

1. Record Nr.	UNINA9910789479503321
Titolo	Polymeric biomaterials // editors, Severian Dumitriu and Valentin Popa
Pubbl/distr/stampa	Boca Raton, Fla. : , : CRC Press, , 2013
ISBN	0-429-14240-4 1-4200-9471-8
Descrizione fisica	1 online resource (922 p.)
Collana	Polymeric biomaterials ; ; v. 1
Altri autori (Persone)	DumitriuSeverian <1939-> PopaValentin I
Disciplina	610.28
Soggetti	Polymers Biomedical materials - Therapeutic use Regenerative medicine - Methodology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Contents; Preface; Acknowledgments; Editors; Contributors; Chapter 1. Synthesis and Fabrication of Polyesters as Biomaterials; Chapter 2. Hydrogels Formed by Cross-Linked Poly(Vinyl Alcohol); Chapter 3. Development and Evaluation of Poly (Vinyl Alcohol)Hydrogels as a Component of Hybrid Artificial Tissues for Orthopedics Surgery Application; Chapter 4. Polyphosphazenes as Biomaterials; Chapter 5. Biodegradable Polymers as Drug Carrier Systems; Chapter 6. Bioresorbable Hybrid Membranes for Bone Regeneration; Chapter 7. Mucoadhesive Polymers Chapter 8. Biodegradable Polymeric/Ceramic Composite Scaffolds to Regenerate Bone TissueChapter 9. Amphiphilic Systems as Biomaterials Based on Chitin, Chitosan, and Their Derivatives; Chapter 10. Biomaterials of Natural Origin in Regenerative Medicine; Chapter 11. Natural Polymers as Components of Blends for Biomedical Applications; Chapter 12. Metal-Polymer Composite Biomaterials; Chapter 13. Evolution of Current and Future Concepts of Biocompatibility Testing; Chapter 14. Biocompatibility of Elastomers; Chapter 15. Preparation and Applications of Modulated Surface Energy Biomaterials Chapter 16. Electrospinning for Regenerative MedicineChapter 17. Polymeric Nanoparticles for Targeted Delivery of Bioactive Agents and

Drugs; Chapter 18. Polymeric Materials Obtained through Biocatalysis; Chapter 19. Polymer-Based Colloidal Aggregates as a New Class of Drug Delivery Systems; Chapter 20. Photoresponsive Polymers for Control of Cell Bioassay Systems; Chapter 21. Lignin in Biological Systems; Chapter 22. Carbohydrate-Derived Self-Crosslinkable In Situ Gelable Hydrogels for Modulation of Wound Healing; Chapter 23. Dental and Maxillofacial Surgery Applications of Polymers Chapter 24. Biomaterials as Platforms for Topical Administration of Therapeutic Agents in Cutaneous Wound Healing Chapter 25. Polymers for Artificial Joints; Index; Back Cover

Sommario/riassunto

Biomaterials have had a major impact on the practice of contemporary medicine and patient care. Growing into a major interdisciplinary effort involving chemists, biologists, engineers, and physicians, biomaterials development has enabled the creation of high-quality devices, implants, and drug carriers with greater biocompatibility and biofunctionality. The fast-paced research and increasing interest in finding new and improved biocompatible or biodegradable polymers has provided a wealth of new information, transforming this edition of Polymeric Biomaterials into a two-volume set. This volume
