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	Nota di contenuto	Theory and Cryptography -- A Cellular Automaton that computes Shortest Paths in Grid Graph -- Strengthening of ACORN Authenticated Cipher by using Cellular Automata -- Prevention of Fault Attacks in ASCON Authenticated Cipher using Cellular Automata -- Detection of topology changes in dynamical system: an information theoretic approach -- Observability of Affine Cellular Automaton through Mobile Sensors -- One-Dimensional Pattern Generation by Cellular Automata -- Exploring Semi-bent Boolean Functions Arising from Cellular Automata -- EnCash: an Authenticated Encryption scheme using Cellular Automata -- High Order Cellular Automata for Edge Detection: a Preliminary Study -- PENTAVIUM - Potent Trivium-like Stream Cipher Using Higher Radii Cellular Automata -- Modeling and Simulation --

Blockchain smart contract for cellular automata-based energy sharing -- Influence of topology on the dynamics of in silico ecosystems with non-hierarchical competition -- Control of 3D Cellular Automata via Actuator and space Attributes: Application to fires forest -- The Second Order CA-based Multiagent Systems with Income Sharing -- Parameter adjustment of a bio-inspired coordination model for swarm robotics using evolutionary optimisation -- Covering the Space with Sensor Tiles -- Implementation of Cellular Automata using Graphene Nanoribbons with Magnetic Contacts.-A Customized Assessment Tool based on Cellular Automata for the Visitability of an Urban Environment -- Time discretization in pedestrian dynamics simulations by discrete-continuous model -- DESERTICAS, a software to simulate desertification based on MEDALUS and CA -- Double diffusive mixed convection with thermodiffusion effect in a driven cavity by lattice Boltzmann method -- Logical Gates on Gliders in Restricted Space Domain Cellular Automata -- Modeling Carbon Dioxide Dispersion Indoors: A Cell-DEVS Experiment -- Disease Spreading Dynamics -- Using Cell-DEVS to Model the Spread of COVID-19 -- The disease spreading analysis on the grouped network -- Epidemic models with restricted circulation and social distancing on some network topologies -- Preliminaries on a stochastic cellular automaton based framework for studying the population dynamics of COVID-19. .

| Sommario/riassunto | This book constitutes the refereed proceedings of the 14th International Conference on Cellular Automata for Research and Industry, ACRI 2020, which took place in Lodz, Poland, during December 2-4, 2020. The 24 full and 3 short papers presented in this volume were carefully reviewed and selected from 40 submissions. They were organized in topical sections named: theory and cryptography, modeling and simulation, and disease spreading dynamics. |