Special Issue

Nanomaterials as Photocatalysts: Synthesis, Characterization, and Applications

Message from the Guest Editors

This Special Issue delves into the intriguing field of nanomaterials as photocatalysts, focusing on their synthesis, characterization, and diverse applications. Nanomaterials, with their unique optical, electronic, and structural properties, are emerging as promising candidates for photocatalysis, which uses light energy to drive chemical reactions. This Special Issue highlights innovative synthesis methods to enhance photocatalytic efficiency and stability, alongside advanced characterization techniques that provide insights into their structural, electronic, and surface properties. It examines applications ranging from environmental pollutant remediation to hydrogen production and carbon dioxide conversion. By showcasing cutting-edge research in nanomaterials for photocatalysis, this Special Issue aims to deepen the understanding of fundamental principles and practical challenges, paving the way for novel solutions to global energy and environmental issues. It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.

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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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