1. Record Nr. UNINA9910842283503321

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| Titolo | Drug Delivery Strategies in Neurological Disorders: Challenges and Opportunities / / edited by Awanish Mishra, Hitesh Kulhari |
| Pubbl/distr/stampa | Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023 |
| ISBN | 981-9968-07-0 |
| Edizione | [1st ed. 2023.] |
| Descrizione fisica | 1 online resource (457 pages) |
| Collana | Medicine Series |
| Disciplina | 616.80461 |
| Soggetti | Pharmacology<br>Neurosciences<br>Drug delivery systems<br>Pharmaceutical chemistry<br>Neuroscience<br>Drug Delivery<br>Pharmaceutics |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | Section A: Anatomy and Physiology of Human Nervous System -- Chapter 1. Nanocarriers as an emerging tool for drug delivery to combat neurodegenerative diseases -- Chapter 2. Challenges in drug development for neurological disorders -- Chapter 3. Transporter systems and metabolism at the blood-brain barrier and blood-CSF barrier -- Section B: Pathophysiology and management of Neurological disorders -- Chapter 4. Pathophysiology and management approaches for Alzheimer’s Disease -- Chapter 5. Pathophysiology and management approaches for Parkinson's Disease -- Chapter 6 Pathophysiology and management approaches for Epilepsy -- Chapter 7. Pathophysiology and management approaches for Epilepsy -- Chapter 8. Pathophysiology and management approaches for Multiple Sclerosis, Huntington’s disease, and other neurodegenerative diseases -- Chapter 9. Genes Encoding Ion Channels in Neurotherapeutics: Opportunities and Challenges -- Chapter 10. Herbal approaches for the management of neurological disorders -- Section C: Drug Delivery Strategies in Neurological disorders -- Chapter 11. Essential |

Considerations for brain delivery of nanoformulations -- Chapter 12. Drug delivery strategies in Alzheimer’s disease -- Chapter 13. Drug delivery strategies in Parkinson's disease -- Chapter 14. Drug delivery strategies in Epilepsy -- Chapter 15. Drug delivery strategies in Traumatic Brain Injury -- Chapter 16. Drug delivery strategies in Multiple Sclerosis, Huntington’s disease, and other neurodegenerative diseases -- Chapter 17. Nose-to-brain strategies for neurological disorders -- Chapter 18. Drug delivery strategies for the delivery of natural compounds to the brain.

Sommario/riassunto

This book comprehensively reviews the recent progress in the pathogenesis and management approaches for neurological disorders. It focuses on understanding the molecular mechanism, pathology, and novel nanotechnology-based approaches against stroke, Alzheimer’s disease, Parkinson's disease, Huntington’s disease, Multiple sclerosis, and Epilepsy. The book provides a basic understanding of the development and progression of these diseases, and recent pharmacotherapeutic approaches for their management. It also discusses challenges in drug development for neurological disorders, including preclinical models of disorders, the need for drugs to cross the blood-brain barrier, and a limited understanding of relevant pathophysiology. The book also focuses on different conventional and novel strategies for drug delivery in neurological disorders. Towards the end, the book reviews the applications of nanotechnology for the diagnosis of neurological disorders. One of the chapters is focused on the role of herbal actives in the treatment of neurological disorders. Finally, a chapter is included on nanotechnology-based approaches for the diagnosis of neurological disorders. This book is a useful resource for students and researchers of pharmaceutical sciences, life sciences, material sciences, and nano sciences.