



Symmetry/Asymmetry in Low-Dimensional Materials

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Message from the Guest Editors

Dear Colleagues,

Low-dimensional materials (LDMs) provide a promising platform with the potential to revolutionize information and communication technologies. Among them, a special kind of LDMs with in-plane anisotropic properties attract significant research interest due to their anisotropic crystal and spin structures, which give rise to intriguing electronic, optical, and magnetic properties in various fields. Particularly, the symmetry in 2D materials can be modified using methods such as gating, doping, twisting, and stacking heterostructures, thereby making symmetry an important factor in manipulating the electronic and optical properties of low-dimensional systems.

This Special Issue aims to explore how symmetry violations offer unique opportunities for low-dimensional systems. The work may include (but is not limited to) discussions on hyperbolic polaritons arising from in-plane anisotropic optical absorption...

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Guest Editors





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Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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