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Disciplina	006.3
Soggetti	Computer science Artificial intelligence Computer networks Database management Theory of Computation Artificial Intelligence Computer Communication Networks Database Management System
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Livello bibliografico	Monografia
Nota di contenuto	Invited Talk -- Adaptive Coordination of Multiple Learning Strategies in Brains and Robots -- Applications of Natural Computing -- Interactive Sensor-based Virtual Experiment Digital Textbook System on Smart Phone and Learning Cloud -- Solving Hard Problems by Protein Folding? -- A Three-Player Envy-Free Discrete Division Protocol for Mixed Manna -- Convolutional Variational Autoencoders for Audio Feature Representation in Speech Recognition Systems -- Quantum Computing and Unconventional Computing -- Quantum Candies and Quantum Cryptography -- From Practice to Theory: the "Bright Illumination" Attack on Quantum Key Distribution Systems -- Quantum-Inspired Algorithm with Evolution Strategy -- How to Implement a Non-Uniform or Non-Closed Shuffle -- Swarm

Intelligence, Evolutionary Algorithms, and DNA Computing -- A Study on Efficient Asynchronous Parallel Multi-Objective Evolutionary Algorithm with Waiting Time Limitation -- Nonlinear Regression in Dynamic Environments Using Particle Swarm Optimization -- Theta Palindromes in Theta Conjugates -- Line Reconfiguration by Programmable Particles Maintaining Connectivity.

Sommario/riassunto

This book constitutes the refereed proceedings of the 9th International Conference on Theory and Practice of Natural Computing, TPNC 2020, held in Taoyuan, Taiwan, in December 2020. The 12 full papers presented in this book, together with one invited talk, were carefully reviewed and selected from 24 submissions. The papers are organized in topical sections named: applications of natural computing; quantum computing and unconventional computing; and swarm intelligence, evolutionary algorithms, and DNA computing.
