

Special Issue

Nanoporous Graphitic Carbon Materials for Energy Storage and Conversion

Message from the Guest Editors

Nanoporous graphitic carbon materials have received considerable attention due to their potential applications in a wide range of areas. Generally, the hard-templating approach is employed for the preparation of nanoporous carbon materials followed by thermal treatment for the development of the graphitic structure. Inorganic mesoporous silica and zeolites have also been utilized as templates and there are further recent reports of alternative approaches demonstrating direct self-assembly of amphiphilic molecules as a soft-template for carbon precursors. Furthermore, physical/or chemical activation of lignocellulosic materials give high surface area nanoporous carbon materials. Surface textural properties and the structure of the nanoporous carbon materials depends on synthetic conditions. Therefore, fabrication of nanoporous materials is important for the targeted applications. This Special Issue aims to collate original research papers, reviews and communications focusing on advancements of state-of-art nanoporous functional carbon materials in applications, including energy storage and energy conversion.

Guest Editors

Dr. Lok Kumar Shrestha

International Center for Materials Nanoarchitectonics (WPI-MANA),
National Institute for Materials Science (NIMS), 1-1 Namiki, Ibaraki,
Tsukuba 305-0044, Japan

Dr. Rekha Goswami Shrestha

Department of Applied Chemistry, Tokyo University of Science, 1-3
Kagurazaka Shinjuku-ku, Tokyo 162-8601, Japan

Deadline for manuscript submissions

closed (29 February 2020)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/17334

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.

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)