

1. Record Nr.	UNINA9910484721103321
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Titolo	Fractal Control and Its Applications // by Shu Tang Liu, Yong Ping Zhang, Chang An Liu
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-5459-5
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (364 pages) : illustrations
Disciplina	016.6201123
Soggetti	Control engineering Signal processing Image processing Speech processing systems Control and Systems Theory Signal, Image and Speech Processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- New Characteristics about the Fractal Control Theory -- Fractal Control and Synchronization of Classical Model -- Control and Synchronization of Julia Sets Generated by a Class of Complex Time-Delay Rational MAP -- Control and Synchronization of Spatial Fractals -- Fractal Phenomena and Control in Economical Models -- Control of Julia Sets in Complex Physical Systems -- Applications of Fractal Control in Biologies -- Control of the Thermal Fractal Diffusion Systems -- Fractal Analysis and Control of the SIRS Models -- Application of Fractal Control in Other Fields -- References.
Sommario/riassunto	The book focuses on fractal control and applications in various fields. Fractal phenomena occur in nonlinear models, and since the behaviors depicted by fractals need to be controlled in practical applications, an understanding of fractal control is necessary. This book introduces readers to Julia set fractals and Mandelbrot set fractals in a range of models, such as physical systems, biological systems and SIRS models, and discusses controllers designed to control these fractals. Further, it demonstrates how the fractal dimension can be calculated in order to describe the complexity of various systems. Offering a comprehensive

and systematic overview of the practical issues in fractal control, this book is a valuable resource for readers interested in practical solutions in fractal control. It will also appeal to researchers, engineers, and graduate students in fields of fractal control and applications, as well as chaos control and applications.

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