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Titolo	Metabolic Engineering for Bioactive Compounds : Strategies and Processes / / edited by Vipin Chandra Kalia, Adesh Kumar Saini
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Nota di contenuto	1. Developments and diversity of proteins and enzymes -- 2. Strategies for Gene Expression in Prokaryotic and Eukaryotic System -- 3. Molecular farming approach towards bioactive compound -- 4. Protein therapeutics: Production, application and future scenario -- 5. Engineering in plant genome using Agrobacterium: progress and future -- 6. Engineering Saccharomyces cerevisiae for C5 fermentation: A step towards second generation biofuel production -- 7. Gaining insight into plant responses to beneficial and pathogenic microorganisms using metabolomic and transcriptomic approaches -- 8. Engineering Yeast as cellular factory -- 9. Yeast as a model system to study human diseases -- 10. Cellulases: Industrial workhorse in bioenergy sector -- 11. Green chemistry approach towards nanoparticles synthesis -- 12. The antiproliferative and anti-bacterial effect of Moringa oleifera mediated gold nanoparticles: A review -- 13. Nanoparticles in diverse biological Application -- 14. Nanomaterials enabled immunotherapeutic applications -- 15. Biosynthesis of Nanoparticles

	and their application in Pharmaceutical industry.
Sommario/riassunto	This book comprehensively discusses the latest research in the area of metabolic engineering. Metabolic engineering solutions for bioactive compounds are now being derived by means of heterologous gene expression, in a wide range of organisms. The book provides an overview of the model systems being employed for metabolic manipulation to yield bioactive molecules, such as single-cell proteins, antibody generation, metabolites, proteases, chaperones, therapeutic proteins, nanomaterials, polymeric conjugates, dendrimers and nanoassemblies, Escherichia coli, Agrobacterium, Saccharomyces cerevisiae and cell lines, etc. In addition, it shares insights into the scope of these methods in the areas of prevention, diagnosis and treatment of diseases, e.g. immunotherapy for curing various diseases like cancer, allergies, autoimmune diseases, etc. .