

Supporting Information

Syntheses of asymmetric zinc porphyrins bearing different pseudo-pyridine substituents and their photosensitization for visible-light-driven H₂ production activity

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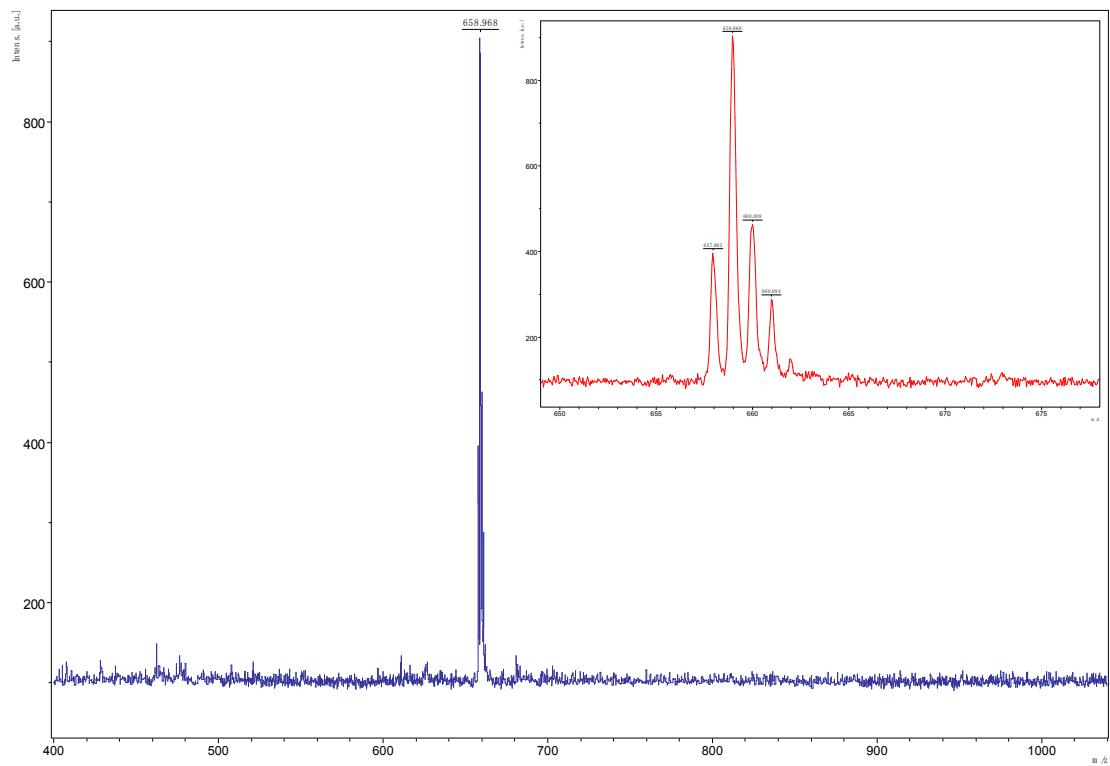


Figure S1. MALDI-TOF mass spectrum of H₂Py-1.

