1. Record Nr. UNINA9910349291503321 Bio-inspired Information and Communication Technologies: 11th EAI **Titolo** International Conference, BICT 2019, Pittsburgh, PA, USA, March 13–14, 2019, Proceedings / / edited by Adriana Compagnoni, William Casey, Yang Cai, Bud Mishra Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-24202-1 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (XII, 209 p. 80 illus., 60 illus. in color.) Collana Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, , 1867-8211;; 289 660.6 Disciplina 570.285 Soggetti **Bioinformatics** Artificial intelligence Computers Computational Biology/Bioinformatics Artificial Intelligence Theory of Computation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Cheating the Beta Cells To Delay the Beginning of Type-2 Diabetes Through Articial Segregation of Insulin -- Physics-Based Nanomedicine to Alleviate Anomalous Events in the Human Kidney -- Bio-inspired System Identification Attacks in Noisy Networked Control Systems --Bio-inspired Approach To Thwart Against Insider Threats: An Access Control Policy Regulation Framework -- Blinded by Biology: Bio-Inspired Tech-Ontologies in Cognitive Brain Sciences -- A Distribution Control of Weight Vector Set for Multi-objective Evolutionary Algorithms -- Classification of Permutation Distance Metrics for Fitness

Landscape Analysis -- Medical Diagnostics Based on Encrypted Medical

Data -- Evolutionary Multi-objective Optimization for Evolving Soft Robots in Different Environments -- Field coverage for weed mapping toward experiments with a UAV swarm -- Self-Assembly from a SingleMolecule Perspective -- Cyber Regulatory Networks: Towards A Bioinspired Auto-resilient Framework for Cyber-Defense -- Space partitioning and maze solving by bacteria -- A Scalable Parallel Framework for Multicellular Communication in Bacterial Quorum Sensing -- Membrane computing Aggregation (MCA): An upgraded Framework for Transition P-Systems.

Sommario/riassunto

This book constitutes the refereed conference proceedings of the 11th International Conference on Bio-Inspired Information and Communications Technologies, held in Pittsburgh, PA, USA, in March 2019. The 13 revised full papers and 2 short papers were selected from 29 submissions. Past iterations of the conference have attracted contributions in Direct Bioinspiration (physical biological materials and systems used within technology) as well as Indirect Bioinspiration (biological principles, processes and mechanisms used within the design and application of technology). This year, the scope has expanded to include a third thrust: Foundational Bioinspiration (bioinspired aspects of game theory, evolution, information theory, and philosophy of science).