

## Special Issue

# Portable Sensor Systems for Microbial Application

### Message from the Guest Editor

Recently, much research has been carried out to propose novel techniques for microbial analysis that can allow low-cost and in situ measurements outside a laboratory environment. One important characteristic of the proposed techniques is potential implementation in the form of an embedded portable electronic system, based on a microcontroller or FPGA, to allow microbial analysis outside a laboratory to also be performed by nonskilled personnel. Moreover, the recent wide diffusion of smartphones with a high processing capability that integrate wireless communication systems and a rich sensor set offers an optimal platform to design low-cost mobile sensing systems. The editors welcome the submission of high-quality research papers not previously published in other journals as well as review articles discussing recent advancements in the development of portable sensor systems for microbial analysis and innovative techniques for microbial analysis that can be easily implemented in the form of an electronic embedded system. Keywords:

- Sensor
- Bacteria
- Microbial analysis
- Portable system
- Biosensor
- Lab-on-a-chip

### Guest Editor

Dr. Marco Grossi

Dipartimento di Ingegneria dell'Energia Elettrica e dell'Informazione  
"Guglielmo Marconi" Viale del Risorgimento 2, Bologna, Italy

### Deadline for manuscript submissions

closed (28 February 2022)



## Sensors

an Open Access Journal  
by MDPI

Impact Factor 3.4  
CiteScore 7.3  
Indexed in PubMed



[mdpi.com/si/60550](https://mdpi.com/si/60550)

*Sensors*

MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[sensors@mdpi.com](mailto:sensors@mdpi.com)

[mdpi.com/journal/  
sensors](https://mdpi.com/journal/sensors)





# Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.4  
CiteScore 7.3  
Indexed in PubMed



[mdpi.com/journal/  
sensors](https://mdpi.com/journal/sensors)



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

---

### 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 (Chemistry, Analytical) / CiteScore - Q1 (Instrumentation)