



an Open Access Journal by MDPI

Electrical, Magnetic and Optical Properties of Two-Dimensional Nanomaterials

Guest Editors:

Dr. Yi Wan

MIIT Key Laboratory of Semiconductor Microstructure and Quantum Sensing, Department of Applied Physics, Nanjing University of Science and Technology, Nanjing 210094, China

Dr. Hui Zhang

Yunnan Key Laboratory of Opto-Electronic Information Technology, Yunnan Normal University, Kunming 650500, China

Dr. Xiaolong Xu

School of Integrated Circuits and Electronics, Beijing Institute of Technology, Beijing 100081, China

Deadline for manuscript submissions: **20 August 2024**



Message from the Guest Editors

Dear Colleagues,

With the miniaturization of semiconductor devices reaching the physical limit, Moore's law is facing a development bottleneck. With their unique advantages, two-dimensional materials are expected to solve the performance bottleneck of chips. Two-dimensional materials also exhibit novel quantum properties related to the topology, strong correlation, charge density wave, and superconductivity. Two-dimensional materials have become an excellent tool for the research of condensed matter physics and material science.

Within the scope mentioned above, this Special Issue intends to publish a series of scientific advances that reveal the up-to-date theoretical and experimental achievements in the electrical, magnetic, and optical properties of twodimensional nanomaterials and heterostructures and the related optoelectronic, magneto-electronic devices. Original research articles, as well as reviews, in the growing field of two-dimensional nanomaterials are welcomed.

See more information in: https://www.mdpi.com/si/194273

Dr. Yi Wan Dr. Hui Zhang Dr. Xiaolong Xu Guest Editors



mdpi.com/si/194273





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Shirley Chiang

Department of Physics, University of California Davis, One Shields Avenue, Davis, CA 95616-5270, USA

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, metalorganic 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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q1 (*Physics, Applied*) / CiteScore - Q1 (*General Chemical Engineering*)

Contact Us

Nanomaterials Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/nanomaterials nanomaterials@mdpi.com X@nano_mdpi