Special Issue

Photo- and Electro-Catalysis of Nanomaterials for Energy Conversion and Storage

Message from the Guest Editors

Photo- and electro-catalysis are regarded as promising methods of eco-friendly and sustainable energy conversion and storage. Nanomaterials especially show a number of amazing and unexpected phenomena which have never been observed in bulky materials. As many research groups have reported interesting and excellent photo- and electro-catalytic material performances and physics in performance recently, we would like to take this opportunity to gather works with focused and narrowed topics in a Special Issue. This Special Issue aims to cover research on photo- and electro-catalysis of nanomaterials especially with following topics:

- Water splitting and hydrogen energy production
- Nitrogen reduction reaction
- CO2 conversion
- Metal-air battery
- Catalysis mechanism
- Modeling, simulations, and theory

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

