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Sommario/riassunto "This book focuses on the recent developments in biosurfactants."

discussing their properties, characterization, production, and applications in environmental remediation, biomedicine and biotechnology. It emphasizes the various techniques that are utilized for the detection and isolation of biosurfactants from microorganisms, and discusses metagenomics strategies to facilitate the exploration of the novel biosurfactants (mechanistic understanding and future prospects) for sustainable environmental remediation and control of antibiotic resistant genes and other pathogens. Topics covered include: Production: \* Biosurfactant production using bioreactors and different carbon sources (food processing and agro- industry by-products) \* Identification of novel biosurfactants- metagenomic approaches Environmental Applications: \* Biosurfactant-assisted bioremediation of crude oil/petroleum hydrocarbon contaminated soil \* Biosurfactants for microbe enhanced oil recovery [MERO] \* Biosurfactants in soil bioremediation and enhanced micronutrient availability \* Biosurfactants enhanced microbial degradation of polyaromatic hydrocarbons \* Surfactant-enhanced bioremediation of DDT and persistent organic micropollutants \* Biosurfactants for heavy metal remediation \*

Biosurfactants for the synthesis of biogenic nanoparticles for environmental application Biomedical Applications: \* Biosurfactant?] inspired control of methicillin?]resistant Staphylococcus aureus (MRSA) \* Antiviral, antimicrobial and antibiofilm potential of biosurfactants against multi-drug-resistant pathogens \* Biosurfactants for cosmetics and dermatological repair \* Biosurfactant mediated biocontrol of pathogenic microbes of crop plants"--