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Titolo	Microbial Biotechnology: Basic Research and Applications / / edited by Joginder Singh, Ashish Vyas, Shanquan Wang, Ram Prasad
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Descrizione fisica	1 online resource (XIV, 370 p. 38 illus., 30 illus. in color.)
Collana	Environmental and Microbial Biotechnology, , 2662-169X
Disciplina	660.62
Soggetti	Microbial genetics Agriculture Microbial ecology Microbiology Biomaterials Nucleic acids Microbial Genetics Microbial Ecology Nucleic Acid
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: The contribution of microbial biotechnology for achieving sustainable development -- Chapter 2: Microbe-mediated genetic engineering for enhancement of nutritional value in food crops -- Chapter 3: Role of microbes for attaining enhanced food crop production -- Chapter 4: Benelial microbes as an alternative of food flavour ingredients for achieving the sustainability -- Chapter 5: Microalgae as nutraceutical for achieving sustainable food solution in future -- Chapter 6: Sustainable Approaches to Remove Heavy Metals from Water -- Chapter 7: Microbial Synthesis of Nanoparticles and Their Applications for Wastewater Treatment -- Chapter 8: Microbial strategies for controlling harmful cyanobacterial blooms -- Chapter 9: Biological strategies against biofilms -- Chapter 10: Microbial options against Antibiotic Resistance Bacteria -- Chapter 11: New and Advanced Technologies in Aquaculture to Support Environmental Sustainable Development -- Chapter 12: Current trends and aspects of

microbiological biogas production -- Chapter 13: Utilization of Biosensors for Environment Monitoring -- Chapter 14: Biological Biosensors for monitoring and diagnosis -- Chapter 15: Aflatoxin: Occurrence, Regulation, and Detection in Food and Feed -- Chapter 16: Recent approaches used in environmental monitoring methods.

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#### Sommario/riassunto

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Microbial biotechnology is an important area that promotes advanced research into using microbes for value-added products, human nutrition, and the overall wellbeing of society. This book presents the latest information on the use of microbes for sustainable development, and highlights state-of-the-art biotechnological techniques used to harness microbial biotechnological traits on a commercial scale. Gathering contributions from authoritative researchers in the field, it addresses recent advances in microbial biotechnological approaches that offer sustainable options for future generations. Exploring a broad range of microbial products and their uses, the book specifically places emphasis on the application of microorganisms in healthcare, the environment and industry. It also discusses various compound classes derived from microbial metabolites. Pursuing a holistic approach to recent advances in the utilization of various microbes as biotechnological tools, the book also covers traditional uses, and explores emerging strategies to harness their full potential. Accordingly, it offers a valuable resource for researchers and graduate students alike.

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