Special Issue

High-Performance Nanocatalysts for Energy Conversion

Message from the Guest Editors

In the face of increasing energy demands and environmental challenges, the development of efficient and sustainable energy conversion technologies has become a global priority, and high-performance nanocatalysts are at the forefront of this effort, offering unique advantages such as high surface area, tunable properties, and enhanced reaction kinetics. These catalysts play a pivotal role in various energy conversion processes, including those governed by photocatalysis, electrocatalysis, and thermocatalysis. This Special Issue aims to provide a platform for researchers to showcase their latest advancements in the design, synthesis, and application of nanocatalysts for energy conversion. In this Special Issue, original research articles and reviews are welcome, and research areas may include (but are not limited to) the following: hydrogen production, hydrogen evolution reaction, oxygen evolution reaction, oxygen reduction reaction, CO2 conversion, fuel cells, metal-ion batteries, metal-air batteries, and water–gas conversion reactions. We look forward to receiving your contributions.

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