



Novel Microfluidic Devices and Sensors

Guest Editor:

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Deadline for manuscript submissions:

closed (31 December 2025)

Message from the Guest Editor

Microfluidic devices and sensors are closely interconnected fields that work both synergistically and complementarily. When integrated with advanced sensors, the footprint of microfluidic devices can be reduced substantially while detecting and measuring a wide range of biological, chemical, and physical parameters with remarkable sensitivity and specificity.

The goal of this Special Issue is to present cutting-edge research that highlights the combination of microfluidic devices and various sensing techniques. We are seeking original research articles and comprehensive reviews that address, but are not limited to, the following topics:

1. Novel methods for designing and fabricating microfluidic devices;
2. Microfluidic methods for sample preparation and processing;
3. Integrated systems for bioanalysis and biosensing;
4. Miniaturized sensing elements that can be combined with microfluidic devices;
5. Novel fluid and particle manipulation strategies in microfluidic systems;
6. Microfluidic preparation of sensing materials.





sensors



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Message from the Editor-in-Chief

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