



Perspectives on Physics of Advanced Nanomaterials and Interfaces

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Deadline for manuscript
submissions:

closed (31 December 2025)

Message from the Guest Editors

Dear Colleagues,

Over the past decades, the field of nanotechnology has witnessed significant progress in manipulating materials at the nanoscale, leading to transformative breakthroughs. Covering studies of organic and inorganic nanodevices, composite nanomaterials, nanostructures with multifunctional capabilities, nanoscale microscopy techniques, and innovative nanofabrication methods, this Special Issue seeks to provide a comprehensive overview of recent developments in the field. The volume covers all type of studies related to the physics governing the growing processes and behavior of advanced nanomaterials and the phenomena occurring at their interfaces and contains but is not limited to the following topics:

- Innovative processing methods and technologies for advanced nanomaterials and nanostructures;
- Studies investigating the phenomena occurring at the interfaces of advanced nanomaterials and nanodevices;
- Theoretical models and simulations for nanomaterials electronic structure and for the observed phenomena;
- Perspectives on emerging physics dictating the properties and applications of advanced nanomaterials and interfaces.





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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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