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| 1. Record Nr.           | UNINA9910799480903321                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Titolo                  | IX Latin American Congress on Biomedical Engineering and XXVIII Brazilian Congress on Biomedical Engineering [[electronic resource] ] : Proceedings of CLAIB and CBEB 2022, October 24–28, 2022, Florianópolis, Brazil—Volume 2: Biomedical Signal Processing and Micro- and Nanotechnologies // edited by Jefferson Luiz Brum Marques, Cesar Ramos Rodrigues, Daniela Ota Hisayasu Suzuki, José Marino Neto, Renato García Ojeda                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| Descrizione fisica      | 1 online resource (XXVII, 635 p. 312 illus., 238 illus. in color.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Collana                 | IFMBE Proceedings, , 1433-9277 ; ; 99                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Disciplina              | 610.28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Soggetti                | Biomedical engineering<br>Signal processing<br>Nanotechnology<br>Biomedical Devices and Instrumentation<br>Signal, Speech and Image Processing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Nota di contenuto       | Estimation of Heart Inclination Angle Using Posteroanterior Chest Radiograph and Comparison with Cardiac Axis Obtained from Synthesised Vectorcardiogram -- Eeg Signal Synchronisation Patterns During Hand Laterality Judgment Task -- Ultrasound Scan Converter Implemented on Xilinx Zynq-7000 All Programmable Systems-on-chip -- Motif Synchronisation and Space-time Recurrences for Biometry from Electroencephalography Data: A Proof-of-concept -- Forty-class Ssvep-based Brain-computer Interface to Inter-subject Using Complex Spectrum Features -- Effect of Intensity on Multichannel Cortical Auditory Evoked Potential Elicited by Spanish Words in Adults with Normal Hearing -- On Hyperparameters Tuning for Deep Learning Segmentation Models Applied to Covid-19 Computerized Tomography Images -- Microvolt T-wave and Ventricular Repolarization Duration Alternans -- Study of Algorithms for Implementation of Brain Computer |

Interfaces in Embedded Systems -- Adhd Subtype Diagnosis Through Convolutional Neural Networks Evaluation of the Connectivity Networks in Brain FMRI -- Reconstructing Electrical Impedance Tomography 3d Brain Images with Anatomical Atlas and Total Variation Priors -- Development of an Intelligent System for Detection of Chronic Stress from Biological Signal Processing -- An Exploratory Study on Powell Optimization Method for Block Matching Evaluation on Ultrasound Images -- Evaluation of Classifiers for the Identification of Multiple Sclerosis Lesions in Neural Mri Scans with Attributes Extracted from Pre-trained Neural Networks -- Histopathological Analysis of Fine-needle Aspiration Biopsies of Thyroid Nodules Using Explainable Convolutional Neural Networks.

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Sommario/riassunto

This book reports on the latest research and developments in Biomedical Engineering, with a special emphasis on topics of interest and findings achieved in Latin America. This first volume of a 4-volume set covers advances in biomedical image and signal processing, biomedical optics, and wearable and assistive medical devices. Throughout the book, a special emphasis is given to low-cost technologies and to their development for and applications in clinical settings. Based on the IX Latin American Conference on Biomedical Engineering (CLAIB 2022) and the XXVIII Brazilian Congress on Biomedical Engineering (CBEB 2022), held jointly, and virtually on October 24-28, 2022, from Florianópolis, Brazil, this book provides researchers and professionals in the biomedical engineering field with extensive information on new technologies and current challenges for their clinical applications.

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