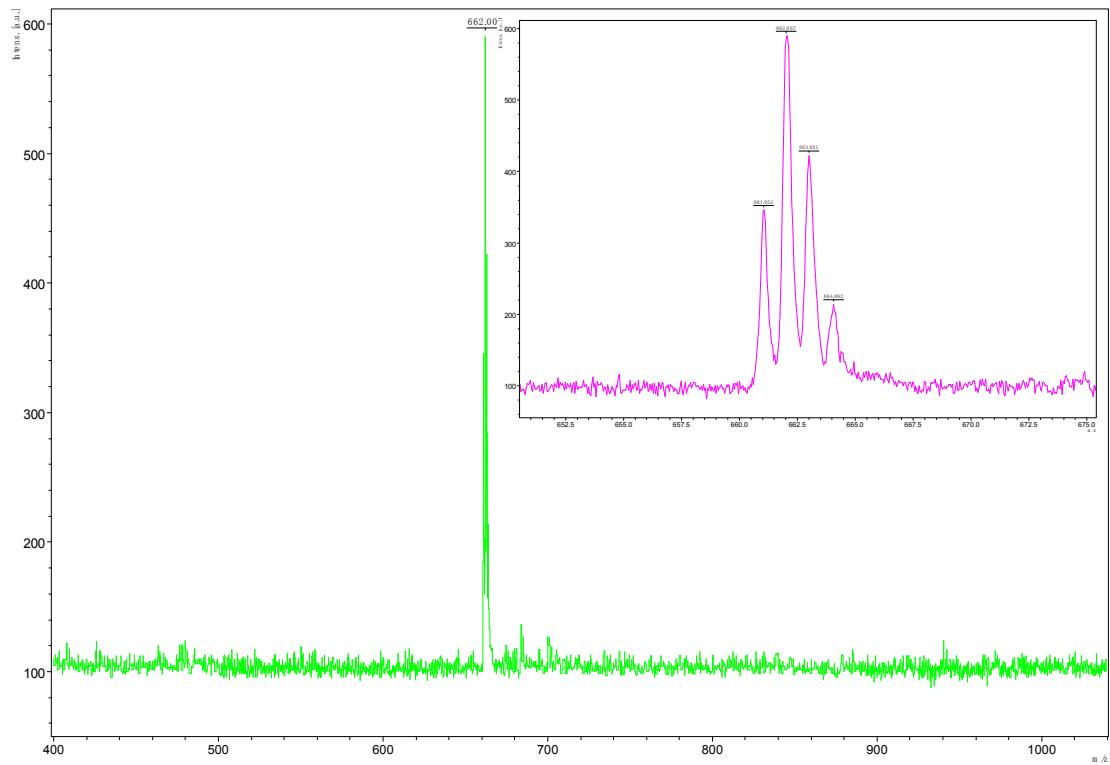


Figure S2. MALDI-TOF mass spectrum of H₂Py-2.

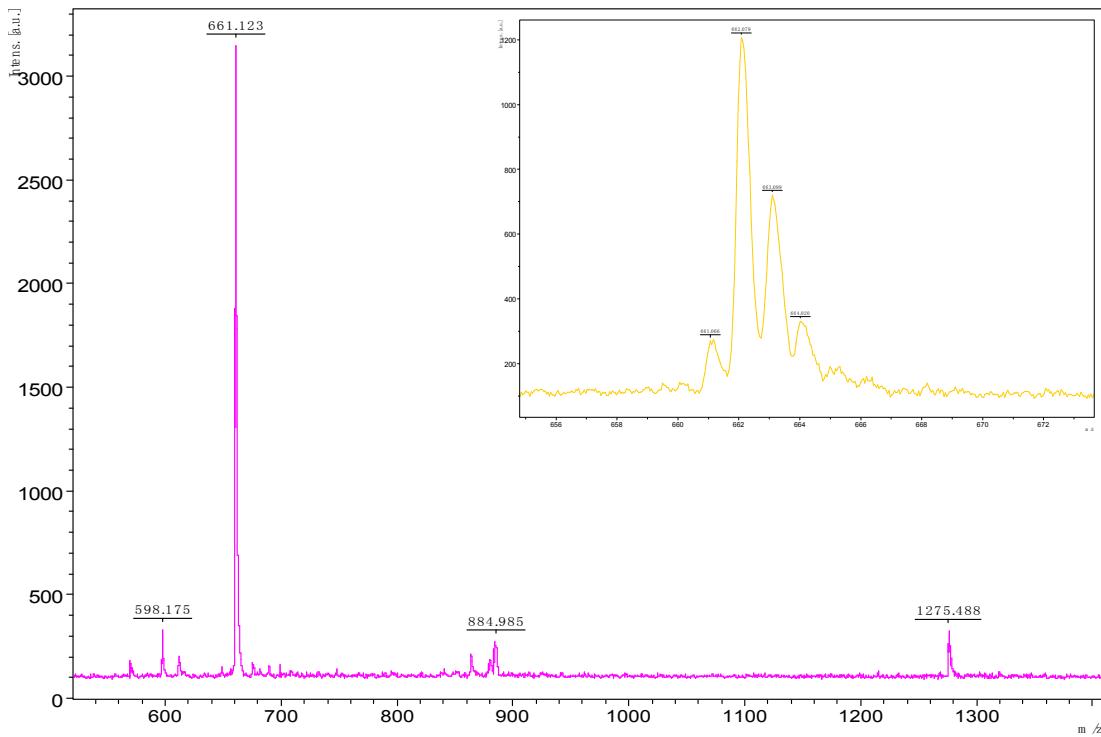


Figure S3. MALDI-TOF mass spectrum of H₂Py-3.

