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Synthesis and Application of Nanocomposite Materials

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Deadline for manuscript submissions:

closed (10 April 2025)

Message from the Guest Editors

Dear Colleagues,

In the realm of material science, the spotlight is now firmly fixed on nanocomposites, captivating the scientific community with their remarkable potential to enhance the intrinsic qualities of polymers while introducing innovative functionalities.

This Special Issue has been curated to shine a spotlight on the most recent and groundbreaking developments within the world of nanoparticles and nanocomposites, with a particular emphasis on the remarkable multifunctionality that nanostructures bring to a diverse array of applications. Of note are the cutting-edge advances in creating novel strain sensors and solid polymer electrolytes, elevating the performance of structural batteries and supercapacitors, and pioneering biosensors and human motion detectors. Moreover, we eagerly welcome studies that investigate the influence of nanostructures on other aspects, boosting the performance of conventional polymers and polymer matrix composites. Theoretical models focused on the mechanical, electrical, thermal, electrochemical, or biological behavior of nanostructured polymers are also warmly encouraged.



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Special Issue



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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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