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Altri autori (Persone)	JunkerBjorn H SchreiberFalk
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Nota di contenuto	Networks in biology / Bjorn H. Junker -- Graph theory / Falk Schreiber -- Global network properties / Ralf Steuer and Gorka Zamora Lopez -- Network centralities / Dirk Koschutzki -- Network motifs / Henning Schwobbermeyer -- Network clustering / Balabhaskar Balasundaram and Sergiy Butenko -- Petri nets / Ina Koch and Monika Heiner -- Signal transduction and gene regulation networks / Anatolij P. Potapov -- Protein interaction networks / Frederik Bornke -- Metabolic networks / Marcio Rosa da Silva ... [et al.] -- Phylogenetic networks / Birgit Gemeinholzer -- Ecological networks / Ursula Gaedke -- Correlation networks / Dirk Steinhauser ... [et al.].
Sommario/riassunto	An introduction to biological networks and methods for their analysis Analysis of Biological Networks is the first book of its kind to provide readers with a comprehensive introduction to the structural analysis of biological networks at the interface of biology and computer science. The book begins with a brief overview of biological networks and graph

theory/graph algorithms and goes on to explore: global network properties, network centralities, network motifs, network clustering, Petri nets, signal transduction and gene regulation networks, protein interaction networks, metabolic networks, phylogenetic networks, ecological networks, and correlation networks. Analysis of Biological Networks is a self-contained introduction to this important research topic, assumes no expert knowledge in computer science or biology, and is accessible to professionals and students alike. Each chapter concludes with a summary of main points and with exercises for readers to test their understanding of the material presented. Additionally, an FTP site with links to author-provided data for the book is available for deeper study. This book is suitable as a resource for researchers in computer science, biology, bioinformatics, advanced biochemistry, and the life sciences, and also serves as an ideal reference text for graduate-level courses in bioinformatics and biological research.