1.	Record Nr.	UNINA9910366608803321
	Titolo	Biomedical Engineering and Computational Intelligence [[electronic resource]] : Proceedings of The World Thematic Conference—Biomedical Engineering and Computational Intelligence, BIOCOM 2018 / / edited by João Manuel R. S. Tavares, Nilanjan Dey, Amit Joshi
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
	ISBN	3-030-21726-4
	Edizione	[1st ed. 2020.]
	Descrizione fisica	1 online resource (xiv, 112 pages) : illustrations
	Collana	Lecture Notes in Computational Vision and Biomechanics, , 2212-9391 ; ; 32
	Disciplina	006.3
	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
	Formato	Materiale a stampa
	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.