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Titolo	Emerging Pollutants in Sewage Sludge and Soils // edited by Avelino Núñez-Delgado, Manuel Arias-Estévez
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ISBN	3-031-07609-5
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (309 pages)
Collana	The Handbook of Environmental Chemistry, , 1616-864X ; ; 114
Disciplina	363.7396
Soggetti	Environmental chemistry Refuse and refuse disposal Soil science Pollution Industrial microbiology Environmental Chemistry Waste Management/Waste Technology Soil Science Industrial Microbiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Biotic and abiotic contamination due to emerging pollutants in sewage sludge and soils: a country-based perspective -- Pharmaceuticals and their metabolites in sewage sludge and soils: distribution and environmental risk assessment -- Microplastics in soils as a source of pollution and environmental risk -- Environmental transmission of human pathogens associated with SARS-CoV-2 and the effect on Soil and Aquatic Ecosystem -- A biological way of management -- Innovative treatment processes for emerging contaminants removal from sewage sludge -- Emerging pollutants that can be transformed into PCDD/Fs -- An innovative technology to minimize biological sludge production and improve its quality in a circular economy perspective -- Fate of neonicotinoids in the environment- why bees are threatened -- Current progress of microplastics in sewage sludge -- Revision of the most harmful organic compounds present in sewage and sludge --

Identifying emerging pollutants using non-target or wide-screening liquid chromatography-mass spectrometry -- Fate of emerging pollutants during anaerobic digestion of sewage sludge -- Pharmaceuticals and Personal Care Products as Contaminants of Emerging Concern in Sewage Sludge and Soils and the Role of Transformation Products in their Fate and Environmental Impact -- Current methodology for extraction, separation, identification and quantification of microplastics in terrestrial systems -- Emerging viruses in sewage sludge and soils.

Sommario/riassunto

This book provides an authoritative overview of emerging pollutants in sewage sludge and soils. It traces the latest research and new trends on the characterization, removal and treatment of such pollutants in urban and industrial sewage sludge and soils. The book covers topics such as antibiotic resistance, fate and environmental impact of contaminants of emerging concern, environmental transmission of human pathogenic viruses and their effect on soil, and the repercussion of various emerging pollutants on biodiversity. It also offers a case study of the epidemiology-based surveillance of SARS-CoV-2 in wastewater and sludge. The book appeals not only to researchers and professionals working with emerging contaminants, but also to policy makers and a broader audience interested in learning more about the effects of these contaminants in human and environmental health.
