Special Issue

Advanced Sensors and Instrumentation for In-Vivo and In-Situ Biological Monitoring

Message from the Guest Editors

We welcome contributions on the development and integration of novel miniaturized microscopes, wearable or implantable biosensors, electrochemical sensing platforms, optical or photonic devices, and embedded systems designed for long-term or real-time observation of biological processes. Special emphasis is placed on enabling continuous data acquisition without disrupting the biological system under study. This Special Issue also seeks interdisciplinary approaches combining microfabrication, embedded electronics, photonics, materials science, and bioengineering in order to overcome existing limitations in size, stability, and environmental compatibility. Authors are encouraged to submit original research articles, reviews, or application notes showcasing validated systems or new concepts with clear relevance to in-vivo or in-situ biological monitoring.

Guest Editors

Prof. Dr. Anna Vilà

Department of Electronic and Biomedical Engineering, University of Barcelona, 08028 Barcelona, Spain

Prof. Dr. Angel Diéguez

Department of Electronic and Biomedical Engineering, University of Barcelona, 08028 Barcelona, Spain

Deadline for manuscript submissions

20 June 2026



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/247300

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

mdpi.com/journal/ sensors





Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)

