



Microfluidics for Biosensing Applications

Guest Editors:

Prof. Dr. Fan-Gang Tseng

Department of Engineering and System Science, Frontier Research Center on Fundamental and Applied Sciences of Matters, National Tsing Hua University, Hsinchu, Taiwan

Dr. Wei-Cheng Wu

National Tsing Hua University, Hsinchu, Taiwan

Deadline for manuscript submissions:

closed (31 December 2020)

Message from the Guest Editors

Dear Colleagues,

The reaction time and applied reagents of microfluidic systems are faster and fewer than those using conventional methods, representing a revolutionary advancement on bio-assay processes. Microfluidics combined with biosensing technologies is one of the most vibrant research areas in this field. Biosensing technologies, such as electrochemical, optical, mechanical, and electrical detections realized on different microfluidic devices with various substrates, including glass, silicon, polymer or paper, are utilized to detect/analyze various targets, including nucleotide (DNA, RNA), proteins, enzymes, cells, tissues, and organs. This Special Issue is aiming at those advanced technologies through the incorporation of microfluidic and biosensing systems for biological/environmental/clinical applications. Topics of interest include but are not limited to the following:

- Microfluidic systems for biosensing
- Nanofluidic biosensing systems
- Assays in droplet microfluidics
- Lab-on-a-chip systems
- Microfluidics for pathogen detection
- Paper-based later flow biosensor
- Point-of-care microfluidic devices
- Hematology microfluidic systems





sensors



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Department of Electrical and
Information Engineering,
Politecnico di Bari, Via Orabona
4, 70126 Bari, Italy

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.

Author Benefits

Open Access : free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Ei Compendex](#), [Inspec](#), [Astrophysics Data System](#), and [other databases](#).

Journal Rank: JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)

Contact Us

Sensors Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sensors
sensors@mdpi.com
[X@Sensors_MDPI](#)