

## Special Issue

# The Interaction of Electron Phenomena on the Mesoscopic Scale

### Message from the Guest Editors

“More is different”. Interacting electrons on the mesoscopic scale present emerging phenomena of multi-body systems in condensed matters. The Special Issue covers cutting-edge studies on the mechanics, thermology, optics, electricity, and magnetism of nanomaterials. These studies include not only novel phenomena in new nanomaterials, but also fundamental phenomena in the “old” ones. We hope that the Special Issue will shed light on the theoretical limitations of weak, medium, and strong interactions among electrons, and, importantly, provide insights on the future development of material synthesis methods, structural and property characterizations, and scientific strategies. See more information in: <https://www.mdpi.com/si/190190>

### Guest Editors

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### Deadline for manuscript submissions

closed (15 August 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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