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Advances in Biological Tissue Biomechanics

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Message from the Guest Editors

This Special Issue will focus on original research papers and comprehensive reviews, dealing with cutting-edge experimental and computational methodologies for multiscale biomechanical investigations of biological tissues in the human body system. Topics of interest for this Special Issue include, but are not limited to, the following:

1. Advanced experimental techniques forcharacteriz characterizing biological tissue mechanics
2. Novel microstructure-based constitutive model forbiological tissues
3. Growth, remodeling and repair in biological tissues
4. Quantification of in vivo functional biomechanical properties of biological tissues
5. Investigations of interrelationship of tissue'sbiome chanical behavior to its underlyingmicrostructure
6. Verification, validation and uncertaintyquantifica tion in image-based patient-specificsimulations
7. Advanced computational biomechanics, such asreduced-order modeling, for fast personalizedsur gery simulations and pre-operative treatmentplanning
8. Molecular and cellular biomechanics informedtissue biomechanics

All research areas considered relevant as long as experi-mentations and/or predictive simulations are the main study drivers.

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Special Issue