

Special Issue

Robotics for Environment Sensing

Message from the Guest Editor

In the last decades, robotics has evolved significantly, both in terms of technologies developed and applications, especially in the field of environmental monitoring. Robots have been developed in different shapes, sizes and with different capabilities becoming a fundamental data gathering tool for scientists studying – not only – our planet. Design and implementation of robotic systems for environmental research still present significant challenges to robotics researchers, especially in the field of Mobile Robot Olfaction (MRO) – the discipline that studies mobile robots with gas sensing capabilities. MRO requires the fusion of different disciplines, such as signal processing, machine perception, autonomous navigation, and pattern recognition, in order to address the challenges related to gas and environmental sensing in unstructured environments. Typical tasks addressed by MRO systems are trail guidance, gas distribution modeling/mapping, and gas source localization as well as gas detection/finding, odor discrimination and concentration estimation, gas plume tracking, and gas source declaration.

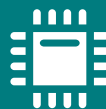
Guest Editor

Dr. Patrick P. Neumann

Bundesanstalt für Materialforschung und prüfung (BAM), Unter den Eichen 87, 12205 Berlin, Germany

Deadline for manuscript submissions

closed (30 August 2023)



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 7.3
Indexed in PubMed



mdpi.com/si/113606

Sensors

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 3.4
CiteScore 7.3
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 (Chemistry, Analytical) / CiteScore - Q1 (Instrumentation)