Special Issue

Nanostructured Porous Carbon based 3D Architectures

Message from the Guest Editors

Nanostructured porous carbon-based 3D architectures have attracted tremendous attention as next-generation active materials templates due to their extraordinary chemical and physical properties. Furthermore, related versatile devices can greatly improve energy efficiency because of their largely expanded working volumes, multiplexed conduction networks, 3D interfacing, and intercalation with other system components.

This Special Issue intends to highlight recent advances

in fabrication approaches for multidimensional nanostructured porous carbon-based architectures in diverse device applications, enabling exotic physical, chemical, electrical, and optical properties. Papers sharing research and advances in related fields, which demonstrate or summarize significant advances in the synthesis and application of nanostructured porous carbon-based 3D architectures in various systems, including, but not limited to, Li (Na, K)-ion batteries, supercapacitors, optoelectronic applications, and insights into the structure–property relation in these new nanostructured materials are also welcomed.

Guest Editors

Prof. Dr. Jun Chen

Prof. Dr. Dongjiang Yang

Prof. Dr. Liangxu Lin

Deadline for manuscript submissions

closed (25 August 2019)



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3 CiteScore 9.2 Indexed in PubMed



mdpi.com/si/16951

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. 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)

