

Special Issue

Low-Dimensional Nanostructures: Synthesis, Characterization and Applications

Message from the Guest Editor

Over the past decade, low-dimensional materials have been successfully developed because of their unique electrical, physical and chemical properties and have been used for multifunctional electronic and optoelectronic applications. Subsequently, low-dimensional materials are rapidly gaining worldwide attention, aiming towards industrial-scale real-time device applications. Moreover, their extremely high surface area and existence of surface defects make them promising and compatible for various applications. This Special Issue is focused on low-dimensional materials-based electronic and optoelectronic device applications (including optical, chemical, biological and electrical devices). Owing to the continuous progress in the synthesis and engineering of low-dimensional materials, a variety of novel functionalities can be achieved either by creating heterostructures with them or doping, which can offer an extra degree of tunability in electrical and optoelectrical devices. The Editorial Board of the journal *Nanomaterials* and myself are very pleased to announce this Special Issue and are looking forward to your contribution.

Guest Editor

Dr. Sang-Soo Chee

Nanomaterials and Nanotechnology Center, Korea Institute of Ceramic Engineering and Technology (KICET), Jinju-si 52851, Republic of Korea

Deadline for manuscript submissions

closed (8 February 2024)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/156494

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.

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)