1. Record Nr. UNINA9910357827303321 Autore Hasnain Md Saquib **Titolo** Carbon Nanotubes for Targeted Drug Delivery [[electronic resource] /] / by Md Saquib Hasnain, Amit Kumar Nayak Singapore:,: Springer Singapore:,: Imprint: Springer,, 2019 Pubbl/distr/stampa 981-15-0910-7 **ISBN** Edizione [1st ed. 2019.] 1 online resource (XIV, 106 p. 21 illus., 16 illus. in color.) Descrizione fisica Collana SpringerBriefs in Applied Sciences and Technology, , 2191-530X Disciplina 620.115 Soggetti Nanotechnology Pharmaceutical technology Pharmacy Pharmaceutical Sciences/Technology Nanotechnology and Microengineering Drug Safety and Pharmacovigilance Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Introduction -- Chemical and physical properties of Carbon Nanotubes Nota di contenuto -- Classification of Carbon Nanotubes -- Preparation of Carbon Nanotubes -- Functionalization of Carbon Nanotubes -- Carbon Nanotubes Characterization -- Applications of Carbon Nanotubes --Carbon Nanotubes absorption and transportation -- Carbon Nanotubes Toxicity Consideration -- Carbon Nanotubes Regulatory considerations -- Carbon Nanotubes Clinical trials and market status -- Conclusion. Sommario/riassunto This book provides a detailed introduction to carbon nanotubes (CNTs) for targeted drug delivery. After a brief overview of the classification. preparation, and characterization of carbon nanotubes, it focuses on their use in targeted drug delivery. It presents CNTs for brain targeting, ocular targeting, cancer targeting, and lymphatic targeting, as well as antibody therapy. The book also includes chapters on carbon nanotubes for controlled drug delivery, transdermal drug delivery, solubility enhancement, vaccine delivery, gene delivery, and as quantum dots. Last but not least, it addresses the absorption and transportation of CNTs, toxicity and regulatory considerations, as well

as clinical trials and the market status of CNTs. .