Special Issue

Novel Nanomaterials and Nanotechnology in Gas Sensing Application

Message from the Guest Editors

With the rapid development of modern society, environmental toxic gases have become the bottleneck that hinders sustainable development. Therefore, highly-efficient detection of toxic gaseous pollutes in our ecological system and exhaled chemicals from respiration is critical to promote the circular economy and livelihood quality as well as carbon neutrality worldwide. The Special Issue on "Novel Nanomaterials and Nanotechnology in Gas Sensing Application" aims at collecting recent advances on nanostructured gas sensing materials and their novel application in different fields of interest. Potential topics include (but are not limited to) the following five categories:

- Novel gas sensing nanomaterials
- Room-temperature gas sensors
- Energy motivated gas sensing technology.
- Respiratory analysis and exhalation detection.
- Flexible gas sensors based on novel nanomaterials and/or nanotechnologies

The submissions of research articles and review papers on the above sensitive materials and gas sensors are welcome.

Guest Editors

Prof. Dr. Ming Xu

Prof. Dr. Yuanjie Su

Dr. Jun Chen

Deadline for manuscript submissions

closed (30 September 2023)



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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometerscale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, Nanomaterials, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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