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## Two-Dimensional Semiconductor Nanostructure and Nanomaterials

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Deadline for manuscript  
submissions:  
**closed (30 June 2024)**

### Message from the Guest Editors

Dear Colleagues,

We are thrilled to announce the launch of our innovative Special Issue entitled "Two-Dimensional Semiconductor Nanostructure and Nanomaterials in the Age of AI". This edition is dedicated to exploring the convergence of artificial intelligence with the fast-evolving field of two-dimensional (2D) semiconductor nanostructures and nanomaterials.

Key highlights of this Special Issue:

1. **AI-Driven Material Discovery**
2. **2D Semiconductors in Sensor Computing**
3. **Advanced Fabrication Techniques**
4. **Applications in Nanotechnology and AI Synergy**
5. **Challenges and Future Prospects**

This Special Issue aims to spotlight the transformative potential of AI in the realm of 2D semiconductors. By compiling the latest research and developments, we aspire to offer a comprehensive overview of how AI and 2D semiconductor technology can together drive innovation in various technological sectors.

For more details, please see the following link:  
<https://www.mdpi.com/si/192884>

Dr. Yong Xie  
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*Guest Editors*



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# Special Issue



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## Editor-in-Chief

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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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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