

Special Issue

Trends in Fluorescent and Bioluminescent Biosensors

Message from the Guest Editors

Fluorescent and bioluminescent biosensors have become important tools and made an enormous impact. These biosensors can be engineered based on a variety of design principles for target recognition, signal transduction, and the generation of optical output. For example, different proteins, nucleic acids, and small molecules have been used as building blocks for the synthesis and conjugation of functional fluorescent as well as bioluminescent sensors. In addition to their broad applications for in vitro diagnostics and drug screening, many of these biosensors have now been delivered and/or genetically encoded to improve our understanding of mysterious biological processes in real living systems. We expect the Special Issue mainly cover the following topics: biosensor development, the integration of biosensors with new instrumentation and protocols, and the applications of biosensors. Other related topics around this central concept of fluorescent and bioluminescent biosensors are also welcome.

Guest Editors

Dr. Huiwang Ai

Department of Molecular Physiology and Biological Physics, University of Virginia, Charlottesville, VA 22908, USA

Dr. Mingxu You

Department of Chemistry, University of Massachusetts Amherst, Amherst, MA 01003, USA

Deadline for manuscript submissions

closed (15 January 2024)



Biosensors

an Open Access Journal
by MDPI

Impact Factor 5.6
CiteScore 9.8
Indexed in PubMed



mdpi.com/si/160311

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

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