
