

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

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

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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

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