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Supporting Information

Microwave synthesis of ZnIn₂S₄/WS₂ composites for photocatalytic hydrogen production and hexavalent chromium reduction

Watcharapong Pudkon^{a,b}, Sulawan Kaowphong^{a,c}, Samuel Pattisson^d, Peter J. Miedziak^{d,e}, Hasliza Bahruji^d, Thomas E. Davies^d, David J. Morgan^d and Graham J. Hutchings^{d,*}

^a*Department of Chemistry, Faculty of Science, Chiang Mai University, Chiang Mai 50200, Thailand*

^b*Graduate School, Chiang Mai University, Chiang Mai 50200, Thailand*

^c*Center of Excellence in Materials Science and Technology, Chiang Mai University, Chiang Mai 50200, Thailand*

^d*Cardiff Catalysis Institute, School of Chemistry, Cardiff University, Main Building, Park Place CF10 3AT, Cardiff, UK*

^e*School of Applied Sciences, University of South Wales, Pontypridd CF37 4AT, UK*

Table S1. The apparent quantum yield (AQY) of the ZnIn₂S₄/WS₂ photocatalyst for the photocatalytic H₂ production compared with the previous literatures.

Photocatalyst	Weight of photocatalyst (mg)	Light source details	AQY (%)	Ref.
ZnIn ₂ S ₄ /WS ₂ (Our work)	100	150 W Xe lamp ($\lambda > 400$ nm)	9.22	-
ZnIn ₂ S ₄ /RGO/BiVO ₄	200	350 W Xe lamp ($\lambda > 420$ nm)	0.8	[1]
ZnIn ₂ S ₄ /g-C ₃ N ₄	500	300 W Xe lamp ($\lambda > 400$ nm)	0.28	[2]
ZnIn ₂ S ₄ /In ₂ S ₃	100	300 W Xe lamp ($\lambda > 400$ nm)	1.4	[3]
ZnIn ₂ S ₄ /RGO/MoS ₂	100	300 W Xe lamp ($\lambda > 420$ nm)	0.4	[4]
ZnIn ₂ S ₄ /NH ₂ -MIL-125(Ti)	50	300 W Xe lamp ($\lambda > 420$ nm)	4.3	[5]

Table S2. The apparent quantum yield (AQY) of the ZnIn₂S₄/WS₂ photocatalyst for the photocatalytic Cr(VI) reduction compared with the previous literature.

Photocatalyst	Weight of photocatalyst (mg)	Light source details	AQY (%)	Ref.
ZnIn ₂ S ₄ /WS ₂ (Our work)	100	150 W Xe lamp ($\lambda > 400$ nm)	5.89	-
ZnIn ₂ S ₄ /CaIn ₂ S ₄	50	300 W Xe lamp ($\lambda > 420$ nm)	6.6	[6]

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