

Special Issue

Advancements in Polymer Functionalization Methods Toward Smart, Sustainable and High-Performance Materials

Message from the Guest Editors

Recent advances in polymer science have enabled transformative material innovations through precise post-synthesis modifications. The scope of polymer functionalization has expanded to include remote activation methods such as radiation, plasma, and photonic techniques. This allows the creation of smart and sustainable materials for biomedical, energy, and environmental applications. This Special Issue invites original research and comprehensive reviews focusing on the emerging functionalization strategies that address modern challenges. Contributions are welcome in areas including, but not limited to, the following: radiation-grafted polymers for drug delivery systems, environmentally benign modifications, multifunctional nanocomposites, and structurally responsive biomaterials. Our goal is to consolidate the current state of the art in polymer modification with a forward-looking perspective that promotes innovation, sustainability, and performance.

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Message from the Editor-in-Chief

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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