1.	Record Nr.	UNINA9910454385103321
	Titolo	Systems bioinformatics : an engineering case-based approach / / Gil Alterovitz, Marco F. Ramoni, editors
	Pubbl/distr/stampa	Norwood, Massachusetts : , : Artech House, , ©2007 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2007]
	ISBN	1-59693-125-6
	Descrizione fisica	1 online resource (404 p.)
	Collana	Artech House bioinformatics & biomedical imaging series
	Altri autori (Persone)	AlterovitzGil RamoniMarco F
	Disciplina	572.80285
	Soggetti	Bioinformatics Biological systems Cytology - Data processing Proteomics - Data processing Electronic books.
	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 and indexes.
	Nota di contenuto	Preface; Part I Introduction: Molecular and Cellular Biology; Chapter 1 Molecular and Cellular Biology: An Engineering Perspective; Chapter 2 Proteomics: From Genome to Proteome; Part II Analysis: Signal Processing; Chapter 3 Introduction to Biological Signal Processing at the Cell Level; Chapter 4 Signal Processing Methods for Mass Spectrometry; Part III Analysis: Control and Systems; Chapter 5 Control and Systems Fundamentals; Chapter 6 Modeling Cellular Networks; Part IV Analysis: Probabilistic Data Networks and Communications.
	Sommario/riassunto	Powerful engineering tools can help solve today?s complex biological and biomedical research challenges? and this first-of-its-kind guide is paving the way . This trail-blazing work gives engineers a quantitative systems approach to bioinformatics research using computational tools drawn from technical disciplines. It presents biological processes in an engineering context to help engineers use their technical skills in solving novel biological problems and also to facilitate reverse engineering from biology in developing synthetic biological devices.