Special Issue

Carbon-Based Nanomaterials for Bioimaging, Sensor, Catalytic, and Photoelectronic Applications

Message from the Guest Editors

Novel trending smart carbon-based nanomaterials, carbon dots (CDs), carbon-based 0-dimensional fluorescent materials, and graphene-based hybrid composites with a cost-effective fabrication mechanism, as well as a wide range of raw materials with excellent physical, chemical, optical, and electrical properties, have attracted the attention of many researchers in recent years because of their stable and adjustable photoluminescence behaviors, good biocompatibility, and abundant surface defects. Hybrid carbon-based nanocomposites with suitable physical properties can expand the application scope of CDs, make up for the limitations of single-component CDs in applications, improve the application performance of inorganic nanomaterials, and enhance the versatility of inorganic nanomaterials.

In this Special Issue, we will focus on brand-new assessment techniques to elucidate the unique functions of CDs in composition regulation, structural fabrication, surface modification, and host–guest interactions in electrocatalysis and ultimately to establish the relationships among structure, composition, and activity.

Guest Editors

Prof. Dr. Kaushik Pal

University Centre for Research and Development (UCRD), Chandigarh University, Punjab, India

Dr. Fernando Gomes de Souza Junior

Biopolymers & Sensors Lab., Macromolecules Institute, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil

Deadline for manuscript submissions

closed (20 June 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/141876

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

MDPI

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)