

Special Issue

Advances in Nanoelectronic Devices and Applications

Message from the Guest Editors

Nanotechnology has enjoyed explosive growth in the past few years, specifically in nanofabrication techniques employed to construct nanoelectronics devices, which has advanced tremendously in recent years.

This Special Issue is open to new advances in nanoelectronics involving:

- Advances in growth, fabrication, and measurement techniques for nanostructures.
- Electron transport in semiconductor nanostructures.
- Electronics in traditional low-dimensional structures.
- Advances in 2D material-based transistors and nanomaterial-based transistors
- Advances in nanomaterial-based optical modulators
- Nanomaterials in communication electronics and technology
- Advances in nanomaterial-based optical sources
- Nanomaterial-based terahertz sources and detectors.
- Nanomaterial-based sensors.
- Nanomaterial-based devices for space applications.
- Nanomaterials in thermoelectric devices and thermal management devices.
- Nanomaterials in fuel cell applications and lithium-ion batteries.
- Nanomaterials in supercapacitors.
- Nanomaterials in photovoltaic applications.
- Nanomaterials in photocatalysis and applications.

Guest Editors

Prof. Dr. S. S. Islam

Centre for Nanoscience and Nanotechnology, Jamia Millia Islamia (A Central University), New Delhi, India

Dr. Manika Khanuja

Centre for Nanoscience and Nanotechnology, Jamia Millia Islamia (A Central University), New Delhi, India

Deadline for manuscript submissions

closed (30 June 2023)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/142105

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)