



sensors



an Open Access Journal by MDPI

Advances in Biomimetic Olfactory Sensors and Electronic Noses and Their Applications

Guest Editors:

Dr. Arnaud Buhot

Grenoble Alpes University, CEA,
CNRS, IRIG-SyMMES, 17 Rue des
Martyrs, 38000 Grenoble, France

Dr. Yanxia Hou

IRIG-SYMMES, University
Grenoble Alpes, CEA, CNRS,
38000 Grenoble, France

Deadline for manuscript
submissions:

closed (10 February 2022)

Message from the Guest Editors

There is currently a rapidly growing demand for the sensitive and selective detection of volatile organic compounds (VOCs) in various domains, including environmental monitoring, air quality control, detection of pollution or gas leaks for personal/public safety, food safety and quality control, non-invasive medical diagnostics, etc. For these applications, portable devices such as miniaturized sensors are preferable for real-time and on-site analyses. Among them, biomimetic olfactory sensors and electronic noses are very promising. Nevertheless, due to the limited number of sensors and especially the limited diversity of sensing materials (metal oxides, polymers, etc.), so far, the performance of most existing electronic noses is still far behind what we expect.

Therefore, this Special Issue of *Sensors* will highlight recent advances in the design and development of novel sensing materials to improve the performance of the olfactory sensors and electronic noses (in terms of sensitivity and selectivity).

Submitted papers should present novel contributions and innovative applications. Relevant topical reviews are also welcome.



mdpi.com/si/27253

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 (*Instruments & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

Contact Us

Sensors Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

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