

1. Record Nr.	UNINA9911049201503321
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Titolo	Contemporary Tissue Engineering and Regenerative Medicine : From Organ Regeneration to Bioengineered Tissue Models / / by Elena García-Gareta, José Manuel García-Aznar
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2026
ISBN	3-032-03441-8
Edizione	[1st ed. 2026.]
Descrizione fisica	1 online resource (379 pages)
Collana	Series in BioEngineering, , 2196-887X
Disciplina	612.028 571.538
Soggetti	Regenerative medicine Regenerative Medicine and Tissue Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction to tissue engineering and regenerative medicine -- Tissue mechanobiology -- Introduction to cell mechanobiology and its impact on tissue engineering and regenerative medicine -- Cells and growth factors for tissue engineering and regenerative medicine -- Scaffolds for tissue engineering and regenerative medicine -- Nanomaterials for tissue engineering and regenerative medicine -- Cell - scaffold interactions -- Mass transfer, vascularization, and innervation of scaffolds and constructs -- Bioreactors for tissue engineering and regenerative medicine -- Microfluidics-based platforms for tissue engineering and regenerative medicine -- Computational modelling of the mechanobiology of scaffolds and their interaction with cells and tissues -- The future of tissue engineering and regenerative Medicine.
Sommario/riassunto	This book offers a current overview of Tissue Engineering and Regenerative Medicine (TERM), highlighting key technological and methodological advances. It introduces core TERM concepts and strategies for tissue and organ regeneration, along with the bioengineering of tissue models based on modern principles. Chapters cover scaffold design and fabrication—especially additive manufacturing—cell-biomaterial interactions, and computational modeling of scaffold behavior. Clinical applications are included to

illustrate real-world relevance. The book also explores cutting-edge topics such as bioprinting, microfluidic devices, and organoids in the development of biomimetic tissue models. Each chapter ends with a “Questions” section to help readers review and reinforce key concepts.
