1. Record Nr. UNINA9910142451003321

Titolo	Complexity in biological information processing
Pubbl/distr/stampa	[Place of publication not identified], : John Wiley, 2001
ISBN	0-470-84667-4 9786610555529 1-280-55552-1
Edizione	[1st ed.]
Descrizione fisica	1 online resource (258 pages)
Collana	Novartis Foundation Symposia ; ; v.Vol. 239
Disciplina	571.7
Soggetti	Biochemical Processes Cell Physiological Processes Biology Biochemical Phenomena Biological Science Disciplines Cell Physiological Phenomena Chemical Processes Chemical Phenomena Phenomena and Processes Natural Science Disciplines Disciplines and Occupations Computational Biology Signal Transduction Health & Biological Sciences Biophysics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Sommario/riassunto	Many human diseases arise from the malfunction of signalling components, in particular alterations of multiple components of an integrated signalling network. Experimental and computational tools to

describe and quantify these changes are increasingly available, providing a wealth of data that can stimulate systematic analysis of the entire signalling network and enable prediction of disease states not easily recognizable from complex data sets. This groundbreaking book explores the structural and temporal complexity in biological signalling exemplified in neuronal, immunological, humoral and genetic signal transduction networks. With discussions between experimentalists and theoretically oriented scientists, this book takes an interdisciplinary approach that may help switch the analysis of biological signalling from descriptive to predictive science and capture the behaviour of entire systems. * Explores the structural and temporal complexity in biological signalling. * Represents an unusual collocation of three different areas: immunology, cell signalling and neural networks. * Contains interdisciplinary discussions between experimentalists and theoretically oriented scientists, in particular those working on computer simulations.