

## Special Issue

# Low Dimensional Nanomaterials and Quantum Dots: Low Cost Synthesis, Analysis, and Characterization

### Message from the Guest Editor

Low dimensional nanomaterials and quantum dots are a class of nanomaterials that possess unique optical, magnetic, and electronic properties due to their small size and large surface area. These materials have significant potential for diverse applications in areas such as drug delivery, biosensing, imaging and energy storage. One of the major challenges in using these materials is the high cost of their synthesis. However, recent advances in low cost synthesis techniques have led to the development of eco-friendly and scalable methods for the production of these materials. Low dimensional nanomaterials and quantum dots offer great promise for addressing various challenges in medicine, energy and electronics. Cost-effective synthesis, advanced characterization and modeling techniques will further enhance our understanding and enable their successful application in various fields. The purpose of this special issue is to collect the latest research results in the synthesis, analysis and characterization of low dimensional nanomaterials and quantum dots. We welcome the submission of original research articles and reviews by scholars in related fields.

### Guest Editor

Prof. Dr. Ghassan E. Jabbour

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### Deadline for manuscript submissions

closed (15 August 2024)



## Nanomaterials

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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 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

Prof. Dr. Eugenia Valsami-Jones

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