

# Special Issue

## ***Symmetry* in Electromagnetic Engineering and Optics: Latest Advances and Prospects**

### Message from the Guest Editor

The idea of symmetry has served as the framework through which various physical disciplines have been fully developed. Additionally, symmetry plays a relevant role in electromagnetics; to elucidate this point, it suffices to consider the concepts of duality, reciprocity, and equivalence. In addition, symmetry comes into play through the geometrical characteristics of the objects involved in the electromagnetic scenario. Currently, the sciences of the natural world exploit symmetry to model nature based on observations of symmetry in molecules, crystals and elementary particles. In contrast, electromagnetic engineering and optics exploit this concept more extensively, especially for characterising new types of devices whose potential properties are not apparent without using this abstraction.

The Special Issue would like to collect the latest advances related to symmetry in the fields of electromagnetic engineering and optics. Topics of the research papers include but are not limited to:

- Microwave and Optics devices
- Wave propagation and Scattering;
- Antennas;
- Electromagnetic media;
- Metamaterials.

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### Guest Editor

Dr. Giovanni Angiulli

Department of Information Engineering, Infrastructure and Sustainable Energy, University Mediterranea, Via Graziella, loc. Feo di Vito, 89122 Reggio Calabria, Italy

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### Deadline for manuscript submissions

closed (31 October 2023)



# Symmetry

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*Symmetry*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[symmetry@mdpi.com](mailto:symmetry@mdpi.com)

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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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### Editor-in-Chief

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

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