



Semiconductor Nanowires: Fabrication, Characterization, and Applications

Guest Editors:

Prof. Dr. Chih-Yen Chen

Dr. Hung-Wei (Homer) Yen

Prof. Dr. Zong-Hong Lin

Prof. Dr. Der-Hsien Lien

Deadline for manuscript
submissions:

closed (30 September 2022)

Message from the Guest Editors

Semiconductor nanowires are designed materials showing one or more functionalities that can be significantly changed in a controlled fashion by external stimuli, such as stress, moisture, electric or magnetic fields, light, temperature, pH, or chemical compounds. One dimensional nanomaterials are materials with typical size features in the lower nanometer size range and characteristic mesoscopic properties. These properties make them attractive objects of fundamental research and potential new applications. The scope of Special Issues includes but not limited to: (1) semiconductor nanowires; (2) 1D nanomaterials; (3) methodologies which include the synthesis of semiconductor nanowires, characterization of mesoscopic properties, and modeling computation of semiconductor nanowires (or 1D nanomaterials) or mesoscopic effects; (4) applications of semiconductor 1D nanomaterials.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Shirley Chiang

Department of Physics, University
of California Davis, One Shields
Avenue, Davis, CA 95616-5270,
USA

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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](#), [CAPus / SciFinder](#), [Inspec](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (General Chemical Engineering)

Contact Us

Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](https://twitter.com/nano_mdpi)