

Special Issue

Nanocatalyst for Water Splitting

Message from the Guest Editor

With the increasing energy consumption and environmental contamination, it is imperative to develop sustainable, fossil-free pathways to produce fuels and chemicals of global importance. Catalytic water splitting provides a promising way to convert the highly abundant resource—water into quite an ideal clean energy, i.e., hydrogen, via photo-/electrochemical processes. Nanocatalysts play a decisive role in these catalytic processes, and thus the design and development of efficient nanocatalysts for water splitting have attracted considerable attention in the past several decades. However, state-of-the-art nanocatalysts for water splitting are yet inadequate. The development of advanced nanocatalysts for photo-/electrocatalytic water splitting with sufficient performance remains a grand challenge. The present Special Issue of *Nanomaterials* is aimed at collecting and reporting research concerning nanocatalysts water splitting, involving inspirational synthesis methods, innovative modification strategies, outstanding catalytic performance, and comprehensive mechanism investigation.

Guest Editor

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano–alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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