

New Strategies and Current Challenges for Label-Free Biosensors Improvement

Guest Editors:

Dr. Jean-François Bryche

Laboratoire Nanotechnologies
Nanosystèmes (LN2 – IRL 3463) -
CNRS, Université de Sherbrooke -
Institut Interdisciplinaire
d'Innovation Technologique
(3IT), 3000 Boulevard de
l'université, Sherbrooke, QC J1K
OA5, Canada

Prof. Frédéric Sarry

Institut Jean Lamour, UMR 7198-
CNRS, Nancy F-54000, France

Deadline for manuscript
submissions:

closed (30 September 2022)

Message from the Guest Editors

Current events have shown the necessity to perform a fast, efficient, and straightforward detection of low concentrations of organic elements. In this period of the global COVID-19 pandemic, most clinical testing occurs in large, centralized laboratories to concentrate operations in a single location for cost savings and standardized results.

Biosensors are once again highlighted as the technologies able to respond quickly to a need for simple and reliable detection requiring no specific knowledge, low reagent, and massive production to address the important societal challenge.

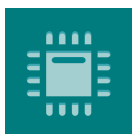
This Special Issue solicits innovative contributions from both industry and academia in biosensing areas covered by a wide range of devices, based on optical, acoustical, chemical, thermal, new materials and electrical parameters but not only. New strategies in micropatterning functionalization or biosensor design are also welcomed.

Keywords:

- Active transport
- Acoustic
- Plasmonics
- Nanobiosensing
- Photonic biosensors
- Raman spectroscopy
- Plasmonics materials
- Innovative biosensors design
- Nanoparticle
- Micropatterning functionalization

Special Issue





sensors



an Open Access
Journal by MDPI

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 (*Instruments & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

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.

Contact Us

Sensors Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

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