## MoC@NC as a cocatalyst modified ZnIn<sub>2</sub>S<sub>4</sub> with strong 2D/2D hetero-interface interaction for efficient H<sub>2</sub> evolution

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Table S1 The light intensity of the Xenon lamp at different wavelengths.

Wavelength(nm)	420	450	500	550	600
Light intensity(mW·cm <sup>-2</sup> )	12.3804	12.0411	20.0861	23.6001	21.6074



Figure S1 TEM and HRTEM imagies of MoC@NC.



Figure S2 The ZIS and MoC@NC (7 *wt* %)/ZIS samples: (a) Nitrogen adsorption-desorption isotherms and (b) pore size distribution



Figure S3 XPS spectra of ZIS, MoC@NC and 7 wt% MoC@NC/ZIS: (a) survey spectra; (b) C1s;

(c) N 1s.



Figure S4 XRD patterns of 7 wt% MoC@NC/ZIS after six cycles of photocatalysis.



Figure S5 PL spectra of ZIS and 7 wt %MoC@NC/ZIS.



Figure S6 CPDs of ZIS and MoC@NC surface related to Au reference at single-point measurement over 800 points.