Special Issue

Micro-/Nanofluidic and Lab-on-a-Chip Devices for Biomedical Applications, 3rd Edition

Message from the Guest Editors

Microfluidic, nanofluidic, and lab-on-a-chip devices have gained particular attention in biomedical application. Due to their advantages, such as miniaturization, versatility, ease of use, cost-effectiveness, and the potential to replace animal model for drug development and testing, these devices hold tremendous potential to revolutionize the research on more effective treatment for several disease that threaten human life. With integrated biosensor, they allow the development and design of micro/nanoparticle to be studied in detail, modelling human physiology, investigating the molecular and cellular mechanism underlying disease formation and progression and gaining insight into the performance and long-term effect of responsive drug delivery nanocarrier. This Special Issue seeks to gather research paper, and review article focusing on novel microfluidic, nanofluidic and lab-on-a-chip device for biomedical application, addressing all steps related to fabrication, biosensor integration and development, characterization, numerical simulation and validation of the device, optimization and, if possible, the translation of these devices from research labs to industry setting.

Guest Editors

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Editor-in-Chief

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