

Special Issue

Biosensors and Bioelectronics Based on Molecular Logic Computing

Message from the Guest Editor

As a promising substitute for semiconductor computers, capable of performing Boolean logic at a molecular level, molecular logic computing has made prosperous developments; DNAs, enzymes, proteins, and other elements can be used as building blocks, and optical, electrochemical signals are taken as binary outputs. In recent decades, apart from traditional computing functions, great efforts have been made to explore those areas where “silicon logic circuits cannot go”, such as smart biosensing, disease diagnostics, pharmaceutical analysis, food quality control, and accurate biotherapy. This Special Issue aims to highlight recent advances in molecular computing and logic-programmed smart biosensing applications. We welcome both original works and reviews that are related to biomolecular computing and logical/point-of-care (POC) sensors for detecting various targets (tumor biomarkers, nucleic acids, proteins, drugs, antibiotics, etc.). We hope that this Special Issue will not only inform experts and newcomers in this research area, but that it will also be a reference for future advancements of this field.

Guest Editor

Dr. Daoqing Fan

School of Medicine and Pharmacy, Ocean University of China, Qingdao
266003, China

Deadline for manuscript submissions

closed (31 August 2023)



Biosensors

an Open Access Journal
by MDPI

Impact Factor 5.6
CiteScore 9.8
Indexed in PubMed



mdpi.com/si/142694

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
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).