



an Open Access Journal by MDPI

## Nanomechanical Biosensors in Diagnostics, Food, and Environmental Monitoring

Guest Editors:

**Prof. Dr. Yi-Kuang (Caleb) Yen**

Department of Mechanical Engineering, National Taipei University of Technology (NTUT), Taipei City 10608, Taiwan

**Prof. Dr. Magnus Willander**

Department of Science and Technology (ITN), Campus Norrköping, Linköping University, SE 60174 Norrköping, Sweden

**Prof. Dr. Laszlo B. Kish**

Department of Electrical & Computer Engineering, Texas A&M University, TX 77843, USA

Deadline for manuscript submissions:

**closed (20 May 2022)**

### Message from the Guest Editors

Dear Colleagues,

Nanomechanical biosensors have been investigated and developed for over two decades—not only because they are promising tools for directly detecting biomolecular interactions with great accuracy, but the detection principles, fabrication techniques, sensing materials, and readout system for developing nanomechanical biosensors are attractive topics for researchers. This Special Issue covers the discussion of sensor working principles, the types of sensor format, the fabrication methods, and any applications in chemical and biological analysis, as well as considerations for commercial purpose. Topics of interest include, but are not limited to the following:

- CMOS MEMS
- Nanomechanics
- Microcantilever
- BioMEMS
- Disposable sensors
- Portable sensing platform
- Environmental monitoring
- Food analysis
- Point-of-care testing
- Sensing chip array
- Medical diagnosis
- Sensing materials
- Signal enhancement
- Gas sensing
- Readout systems



[mdpi.com/si/65249](https://mdpi.com/si/65249)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Giovanna Marrazza**

Department of Chemistry “Ugo Schiff”, University of Florence, Via della Lastruccia 3, 50019 Sesto Fiorentino, Italy

## Message from the Editor-in-Chief

*Biosensors* is a leading journal, devoted to fast publication of the latest achievements, technological developments and scientific research in the exciting multidisciplinary area of biosensors. Both experimental and theoretical papers are published, including all aspects of biosensor design, technology, proof of concept and application. Special issues are devoted to specific technologies and applications, and a selection of the most outstanding papers each year is recognized. Pushing the boundaries of the discipline, we invite original papers, as well as timely reviews on cutting edge fields within the subject area.

## 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, Embase, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q1 (Chemistry, Analytical) / CiteScore - Q1 (Engineering (miscellaneous))

## Contact Us

---

*Biosensors* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

mdpi.com/journal/biosensors  
biosensors@mdpi.com  
X@Biosensors\_MDPI