# Special Issue

# Recent Advances in Photoelectrochemical Biosensors

## Message from the Guest Editor

Photoelectrochemical (PEC) biosensors have emerged as transformative tools in analytical science, combining the sensitivity of photoelectrochemistry with the specificity of biorecognition elements. These systems leverage light-induced electron transfer processes to detect biological and environmental analytes, offering advantages such as high sensitivity, rapid response, and miniaturization potential. Recent advancements in material science have significantly enhanced PEC biosensor performance. This Special Issue invites contributions that explore cutting-edge developments in PEC biosensors, focusing on their design, functionalization, and applications in healthcare, environmental monitoring, and biomimetic sensing. We welcome original research articles, reviews, and perspectives that highlight novel methodologies, mechanistic insights, or applications of PEC biosensors. Submissions should emphasize scalability, reproducibility, and relevance to real-world challenges. For inquiries or to submit a manuscript, please contact the . Join us in advancing photoelectrochemical biosensing to create impactful solutions for a healthier and sustainable future.

## Guest Editor

Prof. Dr. Wenbo Lu
School of Chemistry and Material Science, Shanxi Normal University, Taiyuan 030031, China

## Deadline for manuscript submissions

closed (30 September 2025)

**Biosensors**

**an Open Access Journal by MDPI**

**Impact Factor 5.6**
**CiteScore 9.8**
**Indexed in PubMed**

mdpi.com/si/232681

*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

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 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).

MDPI