

Special Issue

Numerical Modelling and Simulation Studies for Biomechanical Applications

Message from the Guest Editors

The human body is a complex multilayered structure consisting of various types of tissues, bones, and fluids governed by complex materials laws and interactions. The limitation of in vivo studies on human samples has made numerical modeling a vital tool to study injury outcomes. Numerical models based on, e.g., finite element and multibody approaches, can provide valuable data on the biomechanics of the human body and help to explain many pathological conditions. Numerical methods are often a robust way to predict how external mechanical loads affect individual biological structures. Computational models of biological systems have been developed over the years, reaching high levels of detail, complexity, and precision. Thus, this Special Issue aims to collect papers that present new contributions to state-of-the-art numerical modeling and simulation approaches for biomechanical applications.

Guest Editors

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Message from the Editorial Board

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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