

Special Issue

High-Mobility Graphene Structures: Advanced Fabrication Methods and Emerging Quantum Phenomena

Message from the Guest Editors

We are pleased to invite you to contribute to this Special Issue on High-Mobility Graphene Structures.

Graphene's exceptional electronic properties, particularly its potential for ultra-high carrier mobility, have positioned it at the forefront of research on two-dimensional materials. Achieving high mobility is essential for exploring quantum effects and deepening our understanding of fundamental physics in graphene and related materials. For more information, please check the Special Issue website:

https://www.mdpi.com/journal/materials/special_issues/8921126E07

Guest Editors

Dr. Alexander Mayorov

National Laboratory of Solid State Microstructures, School of Physics, Nanjing University, Nanjing, China

Prof. Dr. Geliang Yu

National Laboratory of Solid State Microstructures, School of Physics, Nanjing University, Nanjing 210093, China

Deadline for manuscript submissions

closed (20 July 2025)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2

CiteScore 6.4

Indexed in PubMed



[mdpi.com/si/222414](https://www.mdpi.com/si/222414)

Materials

Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

materials@mdpi.com

[mdpi.com/journal/](https://www.mdpi.com/journal/materials)

[materials](https://www.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](https://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)