Special Issue

Symmetry/Asymmetry in Advanced Metamaterials and Their Applications

Message from the Guest Editors

Advanced metamaterials have garnered significant attention over the past few decades due to their unique physical properties and extensive applications. Among these materials, symmetry and asymmetry play pivotal roles in design and performance optimization. By manipulating structural symmetry, metamaterials can achieve cutting-edge functionalities such as zero stiffness and constant force mechanisms. Meanwhile, the introduction of asymmetry offers greater freedom in controlling physical fields like optics and mechanics, further broadening the potential application domains of metamaterials. This Special Issue will delve into the utilization of symmetry/asymmetry in advanced metamaterials and their practical contributions across optics, acoustics, vibration, and other related fields. We cordially welcome submissions that showcase the innovative applications of symmetry principles in material design or explore how asymmetric structures drive the development of emerging technologies through intricate physical mechanisms.

Guest Editors

Prof. Dr. Wangqiang Xiao

Department of Mechanical and Electrical Engineering, Xiamen University, Xiamen 361000, China

Dr. Wei Huang

Guangxi Key Laboratory of Optoelectronic Information Processing, School of Optoelectronic Engineering, Guilin University of Electronic Technology, Guilin 541004, China

Deadline for manuscript submissions

31 December 2025

Symmetry

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.3

mdpi.com/si/218283

Symmetry
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
symmetry@mdpi.com

mdpi.com/journal/symmetry

Symmetry

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.3

mdpi.com/journal/symmetry

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

Prof. Dr. Sergei Odintsov
1. ICREA, 08010 Barcelona, Spain
2. Institute of Space Sciences (IEEC-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics)

MDPI