Special Issue

Microfluidics for Cell-Based Assays

Message from the Guest Editor

Owing to miniaturization, microfluidic devices provide useful tools for a wide range of research areas in life sciences. In particular, many microfluidics-based cell assays have been developed to enable advanced studies of various cell functions such as cell growth, differentiation, adhesion and migration under well-controlled microenvironments. With the recent rapid development of organ-on-chip approach, microfluidic devices have been increasingly employed to configure complex multicellular environments and to study cell-cell and cell-extracellular matrix (ECM) interactions. Finally, various microfluidics-based cell assays have been developed for biomedical diagnostic applications. Through this Special Issue, we aim to highlight the development of novel cell assays based on microfluidic devices. In particular, we are interested in research articles that demonstrate the unique ability of microfluidic devices for controlling complex cellular microenvironments and for dynamic visualization and quantification of cellular functions and intercellular interactions. In addition, we are interested in research papers of microfluidics-based cell assays with clinical relevance.

Guest Editor

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Deadline for manuscript submissions

closed (15 October 2018)

Micromachines

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed

mdpi.com/si/13794

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