1. Record Nr. UNINA9910627272003321

Autore	Cao Guohou
Titolo	Three-dimensional exploration technology of tunnel geology / / Guohou Cao, Hao Liu, and Xi Yang
Pubbl/distr/stampa	Singapore : , : Springer, , [2022] ©2022
ISBN	981-16-9225-4
Descrizione fisica	1 online resource (288 pages)
Collana	Key Technologies for Tunnel Construction under Complex Geological and Environmental Conditions
Disciplina	624.193
Soggetti	Geotechnical engineering Tunnels - Design and construction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.

2.

Record Nr.	UNINA9910298637703321
Autore	Érdi Péter
Titolo	Stochastic Chemical Kinetics : Theory and (Mostly) Systems Biological Applications / / by Péter Érdi, Gábor Lente
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2014
ISBN	1-4939-0387-X
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (174 p.)
Collana	Springer Series in Synergetics, , 0172-7389
Disciplina	541.390184
Soggetti	Chemometrics Systems biology Probabilities Statistical physics Physics Math. Applications in Chemistry Systems Biology Probability Theory and Stochastic Processes Applications of Nonlinear Dynamics and Chaos Theory Applications of Graph Theory and Complex Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Stochastic kinetics: why and how? -- Chemical kinetics: a prototype of nonlinear science -- Applicability of the deterministic model -- Fluctuation phenomena -- Stochastic chemical kinetics -- Continuous time discrete state stochastic models -- Model frameworks -- Stochastic processes -- The standard stochastic model of homogeneous reaction kinetics -- Solutions of the master equation -- Stationary and transient distributions -- Simulation methods -- Deterministic continuation -- Continuous state approximations -- Non-Markovian approaches -- Applications -- Introductory remarks -- Fluctuations near instabilities -- Compartmental systems -- Autocatalysis -- Enzyme kinetics -- Signal processing -- Gene expression -- Chiral symmetry -- Parameter estimation in stochastic kinetic models -- Stochastic resonance in chemical systems --

	Computation with small stochastic kinetic systems -- The Book in Retrospect and Prospect -- Index.
Sommario/riassunto	This volume reviews the theory and simulation methods of stochastic kinetics by integrating historical and recent perspectives, presents applications, mostly in the context of chemical signal processing, gene expression, enzyme kinetics and autocatalytic processes. In recent years, due to the development in experimental techniques such as optical imaging, single cell analysis, and one-molecule fluorescence spectroscopy, biochemical kinetic data inside single living cells have increasingly become available. The emergence of systems biology brought renaissance in the application of stochastic kinetic methods as is reflected in this book.