Special Issue

New Insights in Nanomaterials for Packaging Applications

Message from the Guest Editors

Nanomaterials have unique properties, such as size effects, a large specific surface area, and high reactivity. The scope of solicitation includes, but is not limited to, the following: Development and Application of Novel Nanomaterials: Innovative applications of nanocellulose, nanoclay, metal nanoparticles, nano-oxides, and biobased nanomaterials are included in packaging. Active and Smart Packaging Systems: Active packaging with antimicrobial and antioxidant properties. Real-time quality monitoring and smart indicator packaging based on nanosensors.

Nanostructuring Technologies: Optimise the performance of packaging materials using processing strategies such as electrospun nanofibres, multilayer composite structures, and nanoparticle reinforcement. Sustainable Packaging Solutions: Biodegradable and recyclable nanocomposite packaging materials. Packaging Performance and Safety Assessment: Enhancing the performance and barrier properties of packaging machinery with nanomaterials, alongside migration behaviour, safety research, and life cycle analysis in packaging applications.

Guest Editors

Prof. Dr. Changging Fang

Faculty of Printing, Packaging Engineering and Digital Media Technology, Xi'an University of Technology, Xi'an 710048, China

Dr. Youliang Cheng

Faculty of Printing, Packaging Engineering and Digital Media Technology, Xi'an University of Technology, Xi'an 710048, China

Deadline for manuscript submissions

20 May 2026



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/260826

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



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 nanometerscale 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)

