

Special Issue

Symmetry in Applied Mechanics Analysis on Smart Optical Fiber Sensors II

Message from the Guest Editor

Symmetry is an important concept during the mathematical and mechanical modeling of control systems in artificial intelligence domains. When sensors have been used to perceive the structural behavior, symmetry can be used to simplify the theoretical analysis on the strain transfer characteristics of multi-layered sensing models. Taking optical fiber sensor as an example, it can be used to measure strain and temperature information of engineering structures due to the unique advantages of high sensitivity, absolute measurement, stable physical and chemical properties and so on. It is expected that smart optical fiber sensors can play an important role in promoting the development of artificial intelligence and intelligent manufacturing in engineering. How to use the measured information for the configuration of the structural performance and safety state is also an important issue. Applied mechanics analysis with symmetry considered is thus significant to scientifically explain the interaction between the smart optical fiber sensor and the monitored structure.

Guest Editor

Dr. Huaping Wang

College of Civil Engineering and Mechanics, Lanzhou University,
Lanzhou 730000, China

Deadline for manuscript submissions

closed (30 September 2024)



Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



mdpi.com/si/134217

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

[mdpi.com/journal/
symmetry](https://mdpi.com/journal/symmetry)





Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



[mdpi.com/journal/
symmetry](https://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
ICREA, 08010 Barcelona and 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)