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Titolo	Computer Methods, Imaging and Visualization in Biomechanics and Biomedical Engineering : Selected Papers from the 16th International Symposium CMBBE and 4th Conference on Imaging and Visualization, August 14-16, 2019, New York City, USA // edited by Gerard A. Ateshian, Kristin M. Myers, João Manuel R. S. Tavares
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Collana	Lecture Notes in Computational Vision and Biomechanics, , 2212-9391 ; ; 36
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Nota di contenuto	Precise Mean Axis of Rotation (MAR) Analysis for Clinical and Research Applications -- Mathematical Model of Age-Specific Tendon Healing -- Classification of Elderly Fallers and Non-fallers Using Force Plate Parameters from Gait and Balance Tasks -- Creation of Categorical Mandible Atlas to Benefit Non-Rigid Registration -- The Effect of Non-Linear Spring-Loaded Knee Orthosis on Lower Extremity Biomechanics -- Consideration of Structural Behaviour of Bones in a Musculoskeletal Simulation Model -- Towards Particle Tracking Velocimetry of Cell Flow in Developing Tissue using Deep Neural Network -- An Index Finger Musculoskeletal Dynamic Model -- Accuracy of Anthropometric Measurements by a Video-based 3D Modelling Technique. .
Sommario/riassunto	This book gathers selected, extended and revised contributions to the

16th International Symposium on Computer Methods in Biomechanics and Biomedical Engineering, and the 4th Conference on Imaging and Visualization (CMBBE 2019), held on August 14-16, 2019, in New York City, USA. It reports on cutting-edge models and algorithms for studying various tissues and organs in normal and pathological conditions; innovative imaging and visualization techniques; and the latest diagnostic tools. Further topics addressed include: numerical methods, machine learning approaches, FEM models, and high-resolution imaging and real-time visualization methods applied for biomedical purposes. Given the scope of its coverage, the book provides graduate students and researchers with a timely and insightful snapshot of the latest research and current challenges in biomedical engineering, computational biomechanics and biological imaging, as well as a source of inspiration for future research and cross-disciplinary collaborations.
