Record Nr. UNINA9910484453103321 **Titolo** Environmental contaminants and neurological disorders // Muhammad Sajid Hamid Akash, Kanwal Rehman, editors Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2021] ©2021 **ISBN** 3-030-66376-0 Edizione [1st ed. 2021.] 1 online resource (XII, 410 p. 81 illus.) Descrizione fisica Collana Emerging contaminants and associated treatment technologies Disciplina 616.8 Soggetti Nervous system - Diseases Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico

Nota di contenuto

1-Pathogenesis of neurodegeneration and associated neurological disorders -- 2-Air pollutants and neurological disorders: From exposure to preventive interventions -- 3-Bacterial endotoxins and neurological disorders: From exposure to preventive interventions --4-Heavy metals and neurological disorders: From exposure to preventive interventions -- 5-Pesticides and neurological disorders: From exposure to preventive interventions -- 6-Cigarette smoking and neurological disorders: From exposure to preventive interventions --7-Mycotoxins and neurological disorders: From exposure to preventive interventions -- 8-Polycarbonate plastics and neurological disorders: From exposure to preventive interventions -- 9-Bisphenol A and neurological disorders: From exposure to preventive interventions --10-Volatile organic compounds and neurological disorders: From exposure to preventive interventions -- 11-Persistent organic pollutants and neurological disorders: From exposure to preventive interventions -- 12-Polychlorinated biphenyls and neurological disorders: From pathogenesis and preventive interventions -- 13-Phthalates and neurological disorders: From exposure to preventive interventions -- 14-Perfluoroalkyl chemicals and neurological disorders: From exposure to preventive interventions -- 15-Polycyclic aromatic hydrocarbons and neurological disorders: From exposure to preventive interventions -- 16-Nanomaterials as source of environmental contaminants: from exposure to preventive

interventions.

Sommario/riassunto

This volume discusses how environmental pollutants are involved in the pathogenesis of neurological disorders, and covers specific mechanisms and risk factors, as well as the necessary strategies to reduce the adverse impacts of environmental pollutants on the human nervous system. With a collection of contributions from experts in environmental pollution, neurology and pharmaceutical chemistry, the book provides both an introduction to the pathogenesis of neurodegeneration, including the types and different classes of neurological disorders, and studies demonstrating the clear link between environmental contaminants (e.g. pesticides, smoking, mycotoxins, persistent organic pollutants (POP's), polychlorinated biphenyls, phthalates, nanomaterials) and the development of neurological disorders in vulnerable populations. The book fills in a gap in research on the topic by also covering state-of-the-art treatment strategies and mitigation measures for each type of pollutant. The book will be of interest to environmental scientists, pharmacologists, toxicologists, biochemists, biotechnologists, and food and drug regulatory organizations.