

Supplementary Information

Novel mesoporous P-doped graphitic carbon nitride nanosheets coupled with ZnIn₂S₄ nanosheets as efficient visible light driven heterostructures with remarkable enhanced photo-reduction activity

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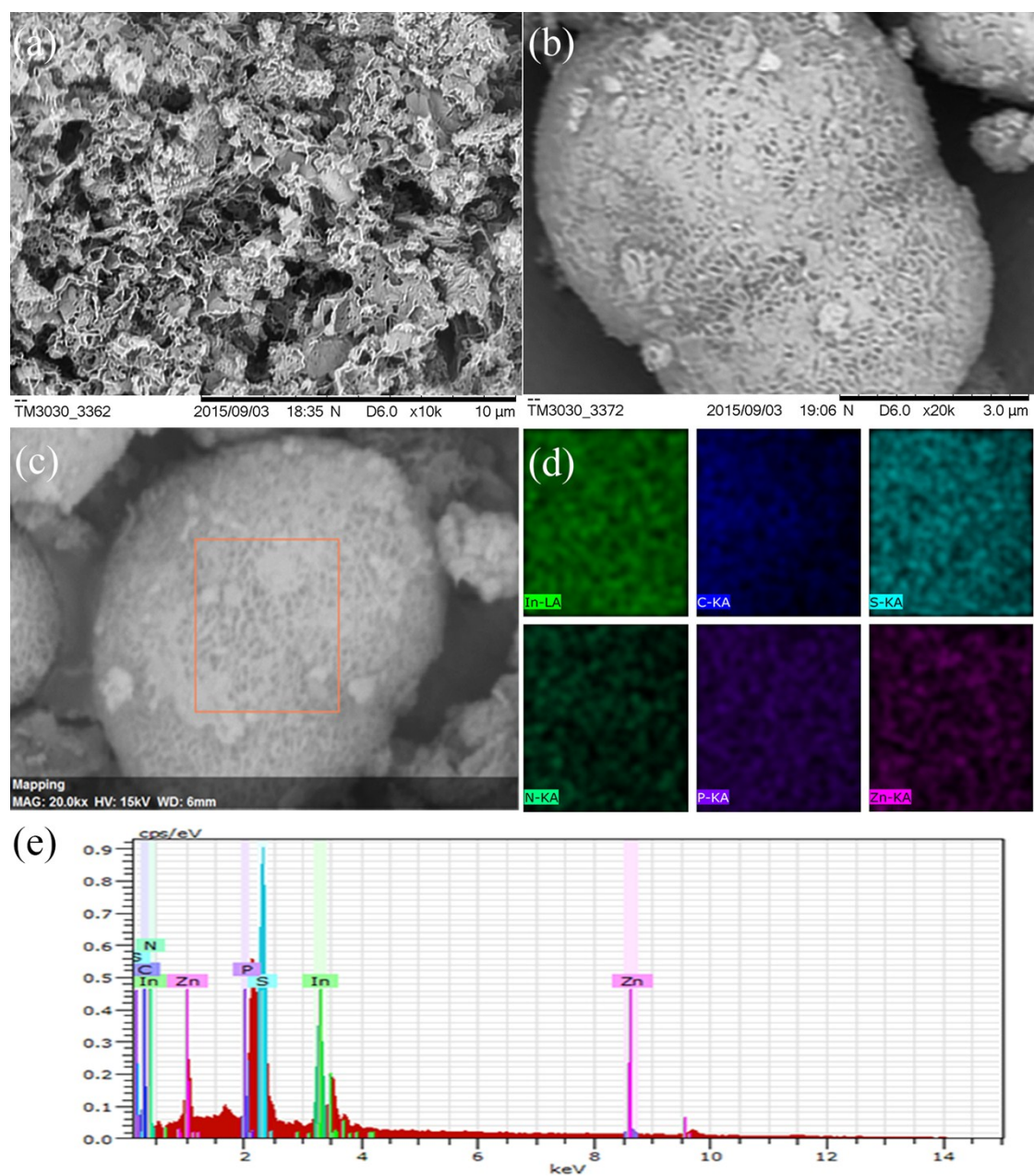


Fig. S1 SEM images of (a) pure $\text{P-C}_3\text{N}_4$ and (b,c) 20 wt% $\text{P-C}_3\text{N}_4/\text{ZnIn}_2\text{S}_4$ nanocomposites; (d) corresponding elemental mapping images; (e) EDS spectrum of 20 wt% $\text{P-C}_3\text{N}_4/\text{ZnIn}_2\text{S}_4$ sample.

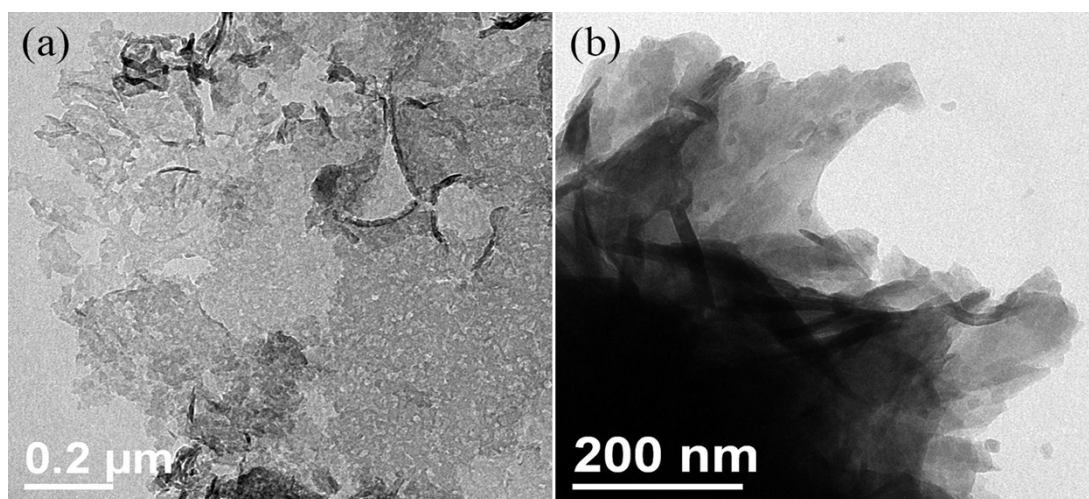


Fig. S2 TEM images of (a) bare P-C₃N₄ and (b) pure ZnIn₂S₄ sample.

