## **Special Issue**

# Low-Dimensional Materials for Optoelectronic and Photovoltaic Fundamentals and Applications

## Message from the Guest Editor

For this Special Issue, we invite the submission of original research articles and reviews on fundamental and applied research focused on low-dimensional materials for optoelectronics and photovoltaics, including, but not limited to, the following:

- Semiconductor and heterostructure optoelectronics and photovoltaics;
- Mesoscopic phenomena in nanostructures;
- Plasmonic and phononic systems;
- Energy conversion and energy-harvesting processes;
- Nonlinear optoelectronic processes;
- Optoelectronics of 2D materials and their heterostructures;
- Carrier dynamics in organic materials and interfaces:
- Ultra-fast optical phenomena at low dimensions;
- Optoelectronics of nanowires and quantum dots:
- Flexible optoelectronics and photovoltaics.

### **Guest Editor**

Prof. Dr. Mustafa Eginligil

Key Laboratory of Flexible Electronics (KLoFE) & Institute of Advanced Materials (IAM), School of Flexible Electronics (Future Technologies), Nanjing Tech University, Nanjing 211816, China

## Deadline for manuscript submissions

20 December 2025



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/206137

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/ materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





## 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

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 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)