

Special Issue

Symmetry/Asymmetry in Advanced Nanotechnologies

Message from the Guest Editors

Nature gives us a wonderful world with symmetric and asymmetric structures, which present different functions in our life. People always utilize the gifts of nature (symmetric or asymmetric) to realize the facilitation of our work in various fields. Symmetry and asymmetry play an important role in designing advanced nanodevices, opening a vast and highly interdisciplinary area that includes physics, chemistry, electrical engineering, etc. The study of the symmetric features of nanocrystals is essential for helping to obtain fundamental knowledge in nanoscience. In addition, symmetry breaking has enabled breakthroughs with unprecedented properties and performance. The exploration of intrinsic and artificial symmetries inspires new strategies in designing advanced nanotechnologies and provides a platform for the further development of state-of-the-art nanotechnologies. This Special Issue invites researchers to submit original research papers and review articles on symmetry- or asymmetry-related phenomena, the characterization of symmetries in nanosystems, and the design and preparation of symmetric and asymmetric structures in nanotechnologies.

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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.

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