



Photocatalysts for Hydrogen Evolution Reaction Based on ZnIn_2S_4 Materials

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Message from the Guest Editors

Dear Colleagues,

Photocatalytic hydrogen production is the best means available presently for human beings to obtain energy, but the important problem in this field is how to build highly active and low-cost photocatalysts. In recent years, the typical ternary metal sulfide of two-dimensional (2D) ZnIn_2S_4 nanosheets has been widely used in the photocatalytic field owing to its chemical stability, strong visible light absorption, and suitable band gap. Unfortunately, single-phase ZnIn_2S_4 nanosheets commonly exhibit serious agglomeration during the reaction process which seriously affects their photocatalytic activity. Among enormous modification methods, construction of heterojunction/homojunction between g- ZnIn_2S_4 and other semiconductor photocatalysts with an interleaved energy band position is an effective channel to improve photocatalytic activity. This Special Issue will present the most recent and significant developments in highly efficient ZnIn_2S_4 -based photocatalysts for hydrogen evolution reaction, where such systems are widely used. Original papers on the above topics and short reviews are welcome for submission.

