Special Issue

Microfluidic Devices for Biomedical Applications

Message from the Guest Editors

In recent decades, microfluidic devices have emerged as a promising technology with the potential to revolutionize biomedical applications and clinical diagnostics by providing more accurate, efficient, and cost-effective methods. Given the significant advantages over traditional systems, droplet-based microfluidic and organ-on-a-chip devices also enable high-throughput analysis of single cells for antibody discovery and screening of potential candidates for drug testing. The biomedical applications of microfluidic devices will surely achieve even brighter prospects with new concepts and commercial products continuing to be witnessed. This Special Issue seeks to showcase research articles and review articles that focus on the latest advancements in the design, fabrication, and biomedical applications of microfluidic devices, including but not limited to:

- lab-on-a-chip devices for medical and POCT diagnostics;
- droplet-based microfluidic for high-throughput analysis and screening;
- organ-on-a-chip devices and 3D structures for drug discovery and tissue engineering;
- microfluidics for drug delivery and flexible electronics.

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