Special Issue

Symmetry-Based Properties in Two-Dimensional Materials

Message from the Guest Editors

This Special Issue aims to explore the role of symmetry in the design, characterization, and application of 2D materials. We invite contributions that delve into theoretical and experimental studies on how symmetry impacts properties such as mechanical and transport properties, electronic band structure, optical responses, etc. The topics of interest include, but are not limited to, symmetry-driven phenomena like Dirac cones in graphene, topological states, and the impact of symmetry breaking on electronic correlations and excitations. By integrating perspectives from various disciplines, this Special Issue seeks to provide a comprehensive overview of how symmetry principles can be harnessed to engineer advanced 2D materials with properties tailored to emerging technologies. We encourage submissions from researchers working on fundamental theories, experimental techniques, and practical applications of symmetry in 2D systems.

Guest Editors

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About the Journal

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.

Editor-in-Chief

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