



Advances in Metamaterial and Asymmetry/Symmetry

Guest Editors:

Dr. Guidong Liu

School of Physics and
Optoelectronics, Xiangtan
University, Xiangtan 411105,
China

Dr. Shuyuan Xiao

Institute for Advanced Study,
Nanchang University, Nanchang
330031, China

Dr. Qi Lin

School of Physics and
Optoelectronics, Xiangtan
University, Xiangtan 411105,
China

Deadline for manuscript
submissions:

31 January 2025

Message from the Guest Editors

Metamaterials are macroscopic composite materials with periodic subwavelength structures whose electromagnetic properties can be controlled not only by varying the chemical composition but also by engineering the shape of the meta-atoms and their internal structures, as well as the mutual positions and orientations of the meta-atoms in the composite material. In general, the symmetry and asymmetry of the structure is a crucial factor in the design of metamaterials, as well as the engineering of the optimal properties for specific applications.

In recent years, metamaterials have established themselves as one of the most important topics in physics and engineering and have found practical applications across a wide variety of fields, including photonics, condensed matter physics, materials science, and biological and medical physics.

Topics of interest include, but are not limited to, bound states in the continuum in metamaterials, strong coupling in metamaterials, topological properties in metamaterials, nonlinear and quantum effects in metamaterials, novel optical phenomena in metamaterials, and optical and optoelectronic devices based on metamaterials.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Sergei D. Odintsov

1. Institució Catalana de Recerca
i Estudis Avançats (ICREA),
Passeig Luis Companys, 23,
08010 Barcelona, Spain
2. Institute of Space Sciences
(ICE-CSIC), C. Can Magrans s/n,
08193 Barcelona, Spain

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.

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)

Contact Us

Symmetry Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/symmetry
symmetry@mdpi.com
X@Symmetry_MDPI