Special Issue

Growth and Characterization of 2D Materials

Message from the Guest Editor

Two-dimensional (2D) materials have become an increasingly important area of research in both the academic community and the semiconductor industry due to their exceptional electrical and optical properties. The range of materials that are available in 2D form has grown to include semiconducting transition metal dichalcogenides, insulating boron nitride, ferromagnetic insulators and superconductors. These 2D materials hold tremendous promise for a range of novel applications that are not possible with bulk materials. This Special Issue assembles original articles that present novel methods to enable the growth of a broad spectrum of 2D materials, and that characterize their physical and electronic properties. This Special Issue also explores the potential uses of 2D materials, and the applications of their exceptional performances in electronics, clean energy, bioengineering and biosensing. The scope of this Special Issue includes, but is not limited to:

- New growth/synthesis of 2D materials and their heterostructures.
- Characterization of 2D materials and their heterostructures.
- Theoretical study of 2D materials and modeling or design of the 2D materials

Guest Editor

Dr. Hongli Guo

Department of Physics and Astronomy, California State University Northridge, Northridge, CA, 91330-8268, USA

Deadline for manuscript submissions

closed (20 September 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/152474

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)