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Nota di contenuto	Fundamentals of biomaterials and biocompatibility / Bikramjit Basu and Shekhar Nath -- Fundamentals of hydroxyapatite and related calcium phosphates / Racquel Zapanta LeGeros ... [et al.] -- Materials for orthopedic applications / Shekhar Nath and Bikramjit Basu -- The micro macroporous biphasic calcium phosphate concept for bone reconstruction and tissue engineering / Guy Daculsi, Franck Jegoux, and Pierre Layrolle -- Science and technology integrated titanium dental implant systems / Yoshiki Oshida and Elif Bahar Tuna -- Injectable hydrogels as biomaterials / Lakshmi S. Nair, Cato T. Laurencin, and Mayank Tandon -- Nanomaterials for improved orthopedic and bone tissue engineering applications / Lijie Zhang ... [et al.] -- Introduction to processing of biomaterials / Dharendra S. Katti ... [et al.] -- Laser processing of orthopedic biomaterials / Rajarshi Banerjee and Soumya Nag -- Functionally graded all ceramic hip joint / Omer Van der Biest ... [et al.] -- Medical devices based on bioinspired

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Sommario/riassunto

Enables readers to take full advantage of the latest advances in biomaterials and their applications Advanced Biomaterials: Fundamentals, Processing, and Applications reviews the latest biomaterials discoveries, enabling readers to take full advantage of the most recent findings in order to advance the biomaterials research and development. Reflecting the nature of biomaterials research, the book covers a broad range of disciplines, including such emerging topics as nanobiomaterials, interface tissue engineering, the latest manufacturing techniques, and new polymeric materials. The book,
