Special Issue

Carbon-Based Electronic Devices: Recent Advances and Future Challenges

Message from the Guest Editors

Carbon-based materials such as graphene, carbon nanotubes, organic semiconductors, and quantum dots are at the forefront of innovation in modern electronics and related technologies. Their unique electrical, mechanical, and optical properties offer new pathways for the development of devices and systems that are faster, lighter, more flexible, energy-efficient, and environmentally sustainable. This Special Issue, entitled "Carbon Based Electronic Devices: Recent Advances and Future Challenges", invites contributions that explore the wide spectrum of possibilities offered by carbon-based materials in electronics and beyond. Original research articles, communications, and reviews covering advances in fundamental material design, device fabrication, and practical applications are welcome. Topics of interest include, but are not limited to, transistors, sensors, memory devices, energy storage and conversion, optoelectronics, photonics, flexible and portable technologies, and emerging interdisciplinary applications where carbon materials play a central role. I welcome your participation in this Special Issue, and I look forward to receiving your contributions.

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Deadline for manuscript submissions

31 May 2026

Micromachines

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed

mdpi.com/si/255452

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