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	Edizione	[First edition.]
	Descrizione fisica	1 online resource (190 pages) : 30 illustrations
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	Soggetti	Fractals Imaging systems in medicine Mathematical analysis
	Lingua di pubblicazione	Inglese
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	Nota di contenuto	chapter 1 Introduction -- chapter 2 Physiology, Anatomy and Fractal Properties -- chapter 3 Fractal Dimension of Biosignals -- chapter 4 Fractals Analysis of Electrocardiogram -- chapter 5 Fractals Analysis of Surface Electromyogram -- chapter 6 Fractals Analysis of Electroencephalogram -- chapter 7 Fractal Analysis of Biomedical Images -- chapter 8 Fractal Dimension of Retinal Vasculature -- chapter 9 Fractal Dimension of Mammograms -- chapter 10 Fractal Dimension of Skin Lesions -- chapter 11 Case Study I: Age Associated Change of Complexity -- chapter 12 Case Study 2: Health, Well-being and Fractal Properties.
	Sommario/riassunto	The book provides an insight into the advantages and limitations of the use of fractals in biomedical data. It begins with a brief introduction to the concept of fractals and other associated measures and describes applications for biomedical signals and images. Properties of biological data in relations to fractals and entropy, and the association with health and ageing are also covered. The book provides a detailed description of new techniques on physiological signals and images based on the fractal and chaos theory.