

## Special Issue

# Topological Materials in Low Dimensions

### Message from the Guest Editor

Topological materials possess exciting properties for fundamental research and functionalization in quantum computing and spintronics. Topological materials have particular topological arrangements in the geometry of their electronic band structures, resulting in robust surface states and unconventional electromagnetic activity. Topological insulators have rendered a new and fascinating class of materials, opening up an internationally flourishing research field. The properties of topological materials indicate the existence of Majorana, Weyl and Dirac fermions. Intense research has been devoted to developing codes to compute the geometry of electronic band structures, in order to predict future topological materials and optimize them in terms of the robustness of their topological phenomena. This Special Issue will present comprehensive research outlining the latest advances in the theory and experimental verification of the fascinating physics of nanostructures assembled from topological materials. This Special Issue will also focus on the fabrication and applications of nanostructures to unravel the potential use of topological materials in quantum devices.

### Guest Editor

Prof. Dr. Detlev Grützmacher

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### Deadline for manuscript submissions

closed (15 November 2023)



## 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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