

Special Issue

Advances in Nanoenergetic Materials: Synthesis, Characterization, and Emerging Applications

Message from the Guest Editor

This Special Issue aims to showcase cutting-edge research and advancements in the synthesis, characterization, and real-world applications of nanoenergetic materials. Topics will include innovative synthesis approaches such as sol-gel processes, hydrothermal synthesis, and flame spray pyrolysis, alongside studies focusing on catalytic nanoenergetics, thermite reactions, and composite materials. Applications in propellants, explosives, pyrotechnics, and micro-electromechanical systems (MEMSs) will also be explored. We invite contributions that address both experimental and theoretical insights, bridging the gap between fundamental research and practical implementations. The goal is to stimulate further developments in this dynamic field, bringing together novel perspectives from chemistry, materials science, and engineering.

Guest Editor

Dr. Ramesh Reddy Nallapureddy
Department of Chemical Engineering, Yeungnam University,
Gyeongsan 38541, Republic of Korea

Deadline for manuscript submissions

closed (20 June 2025)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/221063

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. 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)