

Supporting Information

Enhanced photocatalytic hydrogen activities of CoV-LDH/ZnIn₂S₄ nanocomposites

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Table S1 Hydrogen production of ZnIn₂S₄-based photocatalysts

Catalysts	Light source	Sacrificial reagent	H ₂ yield (μmol·g ⁻¹)	Ref.
2.0%-CoV-LDH/ ZnIn ₂ S ₄	λ>400 nm 300 W Xe	Na ₂ SO ₃ / Na ₂ S	1397.3	This work
CoS/ZnIn ₂ S ₄	λ>350 nm 300 W Xe	TEOA	879	[S1]
SiO ₂ /ZnIn ₂ S ₄	sunlight	Na ₂ SO ₃ / Na ₂ S	796	[S2]
CuInS ₂ /ZnIn ₂ S ₄	λ>420 nm 300 W Xe	Na ₂ SO ₃ / Na ₂ S	1168	[S3]
AgIn ₅ S ₈ /ZnIn ₂ S ₄	λ>420 nm 300 W Xe	Na ₂ SO ₃ / Na ₂ S	949.9	[S4]
Ti ₃ C ₂ /ZnIn ₂ S ₄	λ>420 nm 300 W Xe	TEOA	978.7	[S5]
MoS ₂ -RGO/ ZnIn ₂ S ₄	λ>420 nm 300 W Xe	lactic acid	425.1	[S6]

Table S2 Apparent quantum efficiency of 2.0%-CoV-LDH/ZnIn₂S₄

Samples	420 nm	450 nm	475 nm
2.0%-CoV-LDH/ZnIn ₂ S ₄	11.53%	8.26%	2.14%

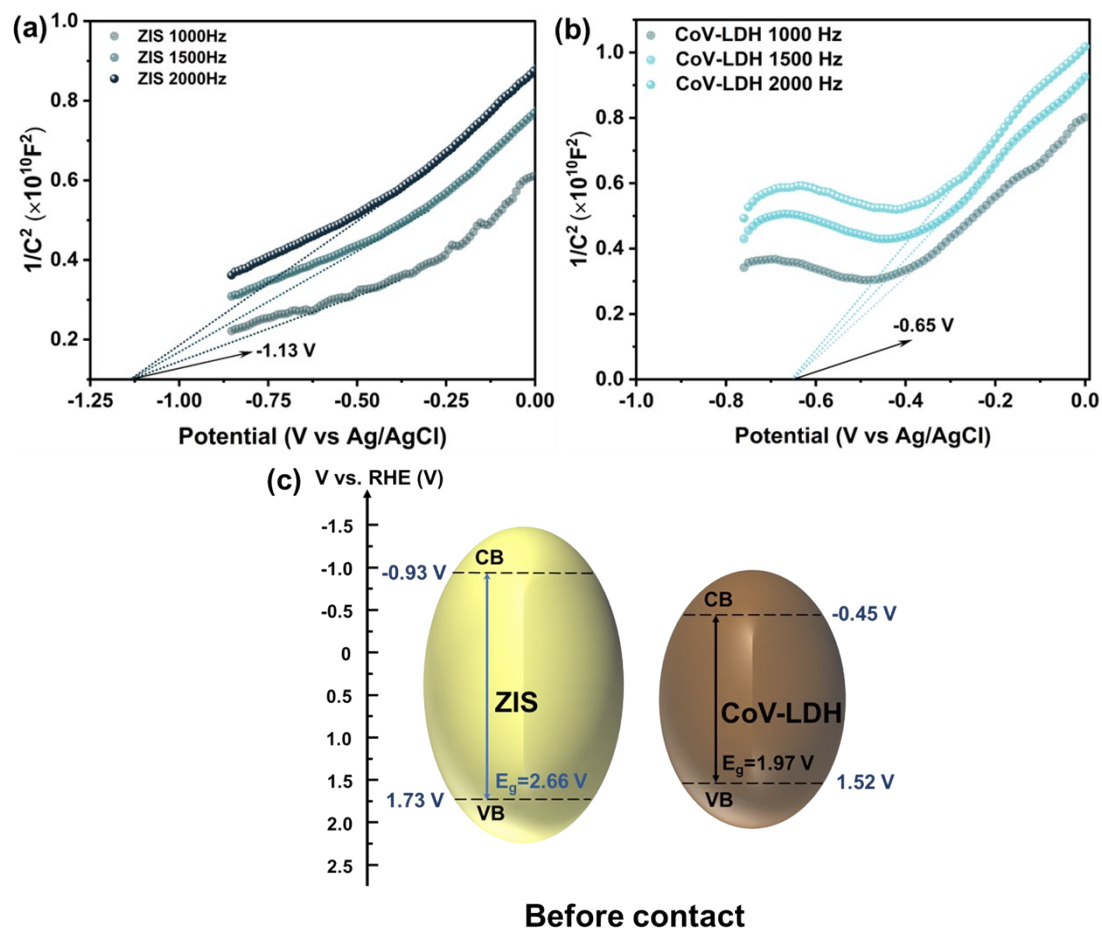


Figure S1 (a-b) Mott-Schottky plots of the CoV-LDH and ZIS CoV-LDH and ZIS samples. (c)

Band structure of CoV-LDH and ZIS.

References

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