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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 10725
Disciplina	511.3
Soggetti	Computer science Algorithms Software engineering Computer networks Computer Science Software Engineering Computer Science Logic and Foundations of Programming Computer Communication Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Simulating Evolutional Symport/Antiport by Evolution-Communication and Vice Versa in Tissue P Systems with Parallel Communication -- Hierarchical P Systems with Randomized Right-hand Sides of Rules -- Controlled Reversibility in Reaction Systems -- Multi-set Patterns and Their Application to Dynamic Causalities in Membrane Systems -- Counting Membrane Systems -- APCol Systems with Teams -- Bi-simulation Between P Colonies and P Systems with Multi-stable Catalysts -- Computationally Complete Generalized Communicating P Systems with Three Cells -- Event-based Life in a Nutshell: How Evaluation of Individual Life Cycles Can Reveal Statistical Inferences Using Action-accumulating P Systems -- On Evolution-Communication P Systems with Energy Having Bounded and Unbounded

Communication -- Generalized P Colony Automata and Their Relation to P Automata -- Modeling and Validating an Engineering Application in Kernel P Systems -- Solving a Special Case of the P Conjecture Using Dependency Graphs with Dissolution -- Most Common Words -- A cP Systems Solution -- Tissue P Systems with Rule Production/Removal -- Reversing Steps in Membrane Systems Computations -- Families of Languages Encoded by SN P Systems -- On the Robust Power of Morphogenetic Systems for Time Bounded Computation.

Sommario/riassunto

This book contains revised selected papers from the 18th International Conference on Membrane Computing, CMC 2017, held in Bradford, UK, in July 2017. The 18 full papers presented in this volume were carefully reviewed and selected from 29 submissions. They deal with membrane computing (P systems theory), an area of computer science aiming to abstract computing ideas and models from the structure and the functioning of living cells, as well as from the way the cells are organized in tissues or higher order structures. The volume also contains 2 invited talks.
