Special Issue

Symmetry in Graphene and Nanomaterials

Message from the Guest Editors

Graphene nanocomposites are composites in which graphene or its derivatives are added to the matrix material to improve the overall properties of the composite. These composites are widely used in various fields due to their excellent physical and chemical properties such as high strength, high electrical conductivity, and high thermal conductivity. The following are some of the key points of graphene nanocomposites. (1) Enhanced strength and toughness; (2) Excellent electrical conductivity; (3) Excellent thermal conductivity; (4) Lightweight. However, graphene nanocomposites have also encountered many challenges: (1) Uniform dispersion; (2) Interfacial binding; (3) Cost-effectiveness. This Special Issue focuses on the symmetry in graphene and nanomaterials towards high mechanical–electrical–thermal properties, especially the effects for interfacial electrical/thermal/force resistance, graphene agglomeration, and percolation threshold phenomena.

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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

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