1. Record Nr. UNINA9910404077303321

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Titolo	Biomaterials for Bone Tissue Engineering
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2020
ISBN	3-03928-966-7
Descrizione fisica	1 electronic resource (244 p.)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Bone tissue engineering aims to develop artificial bone substitutes that partially or totally restore the natural regeneration capability of bone tissue lost under circumstances of injury, significant defects, or diseases such as osteoporosis. In this context, biomaterials are the keystone of the methodology. Biomaterials for bone tissue engineering have evolved from biocompatible materials that mimic the physical and chemical environment of bone tissue to a new generation of materials that actively interacts with the physiological environment, accelerating bone tissue growth. Mathematical modelling and simulation are important tools in the overall methodology. This book presents an overview of the current investigations and recent contributions in the field of bone tissue engineering. It includes several successful examples of multidisciplinary collaboration in this transversal area of research. The book is intended for students, researchers, and professionals of a number of disciplines, such as engineering, mathematics, physics, chemistry, biomedicine, biology, and veterinary. The book is composed of an editorial section and 16 original research papers authored by leading researchers of this discipline from different laboratories across the world