Record Nr. UNINA9910766881303321 Autore Malviya Rishabha Titolo Engineered Biomaterials: Synthesis and Applications / / edited by Rishabha Malviya, Sonali Sundram Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 Pubbl/distr/stampa **ISBN** 9789819966981 9819966981 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (623 pages) Collana Engineering Materials, , 1868-1212 Altri autori (Persone) SundramSonali Disciplina 610.153 Soggetti Medical physics Biomaterials Biomedical engineering Nanobiotechnology Cancer - Treatment Nanoscience **Medical Physics** Biomedical Engineering and Bioengineering **Cancer Therapy Nanophysics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1. Naturally Derived Biomaterials: Advances and Opportunities -- 2. Different Techniques of Genetic Engineering Used for the Development of Novel Biomaterials -- 3. Green methods for the development of bone and tissue engineering based biomaterials -- 4. Genetically Induced Biomaterial Advances in Medical Science -- 5. Biomimetic approach for biomaterials development. Sommario/riassunto This book highlights recent advances focusing on the synthesis methods of engineered biomaterials and their applications. The book discusses recent applications of various approaches and technology in improving the functional properties and biological activities of biopolymers. It includes two major sections: the first section introduces a range of methods which lead to materials with enhanced properties

for a range of practical applications, along with the positives and limitations of the techniques. The second section covers recent trends and advances in application of engineered biomaterials that assist materials scientists and researchers in mapping out the future of these new improved materials through value addition in order to enhance their use. Contributions in the book are done by prominent researchers from industry, academia, and government/private research laboratories across the globe. The book summarizes in a fairly comprehensive manner many of the recent technical advancements in the area of biopolymers. The book is intended to serve as a reference resource in the area of polymers science.