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Altri autori (Persone)	IglesiasPablo A. <1964-> IngallsBrian P. <1974->
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Preface; 1 A Primer on Control Engineering; 2 Modeling and Analysis of Stochastic Biochemical Networks; 3 Spatial Modeling; 4 Quantifying Properties of Cell Signaling Cascades; 5 Control Strategies in Times of Adversity; 6 Synthetic Biology; 7 Graphs and the Dynamics of Biochemical Networks; 8 A Control-Theoretic Interpretation of Metabolic Control Analysis; 9 Robustness and Sensitivity Analyses in Cellular Networks; 10 Structural Robustness of Biochemical Networks; 11 Robustness of Oscillations in Biological Systems; 12 A Theory of Approximation for Stochastic Biochemical Processes 13 System-Theoretic Approaches to Network Reconstruction 14 Identification of Biochemical Reaction Networks Using a Parameter-Free Coordinate System; References; Contributors; Index
Sommario/riassunto	This is a survey of how engineering techniques from control and systems theory can be used to help biologists understand the behaviour of cellular systems.