

## Special Issue

# Infrared-Controlled Nanomaterials

### Message from the Guest Editor

Nanomaterials with emission in the near-infrared (NIR) part of the spectrum (700–2500 nm) (termed NIR-LEDs) support a large variety of applications, such as optical diagnosis and biomedical imaging, optical communication, remote sensing, data storage, etc. This Special Issue aims to cover various aspects of infrared nanomaterials, from their composition and design to their photophysical and luminescence properties and emerging applications. It is expected to provide a comprehensive overview of the current state of research in the field of infrared-controlled nanomaterials, while also highlighting the opportunities and challenges that lie ahead. We believe that this Special Issue will serve as a valuable resource for scientists, engineers, and researchers working in this area, offering insights into the latest developments and future directions in this exciting and rapidly advancing field. See more: <https://www.mdpi.com/si/196416>

### Guest Editor

Dr. Yakun Wang

Institute of Functional Nano & Soft Materials (FUNSOM), Jiangsu Key Laboratory for Carbon-Based Functional Materials & Devices, Soochow University, Suzhou 215123, China

### Deadline for manuscript submissions

closed (20 September 2024)



## Nanomaterials

an Open Access Journal  
by MDPI

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/196416](https://www.mdpi.com/si/196416)

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

---

### 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)