Special Issue

Metal-Based Photocatalysts: From Synthesis to Applications

Message from the Guest Editors

The development of metal-based photocatalysts for photocatalytic energy conversion has drawn significant attention in recent years, particularly in the context of H2 evolution. Achieving efficient photocatalytic H2 production requires overcoming critical challenges. including light absorption and charge carrier separation. Metal-based photocatalysts, including noble and transition metal-based composites, offer promising solutions to address these issues. This Special Issue aims to provide a comprehensive platform to showcase the latest advancements in metal-based photocatalysts for H2 evolution. Topics of interest include, but are not limited to design and synthesis of metal-based photocatalysts; advanced characterization techniques for studying metal-based composite photocatalysts; mechanistic insights into hydrogen evolution using metal-based composites: development of heterojunction photocatalysts incorporating noble or transition metals; exploration of metal-mediated charge carrier dynamics and their role in enhancing photocatalytic performance. We look forward to your valuable submissions.

Guest Editors

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Editor-in-Chief

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