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Titolo	Bioremediation and Sustainable Technologies for Cleaner Environment / / edited by Marimuthu Prashanthi, Rajakumar Sundaram, Aravind Jeyaseelan, Thamaraiselvi Kaliannan
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Descrizione fisica	1 online resource (XI, 358 p. 136 illus., 92 illus. in color.)
Collana	Environmental Science, , 1431-6250
Disciplina	628.5
Soggetti	Waste management Renewable energy resources Pollution Environmental engineering Biotechnology Sustainable development Waste Management/Waste Technology Renewable and Green Energy Pollution, general Environmental Engineering/Biotechnology Sustainable Development
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Biological perspective and role of bacteria in pesticide degradation -- Nanobioremediation technologies for sustainable environment -- Stabilization of market vegetable waste through the process of vermicomposting by Eisenia foetida -- Nitrate removal from ground water through lab scale bioreactor using dissimilatory nitrate reducer Bacillus weihenstephanensis (DS45) -- Catalytic degradation of reactive red 120 by copper oxide nanoparticles synthesized by Azadirachda indica -- Removal of Nickel from synthetic waste water Using Gooseberry Seeds as biosorbent -- Bioconversion Of Cellulosic Waste Into Bioethanol – A Synergistic Interaction Of Trichoderma Viride And Saccharomyces Cerevisiae -- Efficient hydrolysis of Lignocellulosic

Biomass: Potential Challenges and Future Perspectives for Biorefineries  
-- Optimization of media components for production of polyhydroxyalkanoates (bioplastic) by *Ralstonia eutropha* using paddy straw as cheap substrate -- Microbial Bioremediation of hazardous heavy metals -- Screening and isolation of textile reactive dyes decolorizing indigenous fungi isolated from textile effluent contaminated site -- Optimization of biosurfactant production and crude oil emulsification by *Bacillus* sp. isolated from hydrocarbon contaminated soil sample.

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Sommario/riassunto

This book offers insights into the current focus and recent advances in bioremediation and green technology applications for waste minimization and pollution control. Increasing urbanization has an impact on the environment, agriculture and industry, exacerbating the pollution problem and creating an urgent need for sustainable and green eco-friendly remediation technology. Currently, there is heightened interest in environmental research, especially in the area of pollution remediation and waste conversion, and alternative, eco-friendly methods involving better usage of agricultural residues as economically viable substrates for environmental cleanup are still required. The book offers researchers and scholars inspiration, and suggests directions for specific waste management and pollution control. The research presented makes a valuable contribution toward a sustainable and eco-friendly societal environment.

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