Special Issue

Bioimpedance Measurements and Microelectrodes

Message from the Guest Editors

Bioimpedance measurements are an essential technique in the field of biomedicine, used to analyze the electrical properties of biological tissues, cells and other biological samples. By applying a small electrical current and measuring the resulting voltage, bioimpedance can provide valuable information about tissue composition, cellular health, and physiological processes. Microelectrodes have become pivotal in enhancing the precision and effectiveness of bioimpedance measurements. Due to their small size, they allow for high-resolution recordings and can access regions that are difficult to measure with traditional electrodes. The articles in this issue should explore various facets of bioimpedance and microelectrode technology. Topics of interest include innovations in microelectrode design, improvements in bioimpedance measurement techniques, and the integration of these technologies in clinical and research settings. Applications range from cardiac monitoring and neural activity recording to cancer detection, cellular analysis, and tissue engineering.

Guest Editors

Prof. Dr. Gloria Huertas

Instituto de Microelectronica de Sevilla (US/IMSE), Universidad de Sevilla, 41004 Sevilla, Spain

Dr. Alberto Yufera

Instituto de Microelectronica de Sevilla (US/IMSE), Universidad de Sevilla, 41004 Sevilla, Spain

Dr. Santiago Fernández Scagliusi

Seville Institute of Microelectronics, Seville, Spain

Deadline for manuscript submissions

25 January 2026

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/208563

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

mdpi.com/journal/sensors

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)