

Special Issue

Quantum Materials for Photonic Devices

Message from the Guest Editor

In recent years, quantum materials have emerged concept across diverse fields of science and engineering. Quantum materials are a promising and broad class of materials that feature optical and electronic properties that can be engineered through their composition and crystal structure, such as quantum dots, quantum rods, quantum wells, etc. From a material and photophysics perspective, exciting opportunities remain in the understanding and harnessing of electrons in highly confined materials. In addition, photonic devices are components for creating, manipulating, or detecting light, such as laser diodes, light-emitting diodes, solar or photovoltaic cells, displays, optical amplifiers, etc. Therefore, “quantum materials” developed for photonic device applications could drive the commercialization of display and lighting applications and provide promising developments in the related fields

Guest Editor

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Deadline for manuscript submissions

closed (20 May 2023)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/122676

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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 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.

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