



*symmetry*



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## Advances of Symmetry/Asymmetry in Magnetic Materials

Guest Editor:

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Deadline for manuscript submissions:

**closed (30 September 2024)**

### Message from the Guest Editor

Symmetry is one of the central concepts in modern physics and plays a fundamental role in characterizing magnetic materials. Magnetic materials are divided into metal and non-metal according to their properties. The former are mainly Fe, Co, Ni elements and their alloys, rare earth elements and their alloys, and the latter are mainly ferrite materials. It can also be divided into soft magnetic materials, permanent magnetic materials and functional magnetic materials according to their use. These magnetic materials play a huge role in various fields of modern technology, such as memories, transformers, magnetoresistive devices, etc., and are closely related to informatization, automation, and mechatronics.

This Special Issue explores various applications of symmetry in magnetic materials. We welcome both original research and review articles.

Topics of interest include, but are not limited to, ferromagnetic materials, magnetoresistive devices, Hall devices, and topological spin materials.



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# Special Issue



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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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