Special Issue

Microfluidic Devices and Systems in Biomedical Research

Message from the Guest Editors

Microfluidic and lab-on-a-chip (LOC) technologies have rapidly evolved since the introduction of the first micro-total analysis system (μTAS) in the 1990s. Over the past three decades, substantial progress has been made in areas such as microfabrication, fluid control at the microscale, biosensing, and bioprinting.

This Special Issue welcomes high-quality contributions—including original research articles, review papers, and brief communications—that showcase the latest innovations and challenges in microfluidic systems. Topics of interest include, but are not limited to, microfluidic device development, organ-on-a-chip systems, microfabrication techniques, advanced sensing and actuation technologies, and computational modelling of microscale phenomena.

- microfluidics
- lab-on-a-chip
- organ-on-a-chip
- microfabrication
- biosensing
- microactuators
- biomedical engineering
- point-of-care diagnostics
- microsystems integration
- multiphysics modelling

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Deadline for manuscript submissions

20 May 2026

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/246224

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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.

Editor-in-Chief

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