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Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2340
Disciplina	511.3
Soggetti	Computer hardware Mathematical logic Computers Algorithms Artificial intelligence Bioinformatics Computer Hardware Mathematical Logic and Foundations Computation by Abstract Devices Algorithm Analysis and Problem Complexity Artificial Intelligence
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Experimental Tools -- An Object Oriented Simulation of Real Occurring Molecular Biological Processes for DNA Computing and Its Experimental Verification -- Towards Optimization of PCR Protocol in DNA Computing -- DNASquenceGenerator: A Program for the Construction of DNA Sequences -- DNA Computing in Microreactors -- Cascadable Hybridisation Transfer of Specific DNA between Microreactor Selection Modules -- Theoretical Tools -- Coding Properties of DNA Languages -- Boundary Components of Thickened Graphs -- Probabilistic Computational Models -- Population Computation and Majority Inference in Test Tube -- DNA Starts to Learn Poker -- PNA-mediated Whiplash PCR -- Computer Simulation and Sequence Design --

Biomolecular Computation in Virtual Test Tubes -- Developing Support System for Sequence Design in DNA Computing -- The Fidelity of the Tag-Antitag System -- PUNCH: An Evolutionary Algorithm for Optimizing Bit Set Selection -- Algorithms -- Solving Knapsack Problems in a Sticker Based Model -- A Clause String DNA Algorithm for SAT -- A Proposal of DNA Computing on Beads with Application to SAT Problems -- Experimental Solutions -- Aqueous Solutions of Algorithmic Problems: Emphasizing Knights on a 3×3 -- Solutions of Shortest Path Problems by Concentration Control -- Another Realization of Aqueous Computing with Peptide Nucleic Acid -- Experimental Confirmation of the Basic Principles of Length-only Discrimination -- Experimental Construction of Very Large Scale DNA Databases with Associative Search Capability -- Nano-tech Devices -- Operation of a Purified DNA Nanoactuator -- DNA Scissors -- Biomimetic Tools -- A Realization of Information Gate by Using *Enterococcus faecalis* Pheromone System -- Patterns of Micronuclear Genes in Ciliates -- Peptide Computing - Universality and Complexity -- Programmed Mutagenesis Is a Universal Model of Computation -- New Computing Models -- Horn Clause Computation by Self-assembly of DNA Molecules -- DNA-based Parallel Computation of Simple Arithmetic -- Splicing Systems and Membranes -- On P Systems with Global Rules -- Computing with Membranes: Variants with an Enhanced Membrane Handling -- Towards an Electronic Implementation of Membrane Computing: A Formal Description of Non-deterministic Evolution in Transition P Systems -- Insertion-Deletion P Systems -- A Universal Time-Varying Distributed H System of Degree 1 -- A Note on Graph Splicing Languages.
