



Nanotechnology-Based Sensing for Biomechanics at Molecular, Cellular and Tissue Levels

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Deadline for manuscript submissions:

30 September 2024

Message from the Guest Editors

Dear Colleagues,

Measuring the mechanics of molecules, cells and tissues is a key challenge in mechanobiology, a field of research aiming to improve our understanding of tissue development and disease progression. Interdisciplinary approaches involving chemistry, physics, engineering and biology perspectives are required to achieve such a goal. This Special Issue aims to provide a platform through which scientists from a diverse range of backgrounds can communicate and share their opinions and findings in this rapidly advancing field. Both original research papers and review articles are welcome. Potential topics include, but are not limited to: measuring and modeling adhesive force and membrane tension dynamics in cells; single-molecule force spectroscopy; DNA nanotechnology; quantum sensing; design and simulation of sensing molecules; tissue mechanics; mechanotransduction; traction force microscopy; microfluidics-based cell phenotyping and sorting, Mems-based force sensing arrays; mechanical markers for disease detection.

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Guest Editors





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Message from the Editor-in-Chief

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