Special Issue

Electron Transport and Electronic Properties in Low-Dimensional Materials

Message from the Guest Editor

Low-dimensional materials, particularly due to quantum confined features, present unique electron transport behaviors that make them perfect to be explored in diverse manners, paving the way towards electronic devices via continuous breakthroughs. Meanwhile, scanning tunneling microscopes and theoretical calculations, such as local field effect transistors, in situ gating methods and density functional theory, have been widely adopted to tackle complex challenges. This collection focuses on electron transport and electronic properties in low-dimensional materials and offers an systematical overview of experimental and theoretical research milestones, as well as emerging new phenomena and potential tuning approaches, along with attempts to identify common challenges in the field and provide feasible solutions with joint efforts from different communities. You can submit your paper at the following link:
https://www.mdpi.com/si/161721

Guest Editor

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Deadline for manuscript submissions

closed (5 October 2023)

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/161721

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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.

Editor-in-Chief

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