Special Issue

Multifunctional Nanomaterials and Hybrid Structures for Sensors, Actuators and Smart Technologies

Message from the Guest Editors

Advanced sensors, actuators, and related technologies are becoming key technologies to help address many of the global humanitarian challenges of today, ranging from clean water, renewable energy, and ecofriendly infrastructures to disaster relief, public health, and national security. Many of these devices can be very significantly boosted by nanoscale materials due to their high surface activities and novel quantum effects. We are, therefore, excited to present this Special Issue focused on nanomaterials, nanocomposites, and hybrid structures related to these applications. Potential topics include, but are not limited to:

- recent progress in nanoscale sensors;
- materials for nanoactuators;
- environmental nanosensors;
- stimulus-responsive materials;
- bio-nano-detectors;
- carbon nanotubes and graphene;
- hybrid materials and nanocomposites;
- thin film coatings;
- nanomaterials for energy conservation.

Guest Editors

Prof. Dr. Sharmila M. Mukhopadhyay

Director, Frontier Institute for Research in Sensor Technologies (FIRST), University of Maine, Orono, ME 04469, USA

Dr. Mallikarjuna N. Nadagouda

Center for Environmental Solutions and Emergency Response, United States Environmental Protection Agency, Cincinnati, OH 45268, USA

Deadline for manuscript submissions

closed (20 November 2021)

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/54317

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

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

MDPI

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.

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)