Special Issue

Structural Modeling and Theoretical Study of Low-Dimensional Materials (Second Edition)

Message from the Guest Editors

Recently, low-dimensional materials have been increasingly used in various applied fields (medical care, environment, new energy, etc.) due to their ultra-thin (fine) characteristics and excellent properties. This Special Issue, entitled “Structural Modeling and Theoretical Study of Low-Dimensional Materials (Second Edition)” is centered on the research fields of materials, physics, and chemistry. The main topics found in this Issue are either aimed at predicting the existence and properties of advanced low-dimensional materials, or to verify the properties of the prepared low-dimensional materials via thorough analyses. These can help deepen our understanding of the internal physical mechanism of low-dimensional materials in order to improve and expand their practical applications. At present, cutting-edge research on low-dimensional materials includes topics on room-temperature superconductivity, topological insulators, ferroelectricity, catalysts, and so on. The study of and progress in these topics will result in outstanding contributions to new energy and aid in the sustainable development of human society.

Guest Editors

Prof. Dr. Xiao-Chun Wang

1. School of Physics Science and Information Technology, Liaocheng University, Liaocheng 252000, China
2. Institute of Atomic and Molecular Physics, Jilin University, Changchun 130012, China

Prof. Dr. Xilian Jin

State Key Laboratory of Superhard Materials, College of Physics, Jilin University, Changchun 130012, China

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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