Special Issue

Optical Fiber Biochemical and Environmental Sensors

Message from the Guest Editors

Due to the merits of low cost, immunity to electromagnetic fields, and high-sensitivity properties, optical biochemical sensors have attracted significant attention in various fields, such as biomedical diagnosis, environmental monitoring and food-safety inspection. Developing more novel and high-quality optical fiber biochemical and environmental sensors can contribute to advancing industrialization in this domain. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Fiber-optic chemical and biological sensors;
- New optical fiber structures and materials for biochemical and environmental sensing:
- Optofluidic optical fiber biochemical and environmental sensors:
- Optical integrated chip or optical fiber waveguide sensors:
- New signal processing techniques;
- New functionalized methods;
- New biochemical and environmental sensor strategies;
- New biochemical and environmental sensing applications;

We look forward to receiving your contributions.

Guest Editors

Dr. Zewei Luo

School of Mechanical Engineering, Sichuan University, Chengdu 610065, China

Dr. Hongtao Li

National Key Laboratory of Opto-Electronic Information Acquisition and Protection Technology, School of Physics and Optoelectronic Engineering, Anhui University, Hefei 230601, China

Deadline for manuscript submissions

28 February 2026



Biosensors

an Open Access Journal by MDPI

Impact Factor 5.6 CiteScore 9.8 Indexed in PubMed



mdpi.com/si/240758

Biosensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biosensors@mdpi.com

mdpi.com/journal/biosensors





Biosensors

an Open Access Journal by MDPI

Impact Factor 5.6 CiteScore 9.8 Indexed in PubMed



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 Lastruccia 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 21.8 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).

