Special Issue

Microfluidic Chips: Definition, Functions and Applications

Message from the Guest Editor

To achieve the precise manipulation and detection of micro- and nanotargets, LOC microsystems provide promising options due to their applications in the mechanical, medical, biological, and environmental fields. In all of these areas, the adoption of microfluidic devices transforms the efficiency of the reactive process or assay and analytical throughput. For biological and chemical applications, there is great interest in micro-/nanostructured channel systems and micro-/nanopatterned surfaces. To precisely control and manipulate these micro-/nanoscale targets and objects, microsystems, including microfluidic and nanofluidic platforms, provide a powerful and promising technique with great potential in the fields of chemical, biological, and environmental science. Accordingly, this Special Issue seeks to showcase research papers, communications, and review articles that focus on novel methodological developments by using advanced microfluidic systems for sampling and detection, with particular interest being paid to techniques for the manipulation, separation, characterization, and identification of microtargets.

Guest Editor

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