



Microfluidics Technologies for Cell-Based Assays, Volume II

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Deadline for manuscript
submissions:

closed (30 September 2021)

Message from the Guest Editors

Microfluidic systems are increasingly used for conducting cell-based assays. Such systems enable monitoring cellular responses under well-controlled physical (mechanical, shear stress, thermal, optical) and chemical (drugs, chemicals, nanomaterials) stimuli to mimic various physiological and pathological cues, allowing for more realistic in vitro models. Furthermore, advancement of microfabrication technologies has facilitated highly integrated and multifunctional organ-on-a-chip systems that can replace the time-consuming and expensive ex vivo and in vivo models. This Special Issue seeks to showcase research papers, short communications, and review articles reporting the latest developments in this exciting and multidisciplinary field. The topics include but are not limited to the following: (i) studying the viability, proliferation, metabolism, signaling, migration, and morphology of cells; (ii) sorting and patterning of cells; and (iii) development of disease-on-a-chip and organ-on-a-chip models using microfluidic technologies.





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Message from the Editor-in-Chief

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