

Special Issue

Advanced Spectroscopy-Based Sensors and Spectral Analysis Technology

Message from the Guest Editor

Advanced spectroscopy plays a crucial role in the application of sensors across various industries, enabling precise and sensitive detection of substances based on their unique spectral signatures. The application of spectroscopy to sensors offers several distinct advantages. One key benefit is the ability to provide a fast response in real-time analysis, crucial for applications where timely information is essential. Spectroscopic sensors enable on-line monitoring, allowing continuous data collection without the need for sample preparation or time-consuming laboratory analysis. The advent of chip spectrometers has further revolutionized spectroscopy for sensors. These miniaturized, portable devices enhance accessibility and versatility, enabling on-site measurements in various environments. Their compact size and low power consumption make them suitable for integration into a wide range of sensing devices, facilitating deployment in diverse settings. Topics of interest include, but are not limited to:

- sensors
- spectroscopy
- spectral analysis
- laser spectroscopy
- chip spectrometers
- chemometry
- monitoring

Guest Editor

Prof. Dr. Israel Schechter

Faculty of Chemistry, Technion-Israel Institute of Technology, Haifa 32000, Israel

Deadline for manuscript submissions

25 August 2025



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/197994

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

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)