

Special Issue

Advancements in Photocatalytic Nanostructures: Synthesis, Characterization and Applications

Message from the Guest Editor

This Special Issue aims to provide a comprehensive overview of the latest advancements in photocatalytic nanostructures, focusing on their synthesis, characterization, and diverse applications. As the global demand for sustainable energy solutions and environmental remediation continues to grow, photocatalysis has emerged as a promising approach to harnessing solar energy for various chemical transformations. We welcome contributions that explore novel synthetic methods for developing photocatalytic nanostructures, including but not limited to green synthesis, sol-gel processes, hydrothermal techniques, and innovative surface modification strategies. Furthermore, we seek research articles that highlight the practical applications of photocatalytic nanostructures in areas such as wastewater treatment, air purification, CO₂ reduction, and hydrogen production. By showcasing interdisciplinary approaches and real-world applications, this Special Issue aims to bridge the gap between fundamental research and technological implementation. We invite researchers to submit their work, with the aim of fostering vibrant discourse on the future of photocatalytic nanostructures.

Guest Editor

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Editor-in-Chief

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