



sensors



an Open Access Journal by MDPI

Advances in Photoacoustic Resonators and Sensors

Guest Editors:

Prof. Dr. Bernd Baumann

Heinrich Blasius Institute of
Physical Technologies, Hamburg
University of Applied Sciences,
Berliner Tor 21, 20099 Hamburg,
Germany

Prof. Dr. Marcus Wolff

Heinrich Blasius Institute of
Physical Technologies, Hamburg
University of Applied Sciences,
Berliner Tor 21, 20099 Hamburg,
Germany

Deadline for manuscript
submissions:

25 February 2026

Message from the Guest Editors

The photoacoustic effect is an emerging technology that has sparked significant interest in the research field since an acoustic wave can be produced simply by the incidence of light on a material or tissue. This phenomenon has been extensively investigated, not only to perform photoacoustic imaging but also to develop highly miniaturized ultrasound probes that can provide biologically meaningful information.

Photoacoustic resonators and sensors have recently branched out to various fields of application, including liquid and gas sensing for environmental monitoring, multi-gas detection, leak detection, breath sensing, homeland security, and petrochemical exploration, leading researchers to design and develop sensor architectures for on-field applications.

This Special Issue of *Sensors*, “Photoacoustic Resonators and Sensors”, will focus on the design and experimental verification of new sensors based on photoacoustic spectroscopy, as well as papers that focus on their field-testing. Both reviews and original research articles will be published.

For more details, please visit [here](#).



mdpi.com/si/164705

Special Issue



sensors



an Open Access Journal by MDPI

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

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.

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 (Chemistry, Analytical) / CiteScore - Q1 (Instrumentation)

Contact Us

Sensors Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sensors
sensors@mdpi.com
[X@Sensors_MDPI](#)