

1. Record Nr.	UNINA9910857783103321
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Titolo	Microbial Applications for Environmental Sustainability // edited by Arun Karnwal, Abdel Rahman Mohammad Said Al-Tawaha
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9706-76-9
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (0 pages)
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Disciplina	579.17
Soggetti	Microbial ecology Ecology Applied ecology Bioremediation Biology Microbial Ecology Applied Ecology Environmental Biotechnology Biological Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1 Microbes For Sustainable Development Of Environmental Issues -- Chapter 2 Harnessing Microbial Solutions For Sustainable Food And Environmental Security -- Chapter 3 Microbial Technology: Tools For Waste Management; Environmental Sustainability and Environmental Safety -- Chapter 4 Microbial Meditated Remediation Of Crude Oil-Contaminated Soil -- Chapter 5 Microbial Degradation Of Pesticides In The Environment -- Chapter 6 Plastisphere: Marine Microbial Assemblages For Biodegradation Of Microplastics -- Chapter 7 Plastisphere: Marine Microbial Assemblages For Biodegradation Of Microplastics -- Chapter 8 Microbial Processes Of Reducing E-Waste Pollution -- Chapter 9 Microbial Enzymes For Eco-Friendly Recycling Of Waste Paper By Deinkin -- Chapter 10 The Potential and Reality of Agricultural Wastewater Reuse -- Chapter 12 Microbial Manganese Peroxidase: Ligninolytic Enzymes For Bioremediation -- Chapter 13 Biofilm- Mediated Heavy Metals Bioremediation -- Chapter 14

Rhizospheric Microbes: A Promising Resource For Bioremediation And Agricultural Productivity -- Chapter 13 Microbial Nanotechnology: Nanoparticles For Bioremediation Of Toxic Pollutants -- Chapter 15 Phytoremediation: A Clean And Green Approach For Heavy Metal Remediation -- Chapter 16 Second Generation Biofuels: Concepts, Applications, And Challenges -- Chapter 17 Third Generation Biofuels: A Promising Approach For Environmental Sustainability -- Chapter 18 The utilization of microorganisms for the sustainable development of environmental issues -- Chapter 19 Microorganisms for the promotion of sustainable development in the context of environmental challenges.

Sommario/riassunto

This book focuses on the various applications of microorganisms for sustainable environment and the reduction of hazardous pollutants released in various forms, including xenobiotics, e-waste, pesticides, insecticides, plastic, heavy metals, paper waste, medical waste, textile dyes, and their impact on environmental and human health. The book involves a series of research reports that explain the application of microbes used to solve real-life issues raised due to changes happening in environment, including pollution, by covering applications, including the use of bacteria, fungi, microalgae and biofilm in the detection and degradation of crude oil, pesticides, dyes, e-waste, heavy metals and other pollutants. It also focuses on integrative strategies in the application of microbial nanomaterials for remediation of pollutant. This material will help environmental scientists and microbiologists to learn about existing environmental problems and suggest novel ways to control or contain their effects by employing various treatment approaches.
