

---

## Contents

Partial Versus Total Halting in P Systems <i>A. Alhazov, R. Freund, M. Oswald, S. Verlan</i> .....	1
Magnetotactic Bacteria and Their Significance for P Systems and Nanoactuators <i>I.I. Ardelean, M. Ignat, C. Moisescu</i> .....	21
Networks of Cells and Petri Nets <i>F. Bernardini, M. Gheorghe, M. Margenstern, S. Verlan</i> .....	33
Extended Spiking Neural P systems with Excitatory and Inhibitory Astrocytes <i>A. Binder, R. Freund, M. Oswald, L. Vock</i> .....	63
Information Theory over Multisets <i>C. Bonchiş, C. Izbaşa, G. Ciobanu</i> .....	73
VisualTissue: A Friendly Tool to Study Tissue P Systems Solutions for Graph Problems <i>R. Borrego-Ropero, D. Díaz-Pernil, J.A. Nepomuceno</i> .....	87
Towards a Causal Semantics for Brane Calculi <i>N. Busi</i> .....	97
Subset Sum with Tissue P Systems with Cell Division <i>D. Díaz-Pernil, M.A. Gutiérrez-Naranjo, M.J. Pérez-Jiménez, A. Riscos-Núñez</i> .....	113
Polarizationless P Systems with Active Membranes Working in the Minimally Parallel Manner <i>R. Freund, Gh. Păun, M.J. Pérez-Jiménez</i> .....	131
Spiking Neural P Systems: Stronger Normal Forms <i>M. García-Arnau, D. Pérez, A. Rodríguez-Paton, P. Sosik</i> .....	157

A Membrane Computing Model for Ballistic Depositions <i>C. Graciani-Díaz, M.A. Gutiérrez-Naranjo, M.J. Pérez-Jiménez</i> .....	179
P Systems with Adjoining Controlled Communication Rules <i>M. Ionescu, D. Sburlan</i> .....	199
Several Applications of Spiking Neural P Systems <i>M. Ionescu, D. Sburlan</i> .....	213
On the Computational Power of Spiking Neural P Systems <i>A. Leporati, C. Zandron, C. Ferretti, G. Mauri</i> .....	227
Some Mathematical Methods and Tools for an Analysis of Harmony-Seeking Computations <i>A. Obtulowicz</i> .....	247
Twenty Six Research Topics About Spiking Neural P Systems <i>Gh. Păun</i> .....	263
Membrane Computing Schema Based on String Insertions <i>M.J. Pérez-Jiménez, T. Yokomori</i> .....	281
A Software Tool for Dealing with Spiking Neural P Systems <i>D. Ramírez-Martínez, M.A. Gutiérrez-Naranjo</i> .....	299
On Two Families of Multiset Tree Automata <i>J.M. Sempere, D. López</i> .....	315
Author index .....	325