1. Record Nr. UNINA9910483034503321

Titolo	Microbial biosurfactants : preparation, properties and applications / / Inamuddin, Mohd Imran Ahamed and Ram Prasad (editors)
Pubbl/distr/stampa	Gateway East, Singapore : , : Springer, , [2021] Â©2021
ISBN	981-15-6607-0
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (VIII, 314 p. 66 illus., 32 illus. in color.)
Collana	Environmental and Microbial Biotechnology, , 2662-1681
Disciplina	579
Soggetti	Microbial ecology Microbiology Botanical chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Application of microbial biosurfactants in the food industry -- Chapter 2. Microbial biosurfactants for contamination of food processing -- Chapter 3. Antioxidant Biosurfactants -- Chapter 4. Classification and production of microbial surfactants -- Chapter 5. Microbial biosurfactants and their potential applications: an overview -- Chapter 6. Biodegradation of hydrophobic polycyclic aromatic hydrocarbons -- Chapter 7. Surfactin -a biosurfactant against breast cancer -- Chapter 8. Anti-cancer biosurfactants -- Chapter 9. Biosurfactant for oil-pollution remediation -- Chapter 10. Potential Applications of Anti-adhesive Biosurfactants -- Chapter 11. Applications of bio-surfactant for microbial bioenergy/value-added bio-metabolite recovery from waste activated sludge -- Chapter 12. Application of microbial biosurfactants in the pharmaceutical industry -- Chapter 13. Antibacterial Biosurfactants -- Chapter 14. Microbial biosurfactants as cleaning and washing agents.
Sommario/riassunto	icrobial biosurfactant compounds are a group of structurally diverse molecules produced by microorganisms, and are mainly categorized according to their chemical structure. The diversity of microbial biosurfactants makes them versatile and means that they offer a range of capabilities, while at the same time being economically sustainable.

As such, they have potential applications in environmental processes, as well as in food, biomedicine and other industries. This book discusses innovative approaches and cutting-edge research that utilize the various properties of biosurfactants. Drawing on research from around the globe, it provides an up-to-date review of biosurfactant applications and their importance in fields such as medicine, gene therapy, immunotherapy, antimicrobial bioremediation and agriculture. It also discusses their anti-adhesive properties. The book will appeal to academics and researchers in the field of microbiology, as well as policymakers. It also serves as additional reading material for undergraduate and graduate students of agriculture, ecology, soil science, and environmental sciences. .