
The fourteen chapters of this book cover the central ideas and concepts of chaos and fractals as well as many related topics including: the Mandelbrot set, Julia sets, cellular automata, L-systems, percolation and strange attractors. This new edition has been thoroughly revised throughout. The appendices of the original edition were taken out since more recent publications cover this material in more depth. Instead of the focussed computer programs in BASIC, the authors provide 10 interactive JAVA-applets for this second edition.
Fractals and Chaos in Geology and Geophysics

Now in a greatly expanded second edition, this book relates fractals and chaos to a variety of geological and geophysical applications and introduces the fundamental concepts of fractal geometry and chaotic dynamics. In this new edition, Turcotte expands coverage of self-organized criticality and includes statistics and time series to provide a broad background for the reader. Topics include drainage networks and erosion, floods, earthquakes, mineral and petroleum resources, fragmentation, mantl...

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