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Collana	Lecture Notes in Computational Vision and Biomechanics, , 2212-9391 ; ; 32
Disciplina	006.3 610.28
Soggetti	Biomedical engineering Optical data processing Artificial intelligence Computer-aided engineering Biomedical Engineering and Bioengineering Image Processing and Computer Vision Artificial Intelligence Computer-Aided Engineering (CAD, CAE) and Design
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Bioinspired Approach to Inverse Kinematic Problem -- Chapter 2. Assessment of Two Musculoskeletal Models in Children with Crouch Gait -- Chapter 3. Low-Complexity Classi cation Algorithm to Identify Drivers' Stress using Electrodermal Activity (EDA) Measurements -- Chapter 4. 3D Model of Blood Flow for Magnetohydrodynamics Study -- Chapter 5. Nonlinear Autoregressive Model Design and Optimization based on ANN for the Prediction of Chaotic Patterns in EEG Time Series -- Chapter 6. Using a coupled MDOF biodynamic model to study the effect of curvature of spine on lumbar spine compression under axial loads -- Chapter 7. Applied logics to develop ontology model of complex-structured domains:

	organic chemistry and biochemistry -- Chapter 8. Analysis of HD-sEMG signals using Channel Clustering Based on Time Domain Features For Functional Assessment with Ageing -- Chapter 9. Effect of reduced point NIR spectroscopy on glucose prediction error in human blood tissue -- Chapter 10. Data augmentation for Signature Images in On-line Verification Systems.
Sommario/riassunto	This book reports on timely research at the interface between biomedical engineering and intelligence technologies applied to biology and healthcare. It covers cutting-edge methods applied to biomechanics and robotics, EEG time series analysis, blood glucose prediction models, among others. It includes ten chapters, which were selected upon a rigorous peer-review process and presented at the 1st World Thematic Conference - Biomedical Engineering and Computational Intelligence, BIOCOM 2018, held in London, United Kingdom, during October 30–31, 2018.