Special Issue

Integrated Optical, Electrochemical, and Electrical Biomicrofluidics

Message from the Guest Editors

A biosensor can detect the presence of analytes in a sample and consists of a receptor system, a transducer, and a readout system. In recent years, with the rapid development of micro/nano fabrication and microfluidics technologies, biosensors for assessing health, including POC technologies, have made great progress. With functions like optical, electrochemical, and electrical characterization and with manipulation or/and detection abilities combined with microfluidics or other biosensing platforms, one can achieve fast, accurate, real-time, in situ, and multiplexed detections. This Special Issue will provide an opportunity for researchers to publish their original achievements related to integrated optical, electrochemical, and electrical biomicrofluidics, including but not limited to:

- On-chip sensor fabrication, integration (optical, electrical, etc.) and packaging;
- Processing and fabrication of micro- and nanodevices;
- Modification of biosensing interfaces;
- Micro/nano biosensors/actuators;
- Microfluidic chips and systems integration;
- Silicon photonics;
- Electrochemical microfluidics;
- Bioimpedance microfluidics.

Guest Editors

Dr. Lihua Wang

Dr. Shilun Feng

Prof. Xiuli Gao

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Micromachines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
micromachines@mdpi.com

mdpi.com/journal/micromachines





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Editor-in-Chief

Prof. Dr. Ai-Qun Liu

Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China

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