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Titolo	Fractals in molecular biophysics // T. Gregory Dewey, Department of Chemistry, University of Denver
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Descrizione fisica	1 online resource (289 p.)
Collana	Topics in physical chemistry : a series of advanced textbooks and monographs
Disciplina	574.8/8/0151474
Soggetti	Molecular biology - Mathematical models Biophysics - Mathematical models Fractals Electronic books.
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; 1 What Are Fractals?; 2 Fractal Aspects of Protein Structure; 3 Loops, Polymer Statistics, and Helix-Coil Transitions; 4 The Multifractality of Biomacromolecules; 5 Fractal Diffusion and Chemical Kinetics; 6 Are Protein Dynamics Fractal?; 7 Fractons and Vibrational Relaxation in Proteins; 8 Encoded Walks and Correlations in Sequence Data; 9 Percolation; 10 Chaos in Biochemical Systems; Index
Sommario/riassunto	This book discusses applications of fractal geometry to complex problems in molecular biophysics. It provides a treatment of fractal aspects of protein and structure dynamics, fractal reaction kinetics in biochemical systems, sequence correlations in DNA, and descriptors of chaos in enzymes.