Special Issue

Nanomaterials for Chemical Engineering

Message from the Guest Editor

Scientists and engineers have emphasized the study of nanomaterials in recent decades. The superior properties of nanomaterials are helping to greatly improve and even revolutionize the development of various technology and industry sectors. Despite their many advantages, challenges present in the control and design of nanomaterials with specific properties (morphology, size, porosity, conductivity, optical property, photoelectric property, chemical activity, etc.) to meet with their functional aims. The main applications of nanomaterials in chemical engineering are in catalysts, coatings, adsorption, sensors, drug delivery etc., which all represent fascinating yet challenging research topics. This Special Issue welcomes contributions devoted to the synthesis and application of functional nanomaterials in chemical engineering, which includes the development of novel nanomaterials and synthesis methods, experimental characterization and computational modeling studies, as well as exploitation in devices and practical applications.

Guest Editor

Prof. Dr. Meiwen Cao

State Key Laboratory of Heavy Oil Processing and Centre for Bloengineering and Biotechnology, College of Chemical Engineering, China University of Petroleum (East China), 66 Changjiang West Road, Qingdao 266580, China

Deadline for manuscript submissions

closed (28 November 2022)



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3 CiteScore 9.2 Indexed in PubMed



mdpi.com/si/99168

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.

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)

