

1. Record Nr.	UNINA9910483456503321
Titolo	Biomaterials in Tissue Engineering and Regenerative Medicine : From Basic Concepts to State of the Art Approaches // edited by Birru Bhaskar, Parcha Sreenivasa Rao, Naresh Kasoju, Vasagiri Nagarjuna, Rama Raju Baadhe
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2021
ISBN	981-16-0002-3
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (587 pages)
Collana	Biomedical and Life Sciences Series
Disciplina	610.284
Soggetti	Biotechnology Regenerative medicine Stem cells Nanotechnology Regenerative Medicine and Tissue Engineering Stem Cell Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Module 1_Fundamentals of Biomaterials -- Module 2_Biomaterials in Tissue engineering -- Module 3_Applications of Biomaterials -- Module 4_Advances in Biomaterials.
Sommario/riassunto	This book comprehensively explores the basic concepts and applications of biomaterials in tissue engineering and regenerative medicine. The book is divided into four sections; the first section deals with the basic concepts and different types of biomaterials used in tissue engineering. The second section discusses the functional requirements and types of materials that are used in developing state-of-the-art of scaffolds for tissue engineering applications. The third section presents the applications of biomaterials for hard and soft tissue engineering, as well as for specialized tissue engineering. The last section addresses the future prospects of nanobiomaterials, intelligent biomaterials, and 3D bioprinting biomaterials in tissue engineering and regenerative medicine. It also discusses various in vitro disease models for tissue bioengineering and regenerative

medicine. As such, it offers a valuable resource for students, researchers, scientists, entrepreneurs, and medical/healthcare professionals.
