

1. Record Nr.	UNINA9910150454503321
Titolo	Advances and Applications Through Fungal Nanobiotechnology // edited by Ram Prasad
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-42990-6
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XIII, 340 p. 72 illus., 48 illus. in color.)
Collana	Fungal Biology, , 2198-7777
Disciplina	660.6
Soggetti	Mycology Microbiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Understanding Mechanism of Fungus Mediated Nanosynthesis: A Molecular Approach -- 2. Innovation of Strategies and Challenges for Fungal Nanobiotechnology -- 3. Marine-Derived Fungi: Potential Candidates for Fungal Nanobiotechnology -- 4. Green Synthesis of Metal Nanoparticles by Fungi: Current Trends and Challenges -- 5. Microbial Enzymes: Current Features and Potential Applications in Nanobiotechnology -- 6. The Effect of Mycobiota on the Biointerface of Polyaniline Surface -- 7. Synthesis Techniques and Evaluation Methods of Nanoparticles as Fungicides -- 8. Plant Fungal Disease Management Using Nanobiotechnology as a Tool -- 9. Antifungal Products by Fungi in Food Nano-Packaging -- 10. Fungal Nanoparticles: An Emerging Tool in Medical Biology -- 11. Intervention of Fungi in Nano-Particle Technology and Applications. 12. Microbial Laccases and Nanobiotechnology: Environmental Perspective -- 13. Polymer Inorganic Nanocomposites: A Sustainable Antimicrobial Agents -- 14. Advances in Bio-Botanicals Formulations with Incorporation of Nanotechnology in Intensive Crop Management -- 15. Nano-Biofungicides: Emerging Trend in Insect Pest Control -- 16. Nanocellulose Production Using Cellulose Degrading Fungi.
Sommario/riassunto	Fungal nanobiotechnology has emerged as one of the key technologies, and an eco-friendly, as a source of food and harnessed to ferment and preserve foods and beverages, as well as applications in human health

(antibiotics, anti-cholesterol statins, and immunosuppressive agents), while industry has used fungi for large-scale production of enzymes, acids, biosurfactants, and to manage fungal disease in crops and pest control. With the harnessing of nanotechnology, fungi have grown increasingly important by providing a greener alternative to chemically synthesized nanoparticles.
