

Special Issue

Nanomechanics, Plasticity and Fracture

Message from the Guest Editors

Different nanomaterials and nanostructures are currently being investigated through experiments or atomistic simulations, such as low-dimensional nanostructures, nanocomposites, nanofibers, biomaterials, and other nanostructures. The mechanical properties or behaviors of nanomaterials are not only attracting extensive efforts under ambient conditions but also at extreme conditions, such as high temperature or pressure. Currently, there is also great interest in the study of the physical or chemical properties of advanced nanomaterials under mechanical strain, which is emerging as a fascinating and challenging avenue to enable nanomaterials with unique properties.

This Special Issue of *Nanomaterials* will attempt to cover the most recent advances in “Nanomechanics, Plasticity and Fracture”, concerning not only the mechanical properties, behaviors, and deformation mechanisms of materials down to the nanoscale but also their novel physical or chemical phenomena or responses, as triggered by mechanical strain.

You can see more details at the following link:
<https://www.mdpi.com/si/145736>

Guest Editors

Dr. Haifei Zhan

1. College of Civil Engineering and Architecture, Zhejiang University, Hangzhou 310058, China
2. School of Mechanical Medical and Process Engineering, Queensland University of Technology, Brisbane, QLD 4000, Australia

Prof. Dr. Jianli Shao

State Key Laboratory of Explosion Science and Technology, Beijing Institute of Technology, Beijing 100081, China

Deadline for manuscript submissions

closed (31 July 2023)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



[mdpi.com/si/145736](https://www.mdpi.com/si/145736)

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

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