Special Issue

Recent Advances in Functional Polymer Nanocomposites

Message from the Guest Editor

A nanocomposite is defined as a multiphase solid material with at least one of the dimensions of one of the constituents on the nanometer scale. Polymer nanocomposites are defined as a mixture of two or more materials, where the matrix is a polymer and the dispersed phase has at least one dimension less than 100 nm. Typical polymer nanocomposites are materials that incorporate nanosized particles in a matrix of polymer material. The inclusion of the nanoparticles induces significant improvements in a variety of properties. Because of high interface areas and strong interfacial interaction between dispersed phase and matrix phase, the nanocomposites possess unique, enhanced properties compared to conventional macro- or micro-composites, including mechanical, electrical, thermal, optical and electrochemical properties. The contents of the Special Issue will specifically, though not exclusively, include:

- polymer nanocomposite
- thin film
- interfacial interaction

Guest Editor

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Deadline for manuscript submissions

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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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