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Sommario/riassunto	Complexity is a ubiquitous phenomenon in physiology that allows living systems to adapt to external perturbations. Fractal structures, self-organization, nonlinearity, interactions at dierent scales, and interconnections among systems through anatomical and functional networks, may originate complexity. Biomedical signals from physiological systems may carry information about the system complexity useful to identify physiological states, monitor health, and predict pathological events. Therefore, complexity analysis of biomedical signals is a rapidly evolving field aimed at extracting information on the physiological systems. This book consists of 16 contributions from authors with a strong scientific background in biomedical signals analysis. It includes reviews on the state-of-the-art of complexity studies in specific medical applications, new methods to improve complexity quantifiers, and novel complexity analyses in physiological or clinical scenarios. It presents a wide spectrum of methods investigating the entropic properties, multifractal structure, self-organized criticality, and information dynamics of biomedical signals touching upon three physiological areas: the cardiovascular system, the central nervous system, the heart-brain interactions. The book is aimed at experienced researchers in signal analysis and presents the latest trends in the complexity methods in physiology and

medicine with the hope of inspiring future works advancing this fascinating area of research.