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Titolo	Cellular Automata [[electronic resource]] : 10th International Conference on Cellular Automata for Research and Industry, ACRI 2012, Santorini Island, Greece, September 24-27, 2012. Proceedings / / edited by Georgios Ch. Sirakoulis, Stefania Bandini
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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 7495
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Soggetti	Computer science
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Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references and author index.
Nota di contenuto	Theoretical results on cellular automata -- Cellular automata dynamics, control and synchronization -- Cellular automata and networks -- Modeling and simulation with cellular automata -- Cellular automata-based hardware and architectures -- Codes, pseudorandom number generators and cryptography with cellular automata -- Crowds and CA -- Traffic and CA -- Cellular automata of cancer growth and invasion.
Sommario/riassunto	This book constitutes the refereed proceedings of the 10th International Conference on Cellular Automata for Research and Industry, ACRI 2012, held in Santorini Island, Greece, in September 2012. The 88 revised papers were carefully selected from numerous submissions. In order to give a perspective in which both theoretical and applicational aspects of cellular automata contribute to the growth

of the area, this book mirrors the structure of the conference, grouping the 88 papers into two main parts. The first part collects papers presented as part of the main conference and organized according to six main topics: theoretical results on cellular automata; cellular automata dynamics, control and synchronization; cellular automata and networks; modeling and simulation with cellular automata; cellular automata-based hardware and architectures; codes, pseudorandom number generators and cryptography with cellular automata. The second part of the volume is dedicated to contributions presented during the ACRI 2012 workshops on theoretical advances, specifically asynchronous cellular automata, and challenging application contexts for cellular automata: crowds and CA, traffic and CA, and the satellite Workshop on cellular automata of cancer growth and invasion.