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Titolo	Chitosan-Based Nanocomposite Materials : Fabrication, Characterization and Biomedical Applications // edited by Shikha Gulati
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Nota di contenuto	Chapter 1. Introduction to chitosan and chitosan-based nanocomposites -- Chapter 2. Strategies for the synthesis and chemical modifications of chitosan -- Chapter 3. Characterization Techniques for Chitosan and its Based nanocomposites -- Chapter 4. Application of Chitosan Based nanocomposites for Drug Delivery -- Chapter 5. Application of Chitosan Based nanocomposites in Gene Therapy -- Chapter 6. Application of Chitosan Based nanocomposites in Tissue Engineering and regenerative medicine -- Chapter 7. Application of Chitosan-Based nanocomposites in Cancer Diagnosis and treatment -- Chapter 8. Application of Chitosan-Based

nanocomposites in Bioimaging -- Chapter 9. Application of Chitosan-Based nanocomposites as wound healing agents -- Chapter 10. Application of Chitosan-Based nanocomposites as antibacterial agents -- Chapter 11. Application of Chitosan-Based nanocomposites as antifungal agents -- Chapter 12. Application of Chitosan-Based nanocomposites as antiviral agents -- Chapter 13. Application of Chitosan-Based nanocomposites in orthopedics and dentistry -- Chapter 14. Conclusion and future prospects.

Sommario/riassunto

This book highlights the state-of-the-art research and discovery in the use of chitosan-based nanocomposites in biomedical applications, including the scope to which these novel materials have been incorporated by the community. It provides an exceptional insight into the strategies for the synthesis and chemical modifications of chitosan, characterization techniques, their use as anticancer agents, antimicrobial, antiviral, and antifungal agents, their role in the biomedical field, and applications in drug delivery, gene therapy, dentistry, orthopedics, etc. This book will also emphasize the challenges with previous signs of progress and way for further research, details relating to the current pioneering technology, and future perspectives with a multidisciplinary approach. Furthermore, it presents up-to-date information on the economics, toxicity, and regulations related to these novel materials.
