

Special Issue

Flexible Sensors Based on Nanomaterials

Message from the Guest Editors

With the applications of nanomaterials in different dimensions, such as nanoparticles, nanowires, and nanosheets, flexible sensors have experienced vigorous development, reshaping people's understanding of the form and function of electronic sensors and systems. These sensors leverage the high specific surface area, high sensitivity, and tunable electronic properties of nanomaterials to achieve the highly sensitive and selective detection of various physical (e.g., pressure, temperature, humidity) and chemical (e.g., gases, pH) stimuli. This Special Issue will present comprehensive research outlining progress on the application of nanomaterials or micro/nanostructures to improve the performance of flexible sensors. This includes the utilization of nanomaterials or micro/nanostructures to improve the performance of sensors, the construction of new flexible sensing interfaces and sensor structures, and the diversified applications of flexible sensors. We invite authors to contribute original research articles and review articles covering the current progress in flexible sensors based on nanomaterials.

Guest Editors

Prof. Dr. Chenying Wang

School of Instrument Science and Technology, Xian Jiaotong University, Xi'an 710049, China

Dr. Le Zhang

Science and Technology on Electronic Test and Measurement Laboratory, North University of China, Taiyuan 030051, China

Deadline for manuscript submissions

closed (20 June 2025)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/202372

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

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





Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



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



About the Journal

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 nanometer-scale 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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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, CAPIus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)