Special Issue

Graphene Foam Based Composites

Message from the Guest Editors

The advent of carbon nanomaterials has had a profound impact on materials engineering and technology at large, due to the exceptional properties of these materials. Graphene foam is a new class of material that addresses one of the most significant challenges hindering the broad implementation of nanocarbon-reinforced composites—*dispersion.* Graphene foam presents a unique and intrinsic solution to the problem of nanoparticle dispersion by providing a pre-existing three-dimensional template structure consisting of graphene nanoplatelets. This Special Issue seeks to present the latest findings in the exciting field of graphene-foam-based composites, including polymer, metal, and ceramic matrix composites. Graphene foam composites have shown exciting properties and potential applications, including de-icing films and coatings, biocompatible scaffolds, electrochemical platforms, and embedded sensors. The fundamental properties of graphene foam composites are still being explored, including deformation mechanisms, transport properties, and the effect of the synthesis route on microstructural evolution.

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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