

Special Issue

Polymer Nanocomposites: State of the Art and Future Prospects

Message from the Guest Editors

Recently, a revolutionary new class of materials, known as polymer nanocomposites, has emerged. These combine the desirable properties of polymers with the exceptional properties of nanomaterials. Significant advances have been made in synthesizing and modifying nanomaterials, as well as a deeper understanding of how polymers and nanofillers interact. Polymeric nanocomposites are hybrid materials in which a polymer matrix is reinforced with nanoparticles, nanotubes, nanofibers, or other nanomaterials. Due to their unique characteristics, nanofillers can manipulate material properties on a molecular level, resulting in materials with superior performance and innovative features. The purpose of this Special Issue, Polymer Nanocomposites: State-of-the-Art and Future Prospects, is to provide a comprehensive overview of the state-of-the-art polymer nanocomposites research and development, addressing scientific advancements and prospects. A wide range of topics will be discussed, including nanocomposite synthesis and characterization and their applications in packaging, electronics, sensors, biomedicine, energy, and others.

Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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