



an Open Access Journal by MDPI

Synthesis and Structure Elucidation of Low-Dimensional Materials

Guest Editors:

Dr. Luka Pirker

Department of Condensed Matter Physics, Jozef Stefan Institute, Jamova Cesta 39, 1000 Ljubljana, Slovenia

Prof. Dr. Bojana Višić

Institute of Physics Belgrade, University of Belgrade, Pregrevica 118, 11080 Belgrade, Serbia

Dr. Lena Yadgarov

Department of Chemical Engineering, Faculty of Engineering, Ariel University, Ariel 4076414, Israel

Deadline for manuscript submissions:

closed (10 February 2024)

Message from the Guest Editors

Low-dimensional materials have attracted a lot of attention due to their tailorable physical and chemical properties and a wide variety of structures.

With at least one dimension being significantly smaller than the other two, low-dimensional materials consist of zero-dimensional (0D) (nanoparticles, quantum dots), one-dimensional (1D) (nanotubes, nanowires), and two-dimensional (2D) (graphene, TMDC monolayers, nanowalls, nanosheets) materials. With the continuous development of nanotechnology, a broad range of synthesis techniques were demonstrated to synthesise low-dimensional materials, from mechanical exfoliation to solvent-based methods and chemical vapour transport reactions. As the crystal structure and the dimensionality depends heavily on the synthesis method, this Special Issue will focus on the synthesis of novel low-dimensional materials, as well as on the relationship between the synthesis method and the crystal structure.

We cordially invite you to contribute a paper to this Special Issue. Full papers, communications, and reviews are all welcome. Thank you very much in advance for your time and consideration.



mdpi.com/si/146959

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)