

Special Issue

Applications of Microfluidics and Nanofluidics

Message from the Guest Editor

Microfluidics and nanofluidics enable people to investigate and control mass transport under the micro- to nanometer-confined space with artificial force fields, such as electric, hydraulic, concentration, pressure, light, etc. Due to the precise detection at a single-particle scale, microfluidics has played an irreplaceable role in modern medicine and chemistry, bioengineering, drug discovery, and environmental engineering.

Meanwhile, nanofluidics, with 100 nm to angstrom-sized confined effect, can achieve atomic-scale mass transport and reaction by rational design of nanometer platforms, regarded as a frontier in condensed physical, biomimetic iontronics, membrane separation, and energy. As multi-discipline-crossing edge subjects, microfluidics and nanofluidics rely on fundamental subjects, and in turn, they can challenge the current knowledge, bridge the knowledge gaps, and develop new knowledge. Accordingly, this Special Issue seeks to showcase research papers, short communications, and review articles focusing on all aspects of microfluidic and nanofluidics, including fundamental science, material platform, device fabrication, and applications.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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