



materials



an Open Access Journal by MDPI

Semiconductor with Novel Electronic and Optoelectronic Properties: Design, Fabrication and Characterization

Guest Editor:

Prof. Dr. Shengyi Yang

School of Physics, Beijing
Institute of Technology, Beijing
100081, China

Deadline for manuscript
submissions:

20 October 2024

Message from the Guest Editor

Semiconductors with novel electronic and optoelectronic properties have become an extremely active research field, encompassing novel electronic and optoelectronic materials, nanomaterials, physical phenomena and design concepts. The objective of this Special Issue is to address these conceptual challenges while highlighting novel trends in electronic and optoelectronic materials and devices, such as the structural properties, band structure, transport, surfaces and interfaces, optical and magnetic properties of semiconductor structures. In addition to conventional semiconductor physics, self-assembled structures, mesoscopic structures and the developing field of spintronics, the effects of low-dimensional physics and strain are included, as well as its modeling and component development.



mdpi.com/si/199374

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)