Special Issue

Advanced Materials for Chemical Sensors

Message from the Guest Editors

The rapid advancement of chemical sensing technologies is increasingly driven by the development of innovative materials with enhanced performance, sensitivity, and selectivity. In this Special Issue, Advanced Materials for Chemical Sensors, we would like to present cutting-edge research and comprehensive reviews that highlight the pivotal role of advanced materials in revolutionizing chemical sensor design and application. Contributions can cover a broad spectrum of materials, including nanostructured metal oxides, conductive polymers, 2D materials (such as graphene and MXenes), metal-organic frameworks (MOFs), and hybrid nanocomposites. These materials are enabling breakthroughs in real-time monitoring, miniaturization, and integration of sensors into flexible, wearable, or wireless platforms. The Special Issue also explores functionalization strategies, surface engineering, and emerging fabrication techniques that enhance sensor response, stability, and environmental adaptability.

Guest Editors

Dr. Sonia Freddi

Institute of Photonics and Nanotechnologies (IFN)-CNR, Milan, Italy

Dr. Monica Bollani

Institute of Photonics and Nanotechnologies (IFN)-CNR, Milan, Italy

Deadline for manuscript submissions

30 June 2026



an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



mdpi.com/si/253195

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

mdpi.com/journal/ materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





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

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 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)