

Special Issue

Metrology in Modern Measurement Systems and Sensors: Design, Application, Research and Challenges

Message from the Guest Editors

Modern technological solutions, including those based on machine learning algorithms, require reliable, optimal and solid measurement results from sensors or entire measurement systems to function correctly, describing the variables used to make decisions or for control. This situation poses significant challenges in the metrology of modern measurement systems and sensors.

Obtaining reliable data that enable the precise operation of modern technological solutions requires the development of new measurement systems and specific sensors. This Special Issue will present the most important problems in metrology in modern measurement systems and sensors, in particular in the areas of design, application and research. It is also likely that the issues presented in this way will open up challenges related to modern measurement systems and sensors. This Special Issue will focus on the following topics:

- Measurements of physical and chemical quantities;
- Measurements in biology and medicine;
- Measurements and diagnostic systems;
- Processing of measurement signals;
- Analysis of measurement results and assessment of uncertainty;
- Modeling of measurement systems.

Guest Editors

Dr. Piotr Kuwalek

Dr. Grzegorz Wiczyński

Prof. Dr. Mariusz Rząsa

Deadline for manuscript submissions

31 October 2026



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/227489

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

[mdpi.com/journal/
sensors](https://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](https://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

Department of Electrical and Information Engineering, Politecnico di Bari, Via Orabona 4, 70126 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)