Special Issue

State-of-the-Art Nanomaterials in Energy and Environmental Applications

Message from the Guest Editors

Advanced nanomaterials are transforming applications, enhancing material performance, and meeting the rising demands of supercapacitors and wastewater treatment. Nano-additives and nanostructured frameworks offer unique solutions. Recent advancements in nanotechnology have opened new possibilities in energy storage and environmental preservation. Nanomaterials like nanofibers, nanoparticles, nanoplates, and nanorods are revolutionizing supercapacitors and wastewater treatment. Their uses range from boosting energy storage to efficient wastewater management. Research must focus on high-performance polymers and composites for supercapacitors and wastewater treatment. Our Special Issue highlights the latest breakthroughs in nanostructured materials, focusing on their use in these areas. Topics include tissue scaffolds, drug delivery, regenerative medicine, filtration, and environmental toxicology. Integrating nanostructures and innovative nanomaterials for energy and wastewater challenges is pivotal. We believe this Special Issue will offer innovative solutions to meet the growing demands in these crucial fields.

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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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