Special Issue

Multifunctional Polymer Nanocomposites

Message from the Guest Editors

With the rapid advancements in nanotechnology, it has now become feasible to produce hierarchically structured polymer composites, encompassing fillers such as carbon nanotubes (CNTs), carbon nanofibers (CNFs), and graphene-based and other inorganic inclusions. These nanocomposites exhibit various physiochemical properties, which may not be attainable by the individual component. The synergy of nanocomposite design with advanced 3D printing techniques has also opened opportunities to produce engineering materials with tailored properties including multi-functionality, i.e., mechanical, thermal, electrical, optical, etc. Various advantages of the "nano-effects" observed include increased conductivity, improved biodegradability, and reduced flammability, which are all factors of the interface between the macromolecule of the polymer and the nano-sized heterogeneities. The current research on nanocomposites is centered on various applications such as nanobiomaterials, nanoelectronics, nanocomposite-based drug-delivery systems and supercapacitors, etc.

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Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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