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## Novel Research in Low-Dimensional Systems

Guest Editor:

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Deadline for manuscript  
submissions:

**closed (30 November 2022)**

### Message from the Guest Editor

Dear Colleague,

Low-dimensional systems exhibit unique properties that have attracted considerable attention. Notably, low-dimensional systems and devices are already featuring in several emerging technologies and advanced applications. We invite authors to contribute original research articles on the fundamental and applied aspects of physics in low-dimensional systems. The aim of the issue is to provide an overview of current research in low-dimensional systems which show a large variety of scientifically fascinating and technologically important phenomena. Potential topics include but are not limited to:

- Two-dimensional electron gas and topological insulators;
- Integer and fractional quantum Hall effects;
- Spin-orbit interaction and spin-related phenomena;
- Quantum dots, wires, and mesoscopic systems;
- Nanostructures (graphene, carbon nanotubes, etc.) and thin films;
- Characterizations of nanomaterials, including theoretical and numerical methods;
- New frontiers in low-dimensional systems.

Detailed information please see the Special Issue webpage.

Prof. Dr. Orion Ciftja

*Guest Editor*



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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.

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