# Special Issue

# Nanowires: Growth, Properties, and Applications

## Message from the Guest Editor

Nanowires, as one of the most well-defined and controlled classes of nanostructures, have been a subject of intense research and development for several decades. The unique control over their microstructure has made them a promising building block for various devices and integration strategies. Recent years have witnessed remarkable progress in nanowire research, particularly in controlling growth orientation, reducing defect density, and optimizing interface structures. We invite submissions on topics including, but not limited to, the following:

- Novel synthesis methods or improvements to existing techniques for nanowire fabrication.
- In-depth studies on the formation mechanisms, structural features, and performance relationships of nanowires.
- Innovative applications of nanowires in diverse fields, such as electronic devices, photonic components, sensors, catalysts, composites, and energy technologies.
- Theoretical simulations and computational studies aimed at predicting nanowire behavior and guiding experimental designs.
- Review articles summarizing state-of-the-art, identifying future trends, and proposing solutions to existing challenges.

## Guest Editor

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## Deadline for manuscript submissions

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# About the Journal

## 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.

## Editor-in-Chief

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