# Special Issue

# Nanowires and Nanoparticles: Synthesis, Characterization and Applications

## Message from the Guest Editors

The development of nanowires and nanoparticles is one of the most dynamic and promising areas of nanoscience and nanotechnology. The controlled synthesis of these nanostructures enables the adjustment of their physical, chemical, and electronic properties, which significantly differ from those of their bulk counterparts. Owing to recent advances in the field, it is now possible to design nanowires and nanoparticles with precise geometries, hybrid compositions, and functionalized surfaces. This expands their potential use in strategic applications.Characterization is crucial for understanding the relationship between structure, size, morphology, and properties. Advanced techniques such as electron microscopy, X-ray spectroscopy, and surface analysis have provided key insights into the optical, electronic, mechanical, and catalytic properties of materials. These studies enable the optimization of synthesis processes and the design of materials with specific functionalities.This Special Issue aims to compile original research and critical reviews that address advances in the synthesis, characterization, and applications of nanowires and nanoparticles.

## Guest Editors

Prof. Dr. Heriberto Cruz-Martínez

Prof. Dr. Omar Solorza-Feria

Dr. Hugo Rojas-Chávez

## Deadline for manuscript submissions

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

mdpi.com/journal/materials

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## 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
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

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