# **Special Issue**

# Quantum Computing and Nanomaterial Simulations

## Message from the Guest Editors

The ever-evolving landscape of nanomaterials science is poised for a revolutionary paradigm shift through the integration of quantum computing methodologies. This call for papers invites scholarly contributions to a Special Issue dedicated to the meticulous exploration of "Quantum Computing and Simulation of Nanomaterials", with emphasis on leveraging quantum computing for nanomaterial simulations and optimizing nanomaterials for quantum information processing. Authors are encouraged to submit manuscripts that showcase pioneering research, methodological innovations, and insightful applications that leverage the prowess of quantum computing to propel nanomaterials science into a new era of precision and computational efficiency. By uncovering the quantum properties of nanomaterials and concurrently harnessing them for quantum information processing, we aim to advance both fields into exciting realms of discovery and innovation. You can submit your paper at the following

https://www.mdpi.com/si/197739

### Assistant

### **Guest Editors**

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## **Deadline for manuscript submissions**

closed (30 September 2024)



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# **About the Journal**

## 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 nanometerscale 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.

### **Editor-in-Chief**

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