# **Special Issue**

# Spectral Sensing Techniques in Biological Detection and Analysis

## Message from the Guest Editor

This special issue explores the potential of spectral sensing techniques in biological detection and analysis, advancing high-sensitivity, non-invasive tools for biomedical, environmental, and forensic applications. Spectral methods, including Raman, infrared, fluorescence, and UV-Vis spectroscopy, enable precise identification and quantification of biomolecules, pathogens, and cellular processes. These techniques offer rapid, selective detection critical for disease diagnostics, biomolecular profiling, and real-time monitoring, just to name a few. This issue aims to showcase innovative sensor designs, signal processing algorithms, and integration strategies that may enhance spectral sensing performance in biological applications.

#### **Guest Editor**

Dr. Lenka Halámková

Department of Environmental Toxicology, Texas Tech University, 2500 Broadway, Lubbock, TX 79409, USA

## Deadline for manuscript submissions

31 December 2025



# **Sensors**

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/242395

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)

