

## Special Issue

# Emerging 2D Materials for Transistors and Photodetectors

### Message from the Guest Editor

Two-dimensional (2D) materials offer exciting opportunities for future electronics and optoelectronics due to their atomic thickness, flexibility, and excellent electrical and optical properties. This Special Issue focuses on recent advances in 2D materials for next-generation transistors and photodetectors. Topics of interest include material synthesis, doping and defect engineering, integration techniques, contact/interface optimization, and device performance benchmarking. We particularly welcome submissions on energy-efficient designs, wafer-scale fabrication methods, flexible and transparent devices, low-power or high-frequency applications, and multifunctional systems combining sensing, memory, and logic. Original research and review articles covering experimental results, theoretical insights, or novel applications are invited from academia, national labs, and industry. This Special Issue aims to highlight key progress and promote interdisciplinary collaboration in 2D materials for advanced electronic devices.

### Guest Editor

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### Deadline for manuscript submissions

28 November 2025



## Nanomaterials

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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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### Editor-in-Chief

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