

Special Issue

Innovative Optical and Scintillation Sensors for Environmental Monitoring

Message from the Guest Editors

Environmental concerns are one of the trendiest topics of our time, highlighting the need for advanced, accurate, real-time monitoring technologies. This Special Issue aims to serve as a reference point for the latest advances in optical and scintillation sensor technologies that provide a new accuracy and sensitivity standard for detecting environmental changes. A short but growing list of potential applications for these innovative sensors includes the following:

- Air and water quality monitoring;
- Pollutant detection;
- Radiation assessment;
- Greenhouse gas emission tracking;
- Soil contamination analysis;
- Climate change impact studies;
- Early-warning systems for natural disasters;
- Biodiversity and ecosystem health monitoring;
- Oceanographic and marine environment surveillance, and other areas related to environmental protection and public health.

The papers in this issue may focus on a specific aspect of research, such as sensor designs and materials, novel optical detection mechanisms, and state-of-the-art scintillation techniques. At the same time, the impact on real-world applications for more appropriate environmental management should be emphasized.

Guest Editors

Dr. Giuseppe Gallo

Department of Physics and Astronomy "E. Majorana", University of Catania, Via Santa Sofia 64, 95123 Catania, Italy

Dr. Domenico Lo Presti

Department of Physics and Astronomy "E. Majorana", University of Catania, Via Santa Sofia 64, 95123 Catania, Italy

Deadline for manuscript submissions

31 October 2025



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/221520

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)