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Sommario/riassunto	Micro RNAs (miRNAs) are known to play an important role in gene expression regulation. Owing to their ever-increasing implications in the control of various biological and pathological processes, miRNAs have now been considered novel biomarkers of various human diseases including, cancer, viral disease, cardiovascular disorders, metabolic disturbances, etc. Unique expression profiles have been associated with specific pathological states. Cardiovascular disease is among the main causes of mortality in developed countries. The pathological process of the heart is associated with altered express

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Sommario/riassunto

This book aims to cover the applications of nanotechnology against human infectious diseases. The chapters of the book discuss the role of nanotechnology in the efficient diagnosis and treatment of these diseases. It explicitly provides an overview of nanodiagnostics for infectious diseases from nanoparticles-based, nanodevice-based, and point-of-care platforms. The book also covers the state-of-the-art review of recent progress in biomimetic and bioengineered nanotherapies to treat infectious diseases. It also presents a nano carrier-based CRISPR/Cas9 delivery system for gene editing and its applications for developing interventional approaches against communicable diseases. Further, it reviews the recent developments in nanotechnology to engineer nanoparticles with desired physicochemical properties as a line of defense against multi-drug resistance micro-organisms. Cutting across the disciplines, this book serves as a guide for researchers in biotechnology, parasitology, and nanotechnology.