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Titolo	Nanobioceramics for healthcare applications // editors, Eng San Thian (NUS, Singapore), Jie Huang (University College London, UK), Mamoru Aizawa (Meiji University, Japan)
Pubbl/distr/stampa	New Jersey : , : World Scientific, , [2017] ©2017
ISBN	1-78634-134-4
Descrizione fisica	1 online resource (315 pages) : illustrations (some color)
Disciplina	610.28
Soggetti	Nanostructured materials Nanomedicine Ceramics in medicine Bone substitutes
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Title from PDF file title page (viewed December 27, 2016).
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Overview of nanobioceramics -- Silica-based nanoceramics -- Bio-ceramics for orthopedic device applications : hydroxyapatite -- Tricalcium phosphate-based nanoceramics -- Calcium phosphate nanocoatings : production, physical and biological properties, and biomedical applications -- Bone cements utilized for the reconstruction of hard tissue : basic understanding and recent topics -- Strontium-containing mesoporous bioactive glass for regeneration of osteoporotic bone and periodontal tissue -- Bioactive glass-ceramics -- Nanocomposites for bone repair.
Sommario/riassunto	"This book provides a comprehensive coverage on nanobioceramics and their potential applications in healthcare. Ground-breaking new discoveries in bioceramics and their properties have meant an increasing interest in the development of how this can be related to nanobiomaterials, and in treating various conditions from osteoporosis to surgical dentistry. Research has also been driven by ageing global populations, where better restorative and reparative treatments are needed. As a consequence of this change in demographics, the research of nanobioceramics for application in healthcare is a field that

is advancing at a considerable pace. Individual chapters give the reader an in-depth coverage on the synthesis and characterization of various nanobioceramics including silica, calcium phosphates, bioglass, and glass-ceramics. Through reviewing and analysing current literature, this book provides a rich source of valuable information on nanobioceramics for any professionals and students in materials science and engineering. It is also aimed at medical professionals searching for state-of-the-art techniques and treatments available and made possible through this particular field of innovation."--Publisher's website.

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