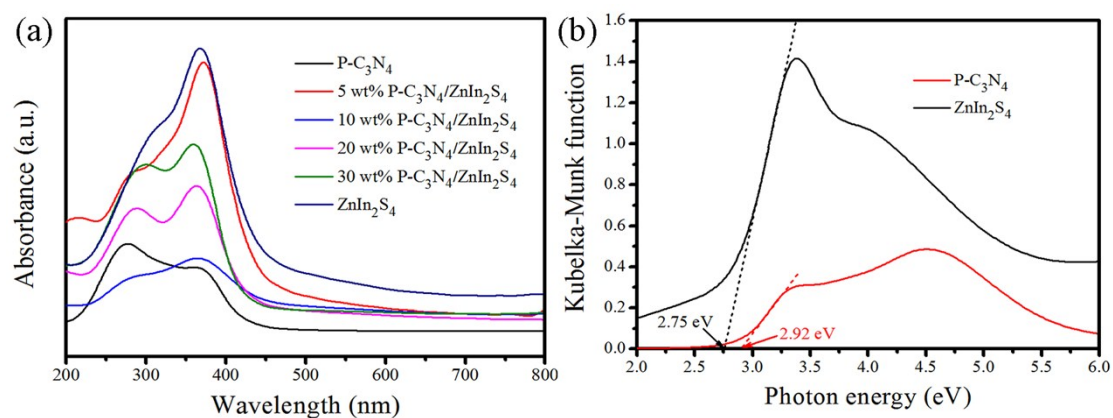


Fig. S3 (a) UV-Vis diffuse reflectance spectra of the as-prepared photocatalysts and (b) the Kubelka-Munk plots for corresponding samples.

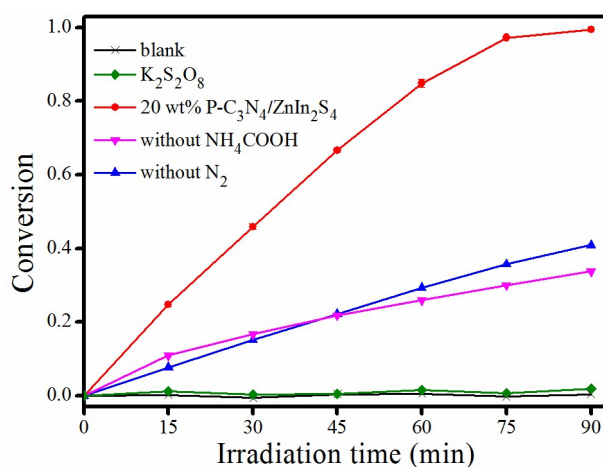


Fig. S4 Photocatalytic conversion of 4-NA in different condition under visible light irradiation ($\lambda > 400$ nm).

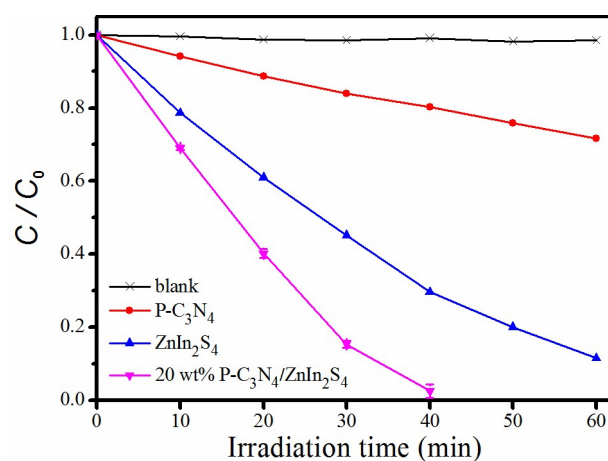


Fig. S5 The photocatalytic degradation for removal of MO aqueous solution. (Condition: 15mg catalyst, 30mL, 20mg/L MO, $\lambda > 400$ nm)

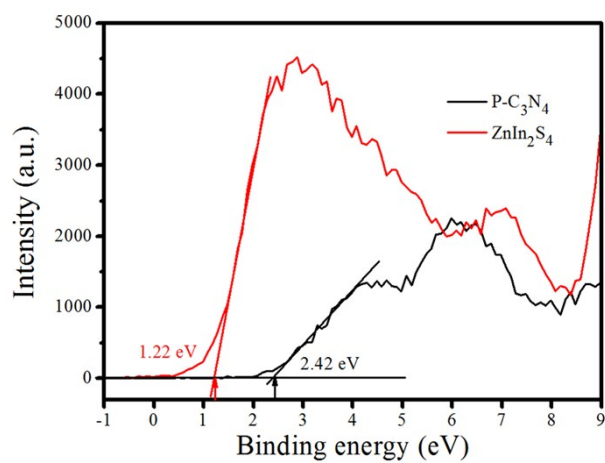


Fig.S6 VB-XPS spectra of pure P-C₃N₄ and single ZnIn₂S₄ sample.