

Contents

Immune Response Enhancement Strategy via Hybrid Control Perspective . . .	1
<i>Hyuk-Jun Chang and Alessandro Astolfi</i>	
Fluorescent Reporter Genes and the Analysis of Bacterial Regulatory Networks	27
<i>Hidde de Jong and Johannes Geiselman</i>	
Modeling and Analysis of Qualitative Behavior of Gene Regulatory Networks	51
<i>Alvis Brazma, Karlis Cerans, Dace Ruklisa, Thomas Schlitt, and Juris Viksna</i>	
Parameter Synthesis Using Parallelotopic Enclosure and Applications to Epidemic Models	67
<i>Thao Dang, Tommaso Dreossi, and Carla Piazza</i>	
Optimal Observation Time Points in Stochastic Chemical Kinetics	83
<i>Charalampos Kyriakopoulos and Verena Wolf</i>	
Exploring Synthetic Mass Action Models.	97
<i>Oded Maler, Ádám M. Halász, Olivier Lebeltel, and Ouri Maler</i>	
Exploiting the Eigenstructure of Linear Systems to Speed up Reachability Computations	111
<i>Alexandre Rocca, Thao Dang, and Eric Fanchon</i>	
RKappa: Statistical Sampling Suite for Kappa Models.	128
<i>Anatoly Sorokin, Oksana Sorokina, and J. Douglas Armstrong</i>	
Integration of Rule-Based Models and Compartmental Models of Neurons. . .	143
<i>David C. Sterratt, Oksana Sorokina, and J. Douglas Armstrong</i>	
FM-Sim: A Hybrid Protocol Simulator of Fluorescence Microscopy Neuroscience Assays with Integrated Bayesian Inference	159
<i>Donal Stewart, Stephen Gilmore, and Michael A. Cousin</i>	
Author Index	175



<http://www.springer.com/978-3-319-27655-7>

Hybrid Systems Biology

Second International Workshop, HSB 2013, Taormina,
Italy, September 2, 2013 and Third International
Workshop, HSB 2014, Vienna, Austria, July 23-24, 2014,
Revised Selected Papers

Maler, O.; Halász, Á.M.; Dang, T.; Piazza, C. (Eds.)

2015, XI, 175 p. 51 illus. in color., Softcover

ISBN: 978-3-319-27655-7