



materials



an Open Access Journal by MDPI

Nanowires: Growth and Applications

Guest Editor:

Prof. Dr. Shengjun Zhou

Center for Photonics and Semiconductors, School of Power and Mechanical Engineering, Wuhan University, Wuhan 430072, China

Deadline for manuscript submissions:

closed (10 February 2024)

Message from the Guest Editor

Nanowires (NWs) are one of the best defined and controlled classes of nanostructures in nanoscience and nanotechnology. Most of the key parameters of NWs, including diameter, length, chemical composition, doping, and growth direction, can be rationally controlled, resulting in a well-defined growth of NWs. The unique control over the microstructure of NWs has enabled them to become a promising building block for various devices and integration strategies.

Today, it is widely recognized that the rational design and synthesis of NWs are critical to understanding fundamental properties and developing novel devices. The Special Issue will compile recent developments in the field of NWs, focusing on the growth and applications of NWs. The articles presented in this Special Issue will cover various topics, ranging from but not limited to the growth strategies of NWs, synthesis of NWs, organization and assembly of NWs, functionalization of NWs, nanoelectronic devices, flexible electronics, nanophotonics, and nano-LEDs.



mdpi.com/si/87801

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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
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)