Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting Information

Transition metal phosphide of nickel and cobalt modified $Zn_{0.5}Cd_{0.5}S$ for efficient photocatalytic hydrogen evolution with visible light irradiation

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Table S1. This experiment is compared with the hydrogen production of the previously reported Metal phosphating compounds..

Photocatalyst	Electron donor	amount of catalyst (mg)	Light Power	H_2 evolution ($\mu mol \cdot h^{-1}$)	Ref.
ZnCdS/NiCoP	Na_2S/Na_2SO_3	10 mg	5 W (LED)	12.80	This work
NP-CN	CH_3OH	50 mg	λ > 420 nm (Xe)	75.00	[1]
g-C_3N_4-Co_2P	TEOA	50 mg	λ > 420 nm (Xe)	28.00	[2]
$Co_2P/ZnIn_2S_4$	Na_2S/Na_2SO_3	5 mg	λ > 420 nm (Xe)	39.65	[3]
Co_2P/S-CN	TEOA	2 mg		0.40	
Fe_2P/S-CN	TEOA	2 mg	λ > 420 nm (Xe)	0.32	[4]
Ni_2P/S-CN	TEOA	2 mg		0.42	
$Ni_xCo_{1-x}P$/rGO/CN	Poly Lactic	10 mg	λ > 420 nm (Xe)	5.80	[5]
MOF-Fe-Ni-P	TEOA	5 mg	λ > 420 nm (Xe)	27.10	[6]
CoP/g-C_3N_4	Methanol	50 mg	UV – Vis (Xe)	52.00	[7]
CoP/BP	Na_2S/Na_2SO_3	10 mg	λ > 420 nm (Xe)	2.00	[8]
NiP/$Cd_{0.5}Zn_{0.5}S$	Na_2S/Na_2SO_3	50 mg	λ > 420 nm (Xe)	65.00	[9]
NiO/Ni_2P/CN	TEOA	5 mg	λ > 420 nm (Xe)	0.50	[10]

2.

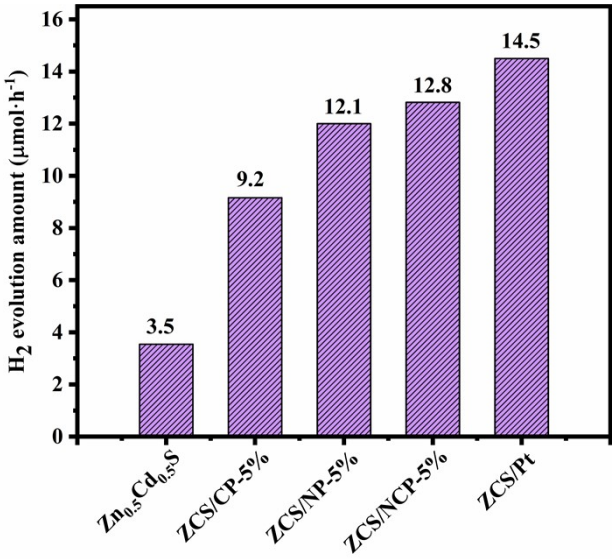

Fig. S1. Hydrogen production rates with different photocatalyst.

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