1. Record Nr. UNINA9911019838603321

Autore	Reghunadhan Arunima
Titolo	Applications of Biopolymers in Science, Biotechnology, and Engineering
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2024 ©2024
ISBN	9781119783473 111978347X 9781119783459 1119783453
Edizione	[1st ed.]
Descrizione fisica	1 online resource (431 pages)
Altri autori (Persone)	HAkhina ThomasSabu
Disciplina	620.1923
Soggetti	Biopolymers Biomedical engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Applications of Biopolymers in Science, Biotechnology, and Engineering -- Contents -- List of Contributors -- Preface -- 1 Introduction to Biopolymers, Their Blend, IPNs, Gel, Composites, and Nanocomposites -- 2 Synthetic Biopolymers: Properties, Fabrication, and Applications -- 3 Role of Biopolymers and Their Composites in Sustainable Agriculture: Recent Developments and Future Perspectives -- 4 Biopolymer in Bioengineering and Medical Technology -- 5 Biopolymers and Composites in Tissue Engineering -- 6 Biopolymers, Composites, Nanocomposites, and Gels in Biotechnology -- 7 Biopolymers, Blends, Composites, Gels, and Thin Films in Drug Delivery and Drug Design -- 8 Biopolymers and Their Composites for Biotechnological Applications -- 9 Biobased Polymers, Their Composites and Blends in Electronics -- 10 Polymers and Biopolymers in Sensing -- 11 Applications of Biopolymers in Construction and Civil Engineering -- 12 Biopolymers and Functional Biopolymers in Food Technology -- 13 Biopolymers in Food Packaging -- 14 Nanofiber Composites for Packaging Applications -- 15 Polymers, Their Composites, Blends, and Nanocomposites for the Fabrication of

Prosthetics -- Index -- EULA

Sommario/riassunto

This book, 'Applications of Biopolymers in Science, and Engineering,' edited by Arunima Reghunadhan, Akhina H., and Sabu Thomas, explores the diverse applications and advancements of biopolymers in various scientific and engineering fields. It covers topics such as synthetic biopolymers, their properties, fabrication, and applications, and delves into their roles in sustainable agriculture, medical technology, tissue engineering, biotechnology, drug delivery, electronics, sensing, construction, civil engineering, food technology, and food packaging. The book is designed for scientists, engineers, and students interested in biopolymer research and its practical applications, providing a comprehensive overview of recent developments and future perspectives in the field.