Special Issue

Microfluidic Systems and Computational Imaging Methods in Lab-on-a-Chip Technologies

Message from the Guest Editors

The industrial sector surrounding biomedical devices could significantly benefit from microfluidics point-ofcare (POC)-based diagnostics. The premise behind POC devices is to perform a diagnostic test near the patient without the need for any infrastructure or trained personnel. This involves reducing the handling of complex fluids, from single cells to multi-phase flows, integrated detection, and sample manipulation. Integrating embedded micro-devices for technologies related to mechanics, optics, microscopy, electronics, fluidics, and computing, together with low-cost microfabrication technology, is fundamental in POC device realization. This Special Issue aims to showcase contributions focusing on (but not limited to) new concepts in POC device realization.

Guest Editors

Dr. Maide Bucolo Department of Electrical, Electronics and Computer Engineering (DIEEI), University of Catania, Catania, Italy

- Dr. Massimo Camarda STLab srl. Catania. Italy
- Dr. Pasquale Memmolo

Institute of Applied Sciences and Intelligent Systems "Eduardo Caianiello" (ISASI), Pozzuoli, Italy

Deadline for manuscript submissions

20 September 2025



an Open Access Journal by MDPI

Impact Factor 5.6 CiteScore 9.8 Indexed in PubMed



mdpi.com/si/186970

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



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).