Special Issue

Novel Microfluidic Devices and Sensors

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:

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

Guest Editor

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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