1. Record Nr. UNINA9910298301903321

Titolo	Advances in Biotechnology / / edited by Indu Ravi, Mamta Baunthiyal, Jyoti Saxena
Pubbl/distr/stampa	New Delhi : , : Springer India : , : Imprint : Springer, , 2014
ISBN	81-322-1554-0
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (264 p.)
Disciplina	660.6
Soggetti	Life sciences Medicine Ecology Pharmacy Life Sciences, general Biomedicine, general Environment, general Science, Humanities and Social Sciences, multidisciplinary Medicine/Public Health, general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. High Capacity vectors -- 2. DNA Sequencing -- 3. Molecular Markers -- 4. Gene Therapy -- 5. RNA interference and its Applications -- 6. DNA Microarray -- 7. Metagenomics: The Exploration of Unculturable Microbial World -- 8. Proteomics -- 9. Recent Advances in Stem Cell Research -- 10. Biosensors -- 11. Production and Applications of Monoclonal Antibodies -- 12. Edible Vaccines -- 13. Engineering Plants for Phytoremediation -- 14. Future of Biotechnology Companies in India.
Sommario/riassunto	The book “Advances in Biotechnology” is about recent advances in some of the important fields that are ongoing in certain biotechnological applications. Biotechnology has been quite helpful in keeping pace with the demands of every increasing human population and in improving the quality of human life. Major biotechnological achievements associated with human welfare have been from the fields

like genetic engineering; transgenic plants and animals; genomics, proteomics, monoclonal antibodies for the diagnosis of disease, gene therapy etc. Fourteen authoritative chapters written by experts having experience in academics and research on current developments and future trends in biotechnology have been empathized. The book provides a detailed account of various methodologies used in biotechnology i.e. High capacity vectors, DNA sequencing dealing with next generation sequencing, Molecular markers, DNA microarray technology, as well as Proteomics that have revolutionized biotechnology with a wide array of applications. The book not only presents a well-founded explanation of the topics but also aims to present up-to-date reviews of current research efforts, some thoughtful discussions on the potential benefits and risks involved in producing biotechnological products and the challenges of bringing such products to market. It will prove to be an excellent reference work for both academicians and researchers, indicating new starting points to young researchers for new projects in the field. The book is intended for biotechnologist, biologist, researchers, teachers and students of Biosciences and Biotechnology.

2. Record Nr. UNINA9910299730103321

Titolo	Bio-Inspired Nanotechnology : From Surface Analysis to Applications / / edited by Marc R. Knecht, Tiffany R. Walsh
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2014
ISBN	1-4614-9446-X
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (317 p.)
Disciplina	541.395 541395 620 620.11
Soggetti	Nanotechnology Biomedical materials Catalysis Nanoscience Nanostructures Renewable energy resources Nanotechnology and Microengineering Biomaterials Nanoscale Science and Technology Renewable and Green Energy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Peptide-Nano particle Strategies, Interactions and Challenges -- Fundamentals of Peptide-Materials Interfaces -- Experimental Characterization of Peptide-Surface Interactions -- Interfacial Structure Determination -- Understanding Bio mineral Growth and Assembly for Engineering Novel Green Nanomaterials -- Understanding Molecular Recognition on Metallic and Oxidic Nanostructures from a Perspective of Computer Simulation and Theory -- Bio-Inspired Nano catalysis -- Addressable Biological Functionalization of Inorganics: Materials-Selective Fusion Proteins in Bio-Nanotechnology -- Environmental Interactions of Geo and Bio-Macromolecules with Nanomaterials --

	Mimicking Bio mineral Systems: What Have We Achieved and Where Do We Go From Here?.
Sommario/riassunto	This book focuses on the use of bio-inspired and biomimetic methods for the fabrication and activation of nanomaterials. This includes studies concerning the binding of the biomolecules to the surface of inorganic structures, structure/function relationships of the final materials, and extensive discussions on the final applications of such biomimetic materials in unique applications including energy harvesting/storage, biomedical diagnostics, and materials assembly. This book also: · Covers the sustainable features of bio-inspired nanotechnology · Includes studies on the unique applications of biomimetic materials, such as energy harvesting and biomedical diagnostics Bio-Inspired Nanotechnology: From Surface Analysis to Applications is an ideal book for researchers, students, nanomaterials engineers, bioengineers, chemists, biologists, physicists, and medical researchers.