

Supporting Information

Photochemical synthesis of bimetallic CuNiS_x quantum dots onto g-C₃N₄ as cocatalyst for high hydrogen evolution

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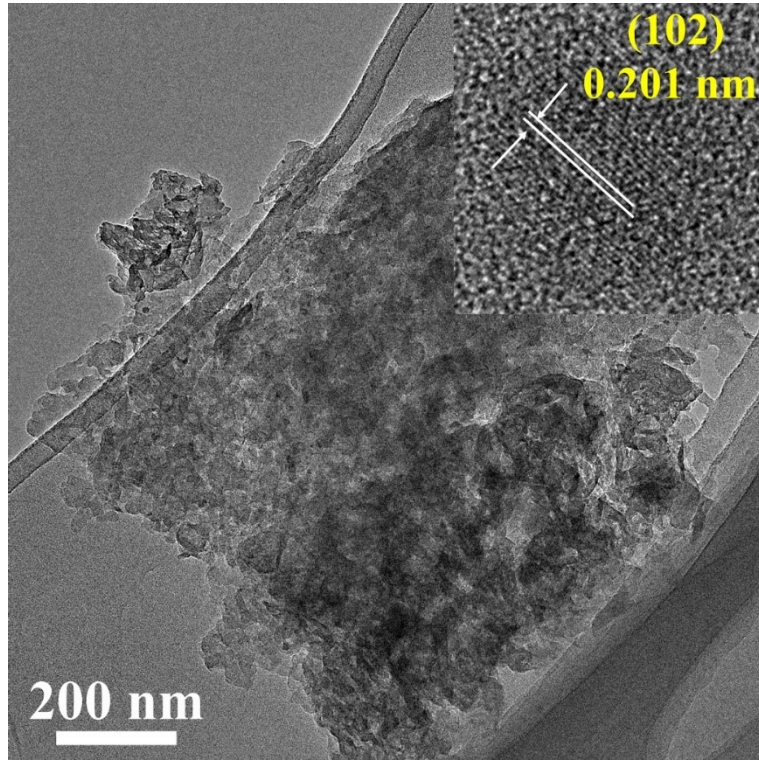


Fig. S1 TEM and HRTEM images of CN/NiS_x QDs.

Table S1 Fitting data results of CN/NiS_x QDs and CN/CuNiS_x QDs.

Sample	R _s (Ω)	R _{ct} (Ω)
CN/NiS _x QDs	3.148	1753
CN/CuNiS _x QDs	3.159	944

Table S2 AQE of CN/NiS_x QDs and CN/CuNiS_x QDs under monochromatic lights with different wavelengths.

Sample	λ (nm) - AQE (%)			
	420	450	500	550
CN/NiS _x QDs	1.33	0.38	0	0
CN/CuNiS _x QDs	3.21	0.97	0.23	0

Table S3 The comparison of photocatalytic hydrogen performance of the CN/CuNiS_x QDs with other cocatalysts based g-C₃N₄ photocatalysts.

Photocatalyst	Method	HER ($\mu\text{mol}\cdot\text{h}^{-1}\text{g}^{-1}$)	Ref
CN/CuNiS _x QDs	Photochemical	1061	This work
NiS/CN	Photodeposition	244	1
Ni _x /Co _{1-x} /CN	Hydrothermal	1420	2
NiS-CuS/CN	Hydrothermal	1602	3
C/NiS/CN	Coupled	366.4	4
Ni/NiS/CN	Three-step	515	5
CuS/NT	Sonochemical	348	6
PtNi _x /CN	Sulfidization	4966	7

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