1. Record Nr. UNINA9910583492103321 Autore Thakur Vijay Kumar Titolo Biopolymer grafting: applications / / Vijay Kumar Thakur Pubbl/distr/stampa Amsterdam, Netherlands:,: Elsevier,, 2018 ©2018 **ISBN** 0-12-810463-5 0-12-810462-7 Descrizione fisica 1 online resource (542 pages) Collana Advances in Polymers and Fibers Disciplina 572.33 Soggetti **Biopolymers** Biopolymers - Biotechnology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto ; Ch. 1 Applications of Graft Copolymerization: A Revolutionary Approach / Anupama Setia -- ; ch. 2 Grafting of Hydroxyapatite for Biomedical Applications / Jordi Puiggali -- ; ch. 3 Grafting of Hydrophilic Monomers Onto Cellulosic Polymers for Medical Applications / Nursel Pekel Bayramgil -- ; ch. 4 Surface Functionalization With Biopolymers via Plasma-Assisted Surface Grafting and Plasma-Induced Graft Polymerization-Materials for Biomedical Applications / Karol Kyziot --; ch. 5 Synthesis and Application as Programmable Water Soluble Adhesive of Polyacrylamide Grafted Gum Tragacanth (GT-g-PAM) / Gautam Sen -- ; ch. 6 Radiation Grafting of Biopolymers and Synthetic Polymers: Synthesis and Biomedical Applications / Emilio Bucio -- ; ch. 7 Derivatized Chitosan: Fundamentals to Applications / Anupama Kumar -- ; ch. 8 Grafted Copolymerized Chitosan and Its Applications as a Green Biopolymer / Babak Salamatinia -- ; ch. 9 Grafting Onto Biopolymers: Application in Targeted Drug Delivery / Animesh Ghosh -- ; ch. 10 Fibroin Grafting Onto Wool Fibers: Recent Advances and Applications / Claudio Tonin --; ch. 11 Grafting Modification of Wood for High Performance / Xiaoying Dong -- ; ch. 12 Processing and Characterization of Grafted Bio-

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Sommario/riassunto

Biopolymer Grafting: Applications presents the latest research and developments in the practical application of these methods in industry, both to enable polymer scientists and engineers to keep up with the latest research trends, as well as to propose ideas for further research and application. Research into bio-based polymers has become increasingly prevalent. However, due to challenges related to the properties of these materials compared to synthetic polymers--such as their resistance to chemicals or weather--uptake has not dramatically increased yet.