

Special Issue

Advanced Materials for Gas Sensors: Performance and Application

Message from the Guest Editors

Gas sensors, despite being the subject of research for many years, are still attracting significant attention from the scientific community due to their numerous applications. One strategy to address these requirements is the search for new suitable materials, as well as novel functionalization strategies and innovative fabrication processes, which can enhance the sensor performance. Therefore, the goal of the present Special Issue is to present novel and promising experimental and theoretical approaches in gas sensor and sensor array development exploiting advanced materials. The latest advances in science and technology will be highlighted, including novel high-performance materials with enhanced sensing properties, innovative functionalization techniques and cutting-edge fabrication and processing methods. Works investigating the sensing mechanisms through innovative techniques and from a theoretical point of view are also welcome. Original research articles (full papers or communications) and reviews are all welcome.

Guest Editors

Dr. Sonia Freddi

Department of Mathematics and Physics, Università Cattolica del Sacro Cuore, Brescia, Italy

Prof. Dr. Luigi Sangaletti

Mathematics and Physics Department, Università Cattolica del Sacro Cuore, 25121 Brescia, Italy

Deadline for manuscript submissions

closed (20 April 2025)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/161291

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

[mdpi.com/journal/
materials](https://mdpi.com/journal/materials)





Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



[mdpi.com/journal/
materials](https://mdpi.com/journal/materials)



About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) /
CiteScore - Q1 (Condensed Matter Physics)