Special Issue

Microfluidics for Single Cell Detection and Cell Sorting

Message from the Guest Editors

In recent decades, advances in single-cell detection and sorting have emerged as a promising technology to revolutionize a wide range of biomedical applications, including microfluidic fluorescent-activated cell sorting and droplet microfluidics. Their biomedical applications in high-throughput screening and multi-omics will surely encourage even more promise, with new concepts and commercial products continuing to be introduced. This Special Issue spotlights innovative microfluidic technologies, with particular emphasis on their role in the detection, analysis, and sorting of single cells. Specific topics to be covered include, but are not limited to, the following: (1) the latest methodologies in design, fabrication, and modeling of microfluidic chips for cell detection and sorting; (2) the exploration of novel approaches for cell detection, manipulation, and sorting, using a variety of mechanisms; and (3) the application of microfluidic technologies in clinical and biological research, environmental and ecological studies. We invite researchers, academics, and professionals to contribute their work and engage in dialogue with the wider community.

Guest Editors

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