Special Issue

Characterization and Applications of Nanomaterials in Sensors and Actuators (2nd Edition)

Message from the Guest Editor

Sensors and actuators are extensively applied in cutting-edge devices, such as in flexible/wearable electronics and soft robotics, for applications spanning healthcare, environmental monitoring, emergency rescue/protection, and the Internet of Things. A wide range of studies have been conducted on emerging nanomaterials in different forms, which have been applied to different material systems to achieve the desirable properties of sensing and actuation. This Special Issue welcomes contributions from researchers worldwide on topics including, but not limited to, the following: The synthesis of novel nanomaterials with special characteristics;
The advanced characterization and testing of nanomaterials and nanodevices;
The design and fabrication of nanomaterial-integrated material systems for sensor and actuator applications;
Novel applications of nanomaterials in niche fields such as harsh environment assessment, in-body health monitoring, and wearable healthcare devices; The application of machine learning in the design and application of nanomaterial-based systems.

Guest Editor

Dr. Lin Jing
School of Materials Science and Engineering, Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798, Singapore

Deadline for manuscript submissions

20 April 2026

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/230640

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

mdpi.com/journal/nanomaterials

MDPI

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

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

MDPI