1. Record Nr. UNINA9910377819203321

Titolo	Accuracy Enhancement Technologies for Micromachining Processes / / edited by Golam Kibria, B. Bhattacharyya
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-2117-4
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XV, 214 p. 131 illus., 83 illus. in color.)
Collana	Lecture Notes in Mechanical Engineering, , 2195-4356
Disciplina	621.8
Soggetti	Machinery Manufactures Nanotechnology Machinery and Machine Elements Manufacturing, Machines, Tools, Processes Nanotechnology and Microengineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Accuracy Improvement in Tool-based Micromachining -- Strategies for Improving Performance of Ultrasonic Micromachining Process -- Strategies of Improving Accuracy in Micro-EDM -- Accuracy Improvement and Precision Measurement on Micro-EDM -- Improvement of Profile Accuracy in WEDM - a Novel Technique -- Improvement in Surface Finish and Geometrical Accuracy by Laser Micro-Turning -- Laser Based Fabrication of Microchannels -- Accuracy Improvement Techniques in Electrochemical Micromachining (EMM) -- Feature Generation Using Indigenously Developed MicroElectro Chemical Discharge Machining (µECDM) Process -- Improvements in Machining Performances of Wire-electrochemical Discharge Micromachining -- Generation of Nano-level Surface Finish by Advanced Nanofinishing Processes.
Sommario/riassunto	This book bridges the gap between the demand for micro-featured components on the one hand, and successful micromachining of miniature products on the other. In addition to covering micromachining in the broader sense, it specifically addresses novel machining strategies implemented in various advanced micromachining

	processes to improve machining accuracy, energy consumption, component durability, and miniature-scale applicability. The book’s main goal is to present the capabilities of advanced micromachining processes in terms of miniature product manufacturing by highlighting various innovative machining strategies that can be used to augment the production scale and precision alike.

2. Record Nr. UNINA9910886072503321

Autore	Bagnoli Franco
Titolo	Cellular Automata : 16th International Conference on Cellular Automata for Research and Industry, ACRI 2024, Florence, Italy, September 9–11, 2024, Proceedings / / edited by Franco Bagnoli, Jan Baetens, Stefania Bandini, Tommaso Matteuzzi
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-71552-7
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (292 pages)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 14978
Altri autori (Persone)	BaetensJan BandiniStefania MatteuzziTommaso
Disciplina	004.0151
Soggetti	Computer science Application software Computer engineering Computer networks Data structures (Computer science) Information theory Theory of Computation Computer and Information Systems Applications Computer Engineering and Networks Data Structures and Information Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	-- Theory, mathematical and physical models. -- Theory of Cellular

Automata: from the Past and Present to Some Path towards the Future. -- Are some family members harmful? – a study on Diploid Cellular Automata. -- Regional Controllability of Cellular Automata through Preimages. -- Pattern Formation by Collective Behavior of Competing Cellular Automata- based Agents. -- Eects of a Vanishing Noise on Elementary Cellular Automata Phase-Space Structure. -- A New Class of the Smallest 4-state Semi-symmetric FSSP Partial Solutions for 1D Arrays. -- Synchronization of chains of logistic maps. -- Fusing Dierent Cellular Automata Models for Surface Flows in SCURRI: Viscosity Extension Step. -- Chaos in a two-dimensional magneto-hydrodynamic system. -- Computational aspects and applications. -- Exploring Diverse Congurations of Cellular Automata Based S-Boxes Using Reinforcement Learning. -- Ecient simulation of non-uniform cellular automata with a convolutional neural network. -- A Scheme for Symmetric Cryptosystem using Large Cycle Reversible Cellular Automata. -- Reversible Decimal First Degree Cellular Automata For Data Classication. -- Sentiment Analysis for Code-Mixed Data using Cellular Automata with Deep Learning Models. -- Asynchronous Method of Generating Stream Ciphers in a Group of Robots Based on Cellular Automata with Active Cells. -- Controlling Desertication Using Cellular Automata and Genetic Algorithms. -- Desertication Control Strategies: A Hybrid Approach using Cellular Automata and Reinforcement Learning. -- Social and biological models. -- Global Analysis of a Lane Merging Strategy for Collaborative Autonomous and Connected vehicles. -- Binary Hiking Optimization Algorithm. -- A Spatial Daisyworld Model. -- A Reaction-Diusion Cellular Automata Model for Mycelium-based Engineered Living Materials Evolution. -- Mycelium-based ELM Digital Twin Implemented in FPGA.

Sommario/riassunto

This book constitutes the refereed proceedings of the 16th International Conference on Cellular Automata for Research and Industry, Cellular Automata, ACRI 2024, held in Florence, Italy, in September 9–11, 2024. The 20 full papers presented were carefully reviewed and selected from 33 submissions. They were organized in the following topical sections: theory, mathematical and physical models; computational aspects and applications; social and biological models.