



materials



an Open Access Journal by MDPI

Recent Advances in Nanomaterials for Optoelectronic Devices

Guest Editors:

Dr. Lin Wang

School of Mechanical
Engineering, Shanghai Jiao Tong
University, Shanghai, China

Dr. Junyong Wang

Suzhou Institute of Nano-Tech
and Nano-Bionics (SINANO),
Chinese Academy of Sciences,
Suzhou 215123, China

Deadline for manuscript
submissions:

30 June 2024

Message from the Guest Editors

Optoelectronic functional devices represent a class of components that are indispensable in our information society, as they play important roles in information generation, modulation, sending, transmission, sensing, processing, displaying, etc. The age of Internet of Things (IoT) is placing rising requirements on future-generation optoelectronic devices in terms of their volume, performance, power consumption, multi-functionality, flexibility, and wearability, to name a few. In this context, nanomaterials (0D, 1D, 2D), as a result of their appealing properties arising from reduced dimensionality, have demonstrated rich potential to meet the stringent demands for diverse optoelectronic devices ranging from photodetectors and light-emitting diodes to photovoltaic cells and optical modulators.

This Special Issue aims to collect original research articles and reviews in the rapidly developing field through both fundamental studies and practical applications. Topics covered include, but are not limited to, the synthesis and growth of nanomaterials, the construction and characterization of functional structures, and the fabrication and characterization of optoelectronic devices.



mdpi.com/si/174025

Special Issue



an Open Access Journal by MDPI

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

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.

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 & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)