Special Issue

Advances in Nanowire

Message from the Guest Editor

Nanowires are 1D nanostructures with a nanoscale diameter (from a few to 100-200 nm) and a microscale length (from around one to several tens of microns). Different materials—either metals, semiconductors, oxides, or polymers—can be obtained in the form of nanowires, through different physicochemical synthesis routes, and can be combined in axial or radial heterostructures. Nanowires have a great potential in the design and realization of the next generation of devices, mainly in the field of photodetectors, photocatalysis, photovoltaics, thermoelectrics, sensing, quantum information processing, and even biomedical and drug delivery approaches. This Special Issue of Nanomaterials will attempt to cover the most recent advances in nanowires, concerning experimental, theoretical, and technological aspects, ranging from the material synthesis, functionalization, and characterization to the proof of concept of functional and smart properties for device applications.

Guest Editor

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Deadline for manuscript submissions

closed (31 October 2021)



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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 nanometerscale 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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