Special Issue

Structure, Properties and Applications of Nanocomposites and Polymer Based Materials

Message from the Guest Editor

Nanocomposite materials are composed of resin, rubber, ceramics, and metals, which act as the continuous phase, and nanoscale metals, semiconductors, rigid particles and other inorganic particles, fibers, carbon nanotubes, and other modifiers, which act as the dispersed phase. Through appropriate preparation methods, the modifiers are uniformly dispersed in matrix material to form a composite system containing nanoscale materials. This system of materials is called nanocomposite materials. Polymer materials, also known as polymer materials, have polymer compounds as the matrix and other additives (additives). Composite materials are widely used in aerospace, defense, transportation, sports and other fields due to their excellent comprehensive performance, especially their designability. Nanocomposites and polymer composites are the most attractive parts among them. It is particularly necessary to conduct research on the structures, properties, and applications of nanocomposites and polymer-based materials, as this will contribute to the development of advanced composite material technology.

Guest Editor

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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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