Special Issue

Integration and Application of Microfluidic Sensors

Message from the Guest Editors

Microfluidics has emerged as a powerful tool that makes substantial contributions in modern chemistry or biology research. Conceptually, the idea of microfluidics precisely manipulates minute amounts of fluids (pL-nL) in microscale chips fabricated with standard semiconductor industry or other microfabrication approaches. These microfluidic devices, or so-called micro total analysis systems (μTAS), show great potentials in broad applications including sensing, separation, analysis, detection, synthesis and diagnosis, with the advantages of sample economy, rapid analysis time, cost effectiveness, compactness and portability, high throughput, and the ability to multiplex and automate. The aim of this Special Issue is to collect new ideas in the integration and application of microfluidic devices. We invite innovative and original researches to contribute to the Special Issue with their prestigious work in the related topics, including but not limited to:

- advanced micro/nanofabrication
- electrokinetics, electrowetting and dielectrophoresis
- acoustofluidics and optofluidics
- sensor technology
- diagnostics and therapy
- other microfluidic applications

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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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