

1. Record Nr.	UNISA996465465803316
Titolo	Bio-inspired Information and Communication Technologies [[electronic resource]] : 12th EAI International Conference, BICT 2020, Shanghai, China, July 7-8, 2020, Proceedings / / edited by Yifan Chen, Tadashi Nakano, Lin Lin, Mohammad Upal Mahfuz, Weisi Guo
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-57115-7
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XI, 338 p. 181 illus., 142 illus. in color.)
Collana	Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, , 1867-8211 ; ; 329
Disciplina	006.38
Soggetti	Bioinformatics Computer organization Computers Artificial intelligence Data structures (Computer science) Algorithms Computer Systems Organization and Communication Networks Information Systems and Communication Service Artificial Intelligence Data Structures and Information Theory Algorithm Analysis and Problem Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Clock Synchronization for Mobile Molecular Communication in Nanonetworks -- A Cooperative Molecular Communication for targeted drug Delivery -- Performance of Diffusion-based MIMO Molecular Communications and Dual Threshold Algorithm -- Binary Concentration Shift Keying with Multiple Measurements of Molecule Concentration in Mobile Molecular Communication -- Real-Time Seven Segment Display Detection and Recognition Online System using CNN -- A novel method for extracting high-quality RR intervals from noisy single-lead ECG signals -- Leak-resistant design of DNA strand

displacement systems -- Chessboard EEG Images Classification for BCI Systems Using Deep Neural Network -- Causal Network Analysis and Fault Root Point Detection Based on Symbolic Transfer Entropy -- Personalized EEG feature extraction method based on filter bank and elastic network -- Release rate optimization based on M/M/c/c queue in local nanomachine-based targeted drug delivery -- Research on Course Control of Unmanned Surface Vehicle -- Design and Experiment of a Double-layer Vertical Axis Wind Turbine -- Real-Time Obstacle Detection Based on Monocular Vision for Unmanned Surface Vehicles -- A Method of Data Integrity Check and Repair in Big Data Storage Platform -- A Study of Image Recognition for Standard Convolution and Depthwise Separable Convolution -- A Novel Genetic Algorithm-based DES Key Generation Scheme -- Developing an Intelligent Agricultural System based on Long Short-Term Memory -- Detection of atherosclerotic lesions based on molecular Communication -- Design for Detecting Red Blood Cell Deformation at Different Flow Velocities in Blood Vessel -- Intelligent Power Controller of Wireless Body Area Networks based on Deep Reinforcement Learning -- Target Tracking Based on DDPG in Wireless Sensor Network -- A fuzzy tree system based on cuckoo search algorithm for target tracking in Wireless Sensor Network -- Sensor scheme for target tracking in Mobile Sensor Networks -- Molecular MIMO Communications Platform with BTK for In-Vessel Network Systems -- Preliminary Studies on Flow Assisted Propagation of Fluorescent Microbeads in Microfluidic Channels for Molecular Communication Systems -- Comparative Evaluation of a New Sensor for Superparamagnetic Iron-Oxide Nanoparticles in a Molecular Communication Setting -- Localization of a Passive Molecular Transmitter with a Sensor Network. .

Sommario/riassunto

This book constitutes the refereed conference proceedings of the 12th International Conference on Bio-inspired Information and Communications Technologies, held in Shanghai, China, in July 2020. Due to the safety concerns and travel restrictions caused by COVID-19, BICT 2020 took place online in a live stream. BICT 2020 aims to provide a world-leading and multidisciplinary venue for researchers and practitioners in diverse disciplines that seek the understanding of key principles, processes and mechanisms in biological systems and leverage those understandings to develop novel information and communications technologies (ICT). The 20 full and 8 short papers were carefully reviewed and selected from 56 submissions. In addition to the main track targeting broad and mainstream research topics, BICT 2020 includes four special tracks with focused research topics on internet of everything, intelligent internet of things and network applications, intelligent sensor network, and data-driven intelligent modeling, application and optimization.
