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Advances in Polymer Nanocomposites: Fabrication, Characterization and Multifunctional Applications

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Message from the Guest Editors

Dear Colleagues,

Polymer nanocomposites are an important novel class of engineering materials in both everyday life and high-tech applications. The versatility of the employed polymer matrices (thermoplastics, thermosets, elastomers, biopolymers, polymer blends, etc.) and the reinforcing phases (inorganic/organic nanofibers, nanotubes, nanoparticles, 2D nano-inclusions, etc.) provides an enormous number of possible nanocomposites with properties which can be tailored or adjusted according to the applications' specifications.

This Special Issue welcomes original research and review papers presenting experimental or theoretical/computational studies of all kinds of polymer-based nanocomposites. Design and fabrication, thermo-mechanical performance, fire retardants, biological systems, biomedical applications, electrical engineering devices, stimuli-responsive materials, smart materials, structure-properties relationships, polymer matrix nanocomposites and hybrids and all current and forthcoming applications comprise a short list of the possible subjects for this Special Issue.

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Guest Editors





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