

## Special Issue

# Microbial Fuel Cell-Based Biosensors

### Message from the Guest Editor

The application of microbial fuel cell (MFC) technology in biosensors is gaining increasing interest from the scientific community. MFCs offer unique and attractive features of low cost, fast response time, ease of signal measurement and interpretation, and long-term operation due to the regeneration of electroactive bacteria, which makes them ideal for environmental applications. MFC biosensors have proven their capability for immediate measurement and monitoring of organic matter in various environments. These devices have also been demonstrated to work as early warning systems through the detection of toxic compounds. Furthermore, due to electricity generation, they can work in an entirely self-powered and autonomous manner. It is therefore my pleasure to invite you to submit your work to this Special Issue. The main topics of this special issue are related but not limited to:

- microbial fuel cell
- MFC
- biosensor
- bioelectrochemical system
- BOD
- toxicity
- whole cell
- sensor
- electroactive bacteria

---

### Guest Editor

Dr. Grzegorz Pasternak

Laboratory of Microbial Electrochemical Systems, Department of Process Engineering and Technology of Polymer and Carbon Materials, Wrocław University of Science and Technology, 50-370 Wrocław, Poland

---

### Deadline for manuscript submissions

closed (15 April 2022)



## Biosensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 5.6  
CiteScore 12.1  
Indexed in PubMed



[mdpi.com/si/61321](https://mdpi.com/si/61321)

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

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





# Biosensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 5.6  
CiteScore 12.1  
Indexed in PubMed



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



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Giovanna Marrazza

Department of Chemistry "Ugo Schiff", University of Florence, Via della  
Laustruccia 3, 50019 Sesto Fiorentino, Italy

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Embase, CAPlus / SciFinder, Inspec, and other databases.

#### Journal Rank:

JCR - Q1 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 20.6 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the second half of 2025).