

Special Issue

Microfluidics in Single Extracellular Vesicles (EV) and Cell Analysis

Message from the Guest Editors

The development of micro- and nanofabrication skills has enabled us to analyze single cells that have a major impact on our understanding of cell subtypes, biology, and medicine. This technological advance has opened up new opportunities to develop highly sensitive diagnostics that can detect subtle molecular changes in the presence of heterogeneity in biological systems. It has become apparent that cells and cell-derived particles are very heterogeneous. For example, exosomes or extracellular vesicles (EV) derived from their mother cells have smaller payload capacity and selective shedding of proteins and nucleic cargo. The heterogeneity of EV in their biological and physical properties (e.g., molecular cargo, size, composition, density, refractive index) underscores the importance of profiling them individually at a single particle level. Accordingly, this Special Issue seeks to showcase research papers and review articles that focus on novel technologies and biological discovery on single cell analysis, mainly on new cells and particles such as bacteria and EV. We look forward to receiving your submissions!

Guest Editors

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