1. Record Nr. UNINA9910999663903321

Titolo	Emergence of Sustainable Biomaterials in Tackling Inflammatory Diseases / / edited by Md. Meraj Ansari, Anil K. Suresh, Nadeem Akhtar
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9621-12-7
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (X, 478 p. 52 illus., 50 illus. in color.)
Collana	Smart Nanomaterials Technology, , 3004-8281
Disciplina	620.115
Soggetti	Nanomedicine Drug delivery systems Nanobiotechnology Nanomedicine and Nanotoxicology Drug Delivery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. An overview of inflammatory diseases -- 2. Smart Nanomaterials and Nanocarriers: Basic Properties and formulation strategies -- 3. Application of nanomaterials in nanomedicine -- 4. Surface modification, functionalization and bioconjugation of nanomaterials for targeted drug delivery -- 5. Nanomaterial-based drug delivery system in targeting inflammatory disorders -- 6. Nanomaterials application for diagnosis and treatment of common inflammatory disorders -- 7. Nanotechnology-based Therapeutic Approaches for the Management of Osteoarthritis -- 8. Emergence of Nanomaterials in the Management of Multiple Sclerosis.
Sommario/riassunto	This book presents the latest technology of sustainable nanomaterials for applications as drug delivery cargos in tackling various inflammatory diseases. The chapters in this book describe nanotechnology-based drug delivery strategies, the mechanistic insights of nanoformulations and their application in managing inflammation diseases such as rheumatoid arthritis, ulcerative colitis, cancer and neurological disorder. It looks into the challenges of using nanomaterials-based smart materials for enhanced therapeutic efficacy while maintaining safe and sustainable procedures. The book is divided

into three main sections: A) Fundamental of smart nanocarriers and nanoformulations targeted drug delivery in inflammatory disease; B) Smart nano drug delivery therapy- an emerging approach towards inflammatory diseases and C) Novel nano delivery strategies in targeting major inflammatory diseases. The book targets early researchers and clinical practitioners who are interested in the management and treatment of inflammatory diseases using nanotechnology-based drug delivery systems.