

1. Record Nr.	UNISA996466244103316
Titolo	Cellular Automata [[electronic resource] ] : 9th International Conference on Cellular Automata for Research and Industry, ACRI 2010, Ascoli Piceno, Italy, September 21-24, 2010, Proceedings // edited by Stefania Bandini, Sara Manzoni, Hiroshi Umeo, Giuseppe Vizzari
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2010
ISBN	1-280-38930-3 9786613567222 3-642-15979-6
Edizione	[1st ed. 2010.]
Descrizione fisica	1 online resource (XVI, 672 p. 332 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 6350
Disciplina	005.0151135
Soggetti	Computer science Algorithms Computer simulation Computer networks Bioinformatics Theory of Computation Computer Modelling Computer Communication Networks Computational and Systems Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Theoretical Results on Cellular Automata -- Information Transfer among Coupled Random Boolean Networks -- Open Environment for 2d Lattice-Grain CA -- All-to-All Communication with CA Agents by Active Coloring and Acknowledging -- The Sandpile Model: Parallelization of Efficient Algorithms for Systems with Shared Memory -- Theory and Application of Equal Length Cycle Cellular Automata (ELCCA) for Enzyme Classification -- Cellular Automata Model for Size Segregation of Particles -- Convex Hulls on Cellular Automata -- Square Kufic Pattern Formation by Asynchronous Cellular Automata -- Modeling and Simulation with Cellular Automata -- Development and

Calibration of a Preliminary Cellular Automata Model for Snow Avalanches -- Tracking Uncertainty in a Spatially Explicit Susceptible-Infected Epidemic Model -- A Proximal Space Approach for Embedding Urban Geography into CA Models -- Bone Remodelling: A Complex Automata-Based Model Running in BioShape -- CANv2: A Hybrid CA Model by Micro and Macro-dynamics Examples -- Simulation of Traffic Flow at a Signalised Intersection -- A Novel Method for Simulating Cancer Growth -- Towards Cellular Automata Football Models with Mentality Accounting -- The Complexity of Three-Dimensional Critical Avalanches -- Using Cellular Automata on a Graph to Model the Exchanges of Cash and Goods -- Montebello: A Metapopulation Based Model of Carcinogenesis -- CA Dynamics, Control and Synchronization -- Towards Generalized Measures Grasping CA Dynamics -- Synchronization and Control of Cellular Automata -- Discovery by Genetic Algorithm of Cellular Automata Rules for Pattern Reconstruction Task -- Addition of Recurrent Configurations in Chip Firing Games: Finding Minimal Recurrent Configurations with Markov Chains -- A Seven-State Time-Optimum Square Synchronizer -- Codes and Cryptography with Cellular Automata -- Null Boundary 90/150 Cellular Automata for Multi-byte Error Correcting Code -- Generating Cryptographically Suitable Non-linear Maximum Length Cellular Automata -- Chaotic Cellular Automata with Cryptographic Application -- d-Monomial Tests of Nonlinear Cellular Automata for Cryptographic Design -- Programmable Cellular Automata (PCA) Based Advanced Encryption Standard (AES) Hardware Architecture -- Exhaustive Evaluation of Radius 2 Toggle Rules for a Variable-Length Cryptographic Cellular Automata-Based Model -- Cellular Automata and Networks -- Network Decontamination with Temporal Immunity by Cellular Automata -- Characterization of CA Rules for SACA Targeting Detection of Faulty Nodes in WSN -- Cellular Automata Applied in Remote Sensing to Implement Contextual Pseudo-fuzzy Classification -- Impact of Coupling of Distributed Denial of Service Attack with Routing on Throughput of Packet Switching Network -- CA-Based Hardware -- A Cellular Automata-Based Modular Lighting System -- Modeling and Programming Asynchronous Automata Networks: The MOCA Approach -- Efficient Circuit Construction in Brownian Cellular Automata Based on a New Building-Block for Delay-Insensitive Circuits -- A Cellular Automaton Controlled Shading for a Building Facade -- FPGA Design of a Cellular Automaton Model for Railway Traffic Flow with GPS Module -- ACA - Int. Workshop on Asynchronous CA -- What Do We Mean by Asynchronous CA? A Reflection on Types and Effects of Asynchronicity -- Parallel Composition of Asynchronous Cellular Automata Simulating Reaction Diffusion Processes -- Comparative Study of Parallel Algorithms for Asynchronous Cellular Automata Simulation on Different Computer Architectures -- Coxeter Groups and Asynchronous Cellular Automata -- Some Formal Properties of Asynchronous Cellular Automata -- A Study on the Automatic Generation of Asynchronous Cellular Automata Rules by Means of Genetic Algorithms -- C&CA - Int. Workshop on Crowds and CA -- Towards Patterns of Comfort: A Multilayered Model Based on Situated Multi-agent Systems -- A Pedestrian Movement Model That Takes into Account the Capacity Drop Phenomenon in the Motion of Crowd -- A Cellular Automaton Model for Crowd Evacuation and Its Auto-Defined Obstacle Avoidance Attribute -- A Learning Algorithm for the Simulation of Pedestrian Flow by Cellular Automata -- On Influencing of a Space Geometry on Dynamics of Some CA Pedestrian Movement Model -- The Dynamic Distance Potential Field in a Situation with Asymmetric Bottleneck Capacities -- Solving the Direction Field for

Discrete Agent Motion -- Phase Coexistence in Congested States of Pedestrian Dynamics -- Stochastic Transition Model for Discrete Agent Movements -- Analysis of Obstacle Density Effect on Pedestrian Congestion Based on a One-Dimensional Cellular Automata -- Excluded Volume Effect in a Pedestrian Queue -- T&CA - Int. Workshop on Traffic and CA -- Simulation on Vehicle Emission by the Brake-Light Cellular Automata Model -- Bidirectional Traffic on Microtubules -- Cellular Automata for a Traffic Roundabout -- Cellular Automata for a Cyclic Bus -- Dynamics of a Tagged Particle in the Asymmetric Exclusion Process with Particlewise Disorder -- Chase and Escape in Groups -- A Velocity-Clearance Relation in the Rule-184 Cellular Automaton as a Model of Traffic Flow -- CA and MAS – With the NaSch as Example -- Productivity Enhancement through Lot Size Optimization -- Multilane Single GCA-w Based Expressway Traffic Model -- Properties of Cellular Automaton Model for On-ramp System -- Inversion of Flux between Zipper and Non-Zipper Merging in Highway Traffic -- Clustering and Transport Efficiency in Public Conveyance System -- Clusters in the Helbing's Improved Model -- Phase Transitions in Cellular Automata for Cargo Transport and Kinetically Constrained Traffic -- A New Computational Methodology Using Infinite and Infinitesimal Numbers -- IWNC - Int. Workshop on Natural Computing -- Molecular Implementations of Cellular Automata -- Achieving Universal Computations on One-Dimensional Cellular Automata.

---