symmetry

an Open Access Journal by MDPI

IMPACT FACTOR 2.2

CITESCORE 5.2

Electromagnetism and Symmetry: Review

Guest Editors:

Dr. Mingyang Lu
School of Electrical and Electronic Engineering, University of Manchester, Sackville Street Building, Manchester M13 9PL, UK

Dr. Xiaobai Meng
Faculty of Art, Science and Technology, University of Northampton, Northampton NN1 5PH, UK

Deadline for manuscript submissions:
closed (30 November 2022)

Message from the Guest Editors

Electromagnetic fields and waves play a pivotal role in the industrial repository, especially in the field of electromagnetic (EM) non-destructive testing (NDT).

There exist several variants of EM testing methods, including eddy current testing (ECT), magnetic flux leakage (MFL), remote field testing (RFT), magnetic particle inspection (MPT), alternating current field measurement (ACFM), alternating current potential difference (ACPD), and direct current potential drop (DCPD). Owing to its sensitivity to small discontinuities, EM testing has been widely applied in object recognition, health monitoring, surface fatigue inspection, and measuring the inhomogeneity of metallic properties including electrical conductivity, magnetic permeability, and the thickness of the sample.

We encourage researchers to apply a wide range of electromagnetic methods, and, in particular, to develop theoretical models and applications including the concept of symmetry. This Special Issue welcomes contributions from, but not limited to, the following fields: electromagnetism and symmetry, electromagnetics, computational electromagnetics, and electromagnetic modeling.

symmetry

an Open Access Journal by MDPI

IMPACT FACTOR 2.2

CITESCORE 5.2

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

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