Special Issue

Preparation and Application of High-Performance Multifunctional Graphene Macroscopic Assemblies and Composites

Message from the Guest Editor

Graphene is a rising star in the field of materials science, showing a 2D hexagonal crystalline structure of carbon atoms with sp2 bonds. Varieties of graphene macroscopic assemblies have been fabricated using graphene and its derivatives, such as fibre, film, foam, aerogel, woven fabric, and non-woven fabric. As a high-performance multifunctional additive, graphene endows composites with fascinating mechanical, electrical, thermal, and self-healing properties, among others. High-performance multifunctional graphene macroscopic assemblies and graphene-based composites have been constantly studied in recent years. The revealing relationships between microstructure and material properties provide new ideas and insights into the preparation of multifunctional applications. This Special Issue covers new advances in high-performance multifunctional graphene macroscopic assemblies and composites. Studies related to the novel fabrication of graphene and composites, the designation of graphene networks and flexible multifunctional materials, and advanced characterizations are preferred. Full papers, communications, and reviews are all welcome.

Guest Editor

Dr. Ying Wu

School of Materials Science and Engineering, University of Science and Technology Beijing, Beijing, China

Deadline for manuscript submissions

closed (20 October 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/131546

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)