

1. Record Nr.	UNINA9910741325703321
Titolo	Biotechnology - Biosensors, Biomaterials and Tissue Engineering . Annual Volume 2023 // Luis Jesus Villarreal-Gomez, editor
Pubbl/distr/stampa	London : , : IntechOpen, , 2023
ISBN	0-85014-091-9
Descrizione fisica	1 online resource (252 pages)
Collana	Biomedical engineering ; ; Volume 20
Disciplina	660.6
Soggetti	Biotechnology Biotechnology - Safety measures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Inventoried Yeast Species in Algeria -- By Abderrahmane Benkhalifa -- 2. Upgrading Non-Conventional Yeasts into Valuable Biofactories -- By Kevin Castillo-Mendieta, Jimmy Arias and Fernando Gonzales-Zubiate -- 3. Silk Fibroin Nanoparticles: A Biocompatible Multi-Functional Polymer for Drug Delivery -- By Faith H.N. Howard, Zijian Gao, Hawari Bin Mansor, Zidi Yang and Munitta Muthana -- 4. Emerging Selenium Nanoparticles for CNS Intervention -- By Jonaid Ahmad Malik, Jeba AjarAnsari, Sakeel Ahmed, Archana Rani, Shabana Yasmeen Ansari and Sirajudheen Anwar -- 5. Antibacterial Strategies: Photodynamic and Photothermal Treatments Based on Carbon-Based Materials -- By David Giancarlo Garcia Velez, Karina Janneri Lagos Alvarez and Maria Paulina Romero Obando -- 6. Frontier Electrospun Fibers for Nanomedical Applications -- By Emilija Zdraveva and Budimir Mijovic -- 7. Influence of Mechanical Properties of Biomaterials on the Reconstruction of Biomedical Parts via Additive Manufacturing Techniques: An Overview -- By Babatunde Olamide Omiyale, Akeem Abiodun Rasheed, Robinson Omoboyode Akinnusi and Temitope Olumide Olugbade -- 8. Challenges and Emerging Technologies in Biomanufacturing of Monoclonal Antibodies (mAbs) -- By Susan McDonnell, Raymon Floyd Principe, Maycou Soares Zamprognio and Jessica Whelan -- 9. Nanomaterials as Novel Biomarkers for Cancer Nanotheranostics: State of the Art -- By Hao Yu, Zhihai Han, Cunrong Chen and Leisheng Zhang -- 10. Biosensor for the Detection of

Cyanobacterial Toxin Microcystin-LR -- By Rasmus Rohtla, Kairi Kivirand, Eerik Jogi and Toonika Rinke.

Sommario/riassunto

Biomedical technology is continually changing, and new approaches are being developed daily. Although widely used, conventional solutions are losing efficacy due to the evolution of microorganisms and the environment. Pathologies and diseases negatively affect humans and animals, but nanotechnology appears promising in the diagnosis and treatment of a variety of health conditions. This book examines some of these nanotechnologies, discussing their advantages and limitations. It is organized into four sections and includes ten chapters that address such topics as drug delivery systems for cancer treatment, photodynamic and photothermal treatments for bacterial infections, electrospun fibers for nanomedical applications, monoclonal antibodies, nanotheranostics, and much more.
