

Special Issue

Advanced Porous Nanomaterials: Synthesis, Properties, and Application (Second Edition)

Message from the Guest Editor

Porous nanomaterials are defined as those with pore sizes less than 100 nm. Porous materials are of scientific and technological importance due to their excellent functional and structural characteristics. They are lightweight materials with low bulk density, high surface area, low thermal conductivity, good permeability, energy management applications, noise attenuation, vibration suppression, and other characteristics. In recent years, there has been an increasing interest and research work in the synthesis, characterization, functionalization, molecular modeling, and design of nanoporous materials. Porous nanomaterials are increasingly used in many fields, such as (bio)sensors, drug delivery, gas separation, energy storage, fuel cell technology, nanocatalysis and photonics. This special issue aims to collect papers on new advances or breakthroughs in the design, synthesis, properties and applications of porous nanomaterials. We welcome outstanding researchers from all over the world to submit their latest, original and creative works to the journal before the submission deadline.

Guest Editor

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Deadline for manuscript submissions

closed (30 November 2025)



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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

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