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**Sommario/riassunto**

The book provides essential insights into the revolutionary potential of nanotechnology in medicine, exploring innovative approaches that harness natural materials for targeted and effective disease management. Nanotechnology has emerged as an innovative field with the potential to transform various sectors, including medicine and allied health sciences. Bioactive nanotherapeutics, a specific area within nanotherapeutics, utilizes natural materials or biomimetic designs to offer distinct advantages such as targeted drug delivery, biocompatibility, and improved therapeutic efficacy. These bioactive-based nanotherapeutics are used in the treatment and management of various diseases. Bioactive-Based Nanotherapeutics explores this rapidly growing field of therapeutics. It presents a broad overview of the fundamentals of bioactive nanomaterials, their design strategies, and their therapeutic applications. Leading experts from different disciplines have contributed chapters that explore a diverse range of topics, including the basics of bioactive nanotherapeutics, isolation methods of different bioactive compounds, and formulation developments. This volume addresses the importance of nanotechnology for the treatment and management of different diseases, including nasal, gastrointestinal, rectal, and transdermal diseases. Readers will find the book: Provides scientific research and evidence that supports the effectiveness of bioactive-based nanocarriers in treating diseases; Explores actionable steps and real-life scenarios to illustrate the practical benefits; Provides a comprehensive guide that explains the holistic approach, explaining health-related applications of bioactive-based nanoformulations. Audience Pharmacists, biologists, chemists, doctors, academics, and industry professionals interested in holistic and bioactive-based methods for disease treatment.

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