

## Special Issue

# Recent Progress in Graphene and 2D Materials

### Message from the Guest Editors

Very recently, the controlled stacking of 2D layered materials at the atomic level revealed new physical and chemical phenomena. Based on this fundamental research, new electronic, optical, energy, and sensor devices are being developed that can overcome the physical limitations of current mainstream technology. This Special Issue is devoted to providing the latest cutting-edge fundamental and applied research across all aspects of graphene and 2D layered materials. Full papers, communications, and reviews on experimental and theoretical studies of 2D layered structures and materials are all welcome. Keywords

- Graphene and graphene-derived materials
- 2D layered materials (TMDCs, hBN, MXene, Xene, etc.)
- Pseudo-2D materials
- Chain-based 1D/2D materials
- Van der Waals heterostructures
- Applications of devices based on 2D layered materials

---

### Guest Editors

Prof. Dr. Jae Young Choi

School of Advanced Materials Science and Engineering, Sungkyunkwan University, 2066 Seobu-ro, Suwon, Gyeonggi-do 16419, Korea

Prof. Dr. Jae-Hyun Lee

Department of Materials Science and Engineering and Energy Systems Research, Ajou University, 2016 World Cup-ro, Suwon 16499, Gyeonggi-do, Korea

---

### Deadline for manuscript submissions

closed (31 May 2021)



## Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/23795](https://mdpi.com/si/23795)

*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto:materials@mdpi.com)

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