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Nota di contenuto	Chapter 1: Application of enzymes in bioremediation of contaminated hydrosphere and soil environment -- Chapter 2: Bioremediation Of Highly Toxic Hexavalent Chromium By Bacterial Chromate Reductases Family: An Structural And Functional Overview -- Chapter 3: An Overview Of Raw Starch Digesting Enzymes And Their Applications In Biofuel Development -- Chapter 4: Bamboo Valorization By Fermentation And Enzyme Treatment -- Chapter 5: Recent Developments In Pretreatment And Enzymatic Hydrolysis For Cellulosic Bioethanol Production -- Chapter 6: Production Of Biofuel From Disposed Food And Dairy Waste -- Chapter 7: Role of enzymes in synthesis of nanoparticles -- Chapter 8: Protein-Nanoparticle Interaction And Its Potential Biological Implications -- Chapter 9: Enzyme-Nanoparticle Corona: A Novel Approach, Their Plausible Applications And Challenges -- Chapter 10: Enzymes In Fuel Biotechnology -- Chapter 11: Role Of Enzymes In Deconstruction Of Waste Biomass For Sustainable Generation Of Value-Added Products --

Chapter 12: Thermostable Enzymes From *Clostridium thermocellum* -- Chapter 13: Hot And Cold Bacteria Of Sikkim: Biodiversity And Enzymology -- Chapter 14: Enzymes In Health Care: Cost Effective Production And Applications Of Therapeutic Enzymes In Health Care Sector -- Chapter 15: Significance Of Enzymes In Modern Healthcare: From Diagnosis To Therapy -- Chapter 16: L-Asparaginase And Methioninase As Prospective Anticancer Enzymes: Current applications And Production Approaches -- Chapter 17: Production Of Thrombolytic And Fibrinolytic Proteases: Current Advances And Future Prospective -- Chapter 18: Enzymes In Textile Industries -- Chapter 19: Role of Enzymes in Textile Processing.

Sommario/riassunto

The rapid urbanization and industrialization of developing countries across the globe have necessitated for substantial resource utilization and development in the areas of Healthcare, Environment, and Renewable energy. In this context, this resourceful book serves as a definitive source of information for the recent developments in application of microbial enzymes in various sectors. It covers applications in fermentation processes and their products, extraction and utilisation of enzymes from various sources and their application in health and biomass conversion for production of value added products. Different chapters discuss various areas of bioprospecting in enzyme technology, and describe why these are the mainstays for industrial production of value added products. The rich compilation of the cutting-edge advances and applications of the modern industrial based techniques hold feasible solutions for a range of current issues in enzyme technology. This book will be of particular interest for scientists, academicians, technical resource persons, engineers and members of industry. Undergraduate and graduate students pursuing courses in the area of industrial biotechnology will find the information in the book valuable. General readers having interest towards biofuels, enzyme technology, fermented food and value added products, phytochemicals and phytopharmaceutical products will also find the book appealing. Readers will discover modern concepts of enzymatic bioprocess technology for production of therapeutics and industrial value added products.
