1. Record Nr. UNINA9910760297603321

Autore	Flores Cuautle José de Jesús Agustín
Titolo	XLVI Mexican Conference on Biomedical Engineering : Proceedings of CNIB 2023, November 2–4, 2023, Villahermosa Tabasco, México - Volume 2: Biomechanics, Rehabilitation and Clinical Engineering / / edited by José de Jesús Agustín Flores Cuautle, Balam Benítez-Mata, Ricardo Antonio Salido-Ruiz, Gustavo Adolfo Alonso-Silverio, Guadalupe Dorantes-Méndez, Esmeralda Zúñiga-Aguilar, Hugo A. Vélez-Pérez, Edgar Del Hierro-Gutiérrez, Aldo Rodrigo Mejía-Rodríguez
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-46936-4
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (282 pages)
Collana	IFMBE Proceedings, , 1433-9277 ; ; 97
Altri autori (Persone)	Benítez-MataBalam Salido-RuizRicardo Antonio Alonso-SilverioGustavo Adolfo Dorantes-MéndezGuadalupe Zúñiga-AguilarEsmeralda Vélez-PérezHugo A Hierro-GutiérrezEdgar Del Mejía-RodríguezAldo Rodrigo
Disciplina	610.28
Soggetti	Biomedical engineering Biomechanics Biomechanical Analysis and Modeling Medical and Health Technologies
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Inverse Kinematics Analysis of a Novel Osseointegrated Prosthesis Prototype with the Use of the “montefiori” Mri Based Musculoskeletal Subject Specific Model -- Characterization of Kinematics and Electromyography During Lunges Execution to Assess Knee Performance in Healthy Subjects -- Kinematic and Electromyography Analysis of the Knee Function in Non-trained Healthy Subjects Through a Single-leg Drop Landing Test -- Analysis of Mechanical Behavior of

Biomaterials of Ha/Ti for Bone Tissue Regeneration Using Finite Element Method -- Kinetic and Kinematic Analysis of Gait in a Patient with Transtibial Amputation: A Case Study -- Ocular Biomechanics of Glaucoma -- Stem Design for Tibial Component of Knee Prosthesis -- Morphological Evaluation of Freeze-dried Fish Gelatin and Bovine Gelatin Scaffolds for Tissue Engineering -- Experimental Test Bed for Hand Orthotic Actuators Characterization -- Lumbar Erector Spinae Activity During Anterior Trunk Flexion of People Who Use the Computer for More than 30 Hours a Week -- Biocompatibility In-vivo Evaluation of Polypyrrole/Iodine Synthesized by Plasma Polymerization -- Exploring the Biological Potential of Hydroxyapatite-doped with Magnesium: Cytotoxicity and Cell Viability Assessment -- Voronoi 3d: A Novel Approach to Design 3d Pla/Hap Printed Scaffolds for Tissue Engineering Applications -- Combating Prosthetic Infections: Synthesis, Characteri-zation, and Evaluation of Magnesium-doped Hydroxy-apatite Nanofibers with Antibacterial Properties -- Characterization and Antimicrobial Evaluation of Gadolinium-doped Hydroxyapatite for Potential Use as Drug Carrier System -- Wrist-forearm Differential Kinematics Using Monocular Vision Capture -- Knee Osteoarthritis Therapy Assistance Software.

Sommario/riassunto

This book reports on cutting-edge research and best practices in the broad fiel of biomedical engineering. Based on the XLVI Mexican Congress on Biomedical Engineering, CNIB 2023, held on November 2-4, 2023 in Villahermosa Tabasco, Mexico, this second volume of the proceedings covers research topics in biomechanics, materials and engineering design and manufacturing, with applications in prostheses design and development, tissue engineering, medical device assessment and healthcare management. All in all, this book provides a timely snapshot on state-of-the-art achievements in biomedical engineering and current challenges in the field. It addresses both researchers and professionals, and it is expect to foster future collaborations between the two groups, as well as international collaborations.