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Nota di contenuto	1 Oxidoreductases for removal of environmental pollutants -- 2 Synthesis of industrial enzymes from lignocellulosic fractions -- 3 Pleurotus-derived laccases, immobilization, and bioremediation applications -- 4 Microbial lipases for polyester degradation -- 5 Application of Microbial Biofilms in Biocatalysis and Biodegradation -- 6 Pyrethroid-degrading microorganisms and their potential application for the bioremediation of contaminated environments -- 7 Bacterial Biodegradation of Phenolic Hydrocarbons -- 8 Biosorption of Industrial wastewater by microalgae -- 9 Plastic degradation and utilization by microbes: Challenges and scope -- 10 Marine Microorganisms: From pollutant degradation to added-value products -- 11 Biodegradation of pesticides used in the agriculture by soil microorganisms -- 12 Probiotic enzymes in biodegradation and value-added products -- 13 Current state, challenges and perspectives on microbial degradation of dioxine and furan -- 14 The Management of Crude Oil Spill by

Bioremediation Technique -- 15 Bacterial Pigments- an Untapped Colorful Microbial World -- 16 Bioinoculants for rapid production of vermicompost -- 17 Microbial-mediated mechanism to improve rock phosphate solubilization and its agronomic implications.

Sommario/riassunto

This book is about different Enzymes from various sources that play an important role in the degradation of an array of pollutants with simultaneous generation of value-added products. This is an "Edited Book" which deals a comprehensive knowledge on the role of different microorganisms/their enzymes in the degradation of pollutants, wastewater treatment with simultaneous production of value added products. It also deals the current state, perspectives and various challenges associated with the microbial/enzymatic degradation of environmental pollutants. This book will provide a profound knowledge on the importance of microorganisms/their enzymes in the degradation of pollutants like pesticides, antibiotics, toxic/hazardous chemicals, endocrine disrupting chemicals/compounds with production of value-added products like bioplastics for the sustainable development of society. It covers various existing wastewater treatment approaches using microorganisms alone and /or in combination of other methods with their merits, demerits and future prospects.
