## **Special Issue**

# Carbon-Based Multifunctional Nanomaterials: Synthesis, Properties and Application

#### Message from the Guest Editors

Carbon is known to form distinct solid-state allotropes with diverse structures and properties, such as sp2bonded graphite and sp3-bonded diamond. Novel carbon nanomaterials composed entirely of sp2hybridized carbon atoms have been developed in dimensionalities ranging from zero-dimensional (OD) fullerenes and one-dimensional (1D) carbon nanotubes (CNTs) to two-dimensional (2D) graphene in past decades. Generally, the atomic structures and interfacial interactions of carbon nanomaterials with materials in other phases has an important influence on the properties of the carbon nanomaterials. Therefore, the design and functionalization of carbon nanomaterials from a nanoscale perspective has become a popular strategy to achieve desirable properties for particular applications.

- carbon-based nanomaterials
- multifunctional composites
- theoretical calculation
- processing and forming of carbon-based materials
- carbon-based thermal conductive composites
- carbon-based energy composites
- carbon-based structural materials

#### **Guest Editors**

Prof. Dr. Wei Feng

Advanced Polymer Materials Institute, Tianjin University, Tianjin, China

Dr. Huitao Yu

School of Materials Science and Engineering, Tianjin University, Tianjin, China

#### Deadline for manuscript submissions

closed (10 May 2024)



## **Nanomaterials**

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/142188

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)

