

1. Record Nr.	UNINA9910734823003321
Titolo	19th Nordic-Baltic Conference on Biomedical Engineering and Medical Physics : Proceedings of NBC 2023, June 12–14, 2023, Liepaja, Latvia / / edited by Yuri Dekhtyar, Inga Saknite
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	3-031-37132-1
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (403 pages)
Collana	IFMBE Proceedings, , 1433-9277 ; ; 89
Disciplina	610.28
Soggetti	Biomedical engineering Biomechanics Biophysics Biomechanical Analysis and Modeling Biomedical Devices and Instrumentation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	The Impact of Engineering Enabling Technologies on the Further Development of Personalized Orthopedics -- The Development of Objective and Quantitative Eye-Tracking-Based Method for the Diagnostics of Oculomotor Dysfunctions -- A Novel Algorithm for the Compensation of Hemoglobin Interference on Bilirubin Measurement Applied to a Two-Wavelengths Reflectance Photometer -- Method for Muscle Fatigue Detection Using Inertial Sensors -- Accurate Registration of 3D Models with Organs in Augmented Reality Through Inertial Sensors -- Dynamic Testing of Piezoresistive Fabrics for Use in Smart Wearable Personal Protective Equipment -- Studies of UV-A inactivation of Escherichia coli by 365 nm Light -- A Prototype Device for Continuous Monitoring of Breathing Mode: Nasal Versus Mouth -- Investigation of Electrospun Keratin Mats Containing Biosynthesized Silver Nanoparticles -- Finite Element Method Modelling of Iron - Oxide Nanoparticle Heat Generation Under Low Radio Frequency Field Conditions -- Detection of Physical Stressors in Patients with Frailty Syndrome Using Wearable Devices -- Expediency of Using a Physical and Mathematical Model in Cell Engineering -- Smart textile in Post

Stroke Patient Rehabilitation Exercises Evaluation for Lower Extremities  
-- Application of DAid Smart Shirt in Rehabilitation for Subacromial  
Pain Syndrome Patients Participating in High-risk for Overuse Injury  
Sports -- Effects of Tactical Boots on Foot and Ankle Biomechanics --  
The Reverse Engineering of Human Organs Based on the Application of  
Method of Anatomical Features.

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Sommario/riassunto

This book reports on new trends, challenges and solutions, in the multidisciplinary fields of biomedical engineering and medical physics. Contributions spans from biomechanics, to robotic rehabilitation, radiation oncology, and image and signal processing, among many other topics. They cover advanced devices for diagnosis or patient monitoring, as well as for therapy (non-invasive surgery, rehabilitation and more). Gathering the proceedings of the 19th Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2023, held on June 12–14, 2023, in Liepaja, Latvia, this book is expected to inform a wide audience of researchers, engineers and other professionals working in the broad field of biomedical engineering, and to offer a timely snapshot of research and projects that have been carried out within Nordic and Baltic countries, in particular, but not limited to them.

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