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Descrizione fisica	1 online resource (XI, 387 p. 56 illus. in color.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 9504
Disciplina	511.3
Soggetti	Computer science Algorithms Software engineering Pattern recognition systems Theory of Computation Software Engineering Computer Science Logic and Foundations of Programming Automated Pattern Recognition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Information Theory in Genome Analysis -- Towards a Theory of Life -- An Excursion through Quantitative Model Refinement -- Polarizationless P Systems with One Active Membrane -- Bridging Deterministic P Systems and Conditional Grammars -- Automated Verification of Stochastic Spiking Neural P Systems -- Dynamically Changing Environment for Generalized Communicating P Systems -- Spiking Neural P Systems with Structural Plasticity: Attacking the Subset Sum Problem -- P Systems with Generalized Multisets over Totally Ordered Abelian Groups -- On the Power of Catalytic P Systems with One Catalyst -- An Integrated Model Checking Toolset for Kernel P Systems -- A New Strategy to Improve the Performance of PDP-systems Simulators -- Automatic Translation of MP+V Systems to Register Machines -- On the Communication Complexity of the Vertex Cover

Problem and 3-Satisfiability Problem in ECP systems -- Membrane Computing Meets Temperature: A Thermoreceptor Model as Molecular Slide Rule with Evolutionary Potential -- A Solution of Horn-SAT with P Systems Using Antimatter -- Tissue P systems can be Simulated Efficiently with Counting Oracles -- Simulating FRSN P systems with real numbers in P-Lingua on sequential and CUDA platforms -- Pictures and Chomsky Languages in Array P System -- Sorting Using Spiking Neural P Systems with Anti-Spikes and Rules on Synapses -- Regulating Rule Application with Membrane Boundaries in P Systems -- Structured Grid Algorithms Modelled with Complex Objects -- Chemistry-inspired Adaptive Stream Processing -- Computing Partial Recursive Functions by Virus Machines -- About models derived from colonies.

Sommario/riassunto

This book constitutes revised selected papers from the International Conference on Membrane Computing, CMC 2015, held in Valencia, Spain, in August 2015. The 22 full papers presented in this volume were carefully reviewed and selected from 34 submissions. The volume also contains 3 invited talks in full-paper length. .
