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Nota di contenuto	Part I: Overview -- Chapter 1: An Overview of Circular RNAs -- Chapter 2: Guidelines for the naming of circular RNAs -- Part II: Bioinformatics for Circular RNAs -- Chapter 3: Circular RNA detection and bioinformatic analysis -- Chapter 4: Online databases in circular RNAs -- Chapter 5: Prediction of circular RNA secondary structures and their targets -- Chapter 6: Circular RNA Identification and Characterization with CircRNAFlow: A Bioinformatics Approach -- Part III: Biogenesis of Circular RNAs -- Chapter 7: The formation of circular RNAs -- Chapter 8: RNA binding proteins (RBPs) and circular RNA biogenesis -- Chapter 9: The internal ribosome entry site in circular RNAs -- Part IV: Molecular Mechanisms and Gene Regulation of Circular RNAs -- Chapter 10: Circular RNAs binding to RNA-Binding Proteins -- Chapter 11: Circular RNAs regulate transcription and translation -- Part V: Circular RNAs as Potential Disease Biomarkers -- Chapter 12: Circular RNA in Exosomes and its clinical significance -- Chapter 13: Circular RNAs in Blood and its clinical relevance -- Chapter 14: Circular RNAs as Biomarkers in the diagnosis of Human Diseases -- Chapter 15: Circular RNAs as Novel Biomarkers and application in cardiovascular diseases -- Chapter 16: Circular RNAs synthesis and applications.-Part VI: Circular

RNAs and Human Diseases -- Chapter 17: Circular RNAs in heart diseases -- Chapter 18: Circular RNAs in cancers -- Chapter 19: Circular RNAs in organ fibrosis -- Chapter 20: Circular RNAs in metabolic diseases -- Chapter 21: Circular RNAs in liver diseases -- Chapter 22: Circular RNAs in respiratory diseases -- Chapter 23: Circular RNAs in brain physiology and neurologic diseases -- Chapter 24: Circular RNAs in immune-related diseases -- Chapter 25: Circular RNAs in musculoskeletal diseases -- Part VII: Circular RNAs in Archaea -- Chapter 26: Circular RNAs in Archaea.

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#### Sommario/riassunto

This book provides a comprehensive overview of circular RNAs (circRNAs), a novel class of non-coding RNAs with diverse regulatory roles and clinical relevance. Covering recent advances in circRNA biogenesis, molecular mechanisms, computational tools, and disease associations, it offers a structured and up-to-date resource. Readers will gain insights into how circRNAs influence gene regulation, participate in human diseases, and serve as potential biomarkers and therapeutic targets. This book is ideal for researchers, clinicians, and students interested in RNA biology, bioinformatics, and precision medicine.

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