Special Issue

Advanced Fluorescence Biosensors

Message from the Guest Editors

In the context of the technological development of sensors, the advent of biosensors has represented the keystone towards the creation of integrated, low-cost, user-friendly, and high-performance devices, capable of detecting the presence of chemical/biochemical agents in a wide range of matrices. Optical biosensors present a high value of the signal-to-noise ratio by virtue of their complete immunity to any electro-magnetic interference coming from the external environment and high intrinsic safety thanks to the dielectric nature of the measurement probe. Among the approaches used by optical biosensors, those that make use of fluorescent markers have acquired progressive and growing interest over the last few decades thanks to the possibility of obtaining operationally simple devices, capable of providing a fast response and high performance. The aim of this Special Issue is to host innovative and perspective contributions regarding these advanced strategies for the development of increasingly high-performance fluorescence biosensors.

Guest Editors

Dr. Simone Berneschi

"Nello Carrara" Institute of Applied Physics, IFAC-CNR, Via Madonna del Piano 10, I-50019 Firenze, Italy

Dr. Cosimo Trono

"Nello Carrara" Institute of Applied Physics, IFAC-CNR, Via Madonna del Piano 10, I-50019 Firenze, Italy

Deadline for manuscript submissions

31 May 2026

Biosensors

an Open Access Journal by MDPI

Impact Factor 5.6
CiteScore 9.8
Indexed in PubMed

mdpi.com/si/193815

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, 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