Special Issue

Advanced Porous Nanomaterials for Adsorption

Message from the Guest Editors

The adsorption of guest molecules on the solid surface of porous materials is a natural phenomenon that has been utilized in the fields of environmental treatment, energy conversion and biomedical applications. The structural properties of porous materials, including pore size, surface area and surface affinity, play critical roles in determining their performance in water treatment, air purification, chemical separation, toxic substance removal, adsorption desalination, adsorption cooling and biomolecules interactions. In recent decades, the emergence of advanced porous materials with ultrahigh surface area and tunable surface affinity, such as metal–organic frameworks (MOFs), covalent organic frameworks (COFs), novel synthesized zeolites and porous carbon, has enabled a remarkable improvement in adsorption capacity, which favors an enhancement in the efficiency of porous materials in environmental treatment, energy conversion and biomedical applications. This Special Issue is open to contributions from all aspects of advanced porous materials for adsorption in environment, energy and biomedical applications.

Guest Editors

Dr. Song Li

Department of New Energy Science and Engineering, School of Energy and Power Engineering, Huazhong University of Science and Technology, Wuhan 430074, China

Dr. Juyeong Kim

Department of Chemistry, Gyeongsang National University, Jinju, Republic of Korea

Deadline for manuscript submissions

closed (15 April 2024)

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/162869

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

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)

MDPI