

Special Issue

Symmetry/Asymmetry and Novel Nanomaterials: Preparation, Characterizations, and Applications

Message from the Guest Editor

We would like to invite you to submit your work to this Special Issue on “Symmetry/Asymmetry and Novel Nanomaterials: Preparation, Characterizations, and Applications”. Nanostructures and nanomaterials have received great attention in the fuel cell, aerospace, automotive, medical, and military industries due to their unique mechanical and physical properties. The physical properties (symmetry/asymmetry) of nanomaterials play an important role in influencing their mechanical, electrical, and chemical properties.

Nanomaterials exhibit increased strength/hardness, enhanced diffusivity, improved ductility/toughness, reduced density, reduced elastic modulus, increased specific heat and surface, etc. The focus of this Special Issue is on the fabrication and characterization of nanomaterials and nanocomposites for different applications, such as automotive, paint, solar cell, and biomedical applications. In particular, the topics of interest include, but are not limited to:

- Bioinspired nanomaterials and nanocomposites;
- Self-healing nanomaterials and nanocomposites;
- Smart structures with shape memory capabilities;
- ...

Guest Editor

Dr. Fariborz Tavangarian

1. Mechanical Engineering Program, Pennsylvania State University, Harrisburg, Middletown, PA 17057, USA

2. Department of Biomedical Engineering, Pennsylvania State University, University Park, State College, PA 16802, USA

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

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

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