

1. Record Nr.	UNINA9910743271203321
Titolo	Nonlinear Dynamics in Complex Systems via Fractals and Fractional Calculus
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2023
Descrizione fisica	1 online resource (276 p.)
Soggetti	Mathematics & science Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Current advances in the knowledge of nonlinear dynamical networks, systems and processes, as well as their unified repercussions, allow us to include some typical complex natural phenomena, from the nanoscale to an extra-galactic scale, in an unitarian comprehensive manner. In other words, the physical, biological and financial data, as well as technological ones (mechanical or electronic devices), of complex systems available today can be managed by the same unique conceptual approach, both analytically and through a computer simulation, using effective nonlinear dynamics procedures. This volume collected some important advances in the fields of fractal curves, fractal analysis and fractional calculus, as well as new solutions of fractal differential equations. The works edited in the present technical publication are those that appeared in the Fractal and Fractional journal, in a Special Issue of the same name.