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Nota di contenuto	Chapter 1_Fundamentals and Analytical Techniques for Biological Applications of Nanomaterials -- Chapter 2_Emerging applications of nanotechnology in human welfare with special reference to biomedical issues -- Chapter 3_Nanotechnology in healthcare -- Chapter 4_Nanotechnology on disease therapy and diagnostics -- Chapter 5_Nanovaccines -- Chapter 6_Role of biogenic inorganic nanomaterials as drug delivery systems -- Chapter 7_Nano-Electronics on medical applications -- Chapter 8_Nanotechnology in agricultural applications -- Chapter 9_Nanotechnology application in plant and agriculture Biotechnology -- Chapter 10_MOF: A new age smart material as nanocarriers for fertilizer and pesticides -- Chapter 11_Unravelling Algal Nanobionics for the Sustainable Production of Bioactive Compounds -- Chapter 12_Nanotoxicological issues in agriculture and related regulatory framework. –Chapter 13_Nanotechnology application on veterinary science -- Chapter 14_Nanotechnology application on

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Sommario/riassunto

This textbook for graduate and postgraduate students provides comprehensive applications of nanoparticles in medicine, agriculture, and environmental sciences. The initial chapter covers basic topics related to types, synthesis, structure, and properties of various nanoparticles. It further discusses the wide range of applications of nanoparticles in medicine, agriculture, and the environment. The book presents nano-electronic biosensors that are used to diagnose and monitor the progression of human diseases. It summarizes the opportunities and challenges of nanotechnology in the agriculture and food sector highlighting the scientific, technical, regulatory, safety, and societal impacts. Additionally, it illustrates the applications of nanotechnology in the field of aquaculture medicine, bioinformatics and food technology. The textbook examines the development and administration of nano-medicines , their applications, advantages, and limitations for the treatment and prophylaxis of a broad range of diseases. Lastly, the textbook explores the recent advances in the field of nanobusiness and nanotechnology issues in intellectual property management(IPR).