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3.1.3 Levels of Modeling 3.2 Data Analysis; 3.2.1 Types of Data; 3.2.1.1 Purification; 3.2.1.2 Detection; 3.2.1.3 Large-Scale Analyses; 3.2.1.4 Identification of Components; 3.2.2 Working with Data; 3.2.2.1 Different Clustering Approaches; 3.2.2.2 Principal Component Analysis; 3.3 ODE Modeling; 3.3.1 Differential Equations; 3.3.2 Stoichiometric Matrix; 3.3.3 Reaction Kinetics; 3.3.4 Steady States; 3.3.5 Metabolic Control Analysis; 3.3.6 Simulating Models; 3.3.7 Parameter Estimation; 3.4 Results Gained from Systems Biology; 3.4.1 Just-in-Time Transcription
3.5 Standard Formats, Databases, and Tools

Sommario/riassunto

This first book to provide a comprehensive overview of the recent progress made in this break-through approach includes expert contributions from a variety of disciplines. Particular focus is placed on high-throughput methods and the analysis of data thus obtained, as well as their use in silico experiments so as to gain an insight into the complex biological processes in neuronal systems. A must-have for everyone working in psychiatric research.