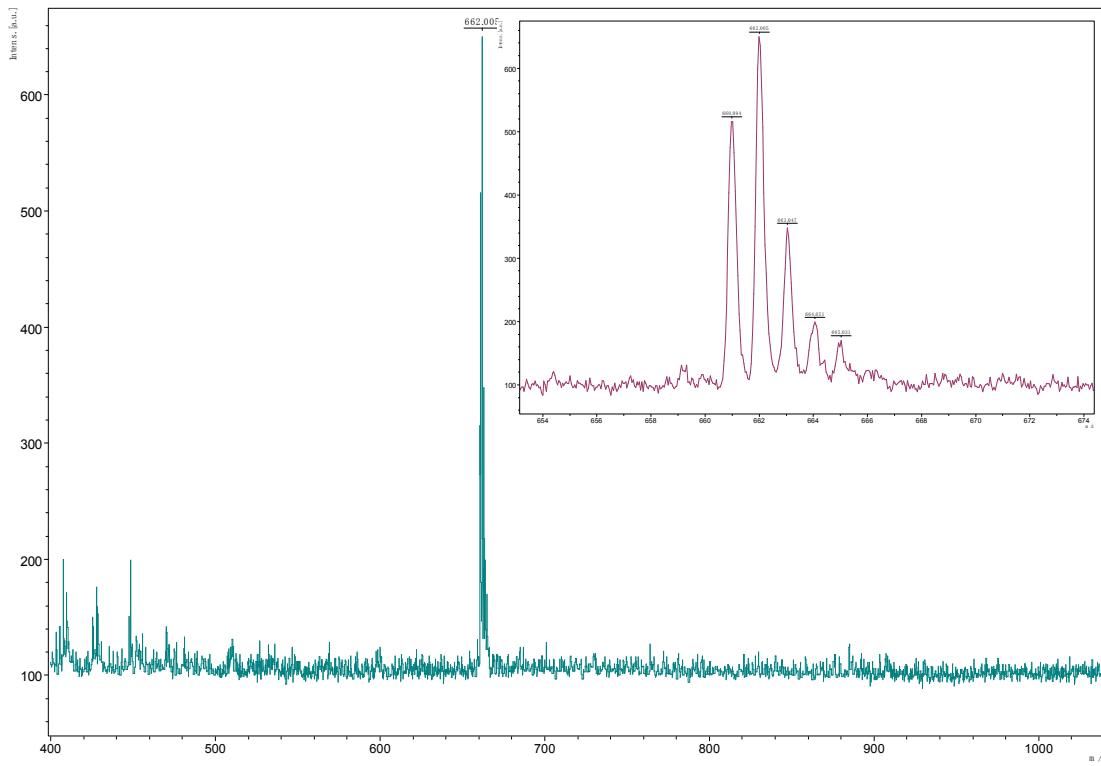


Figure S4. MALDI-TOF mass spectrum of H₂Py-4.

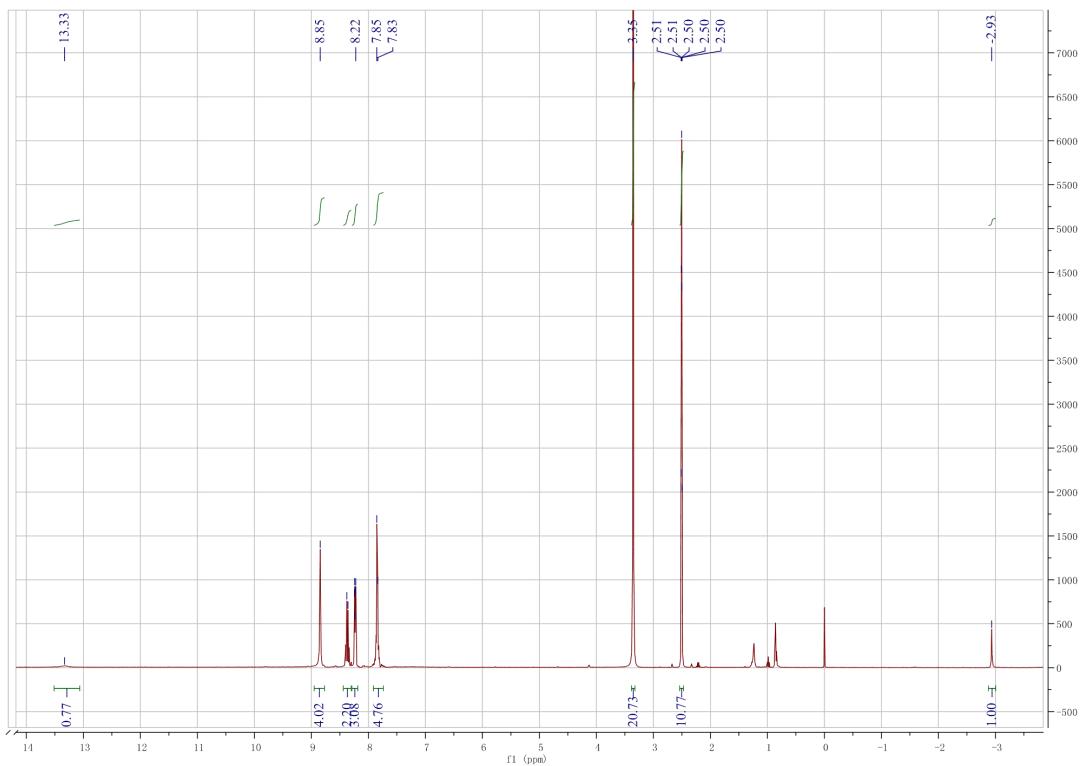


Figure S5. ^1H NMR (in DMSO-d_6) spectrum of the molecular ion of $\text{H}_2\text{Py-1}$.

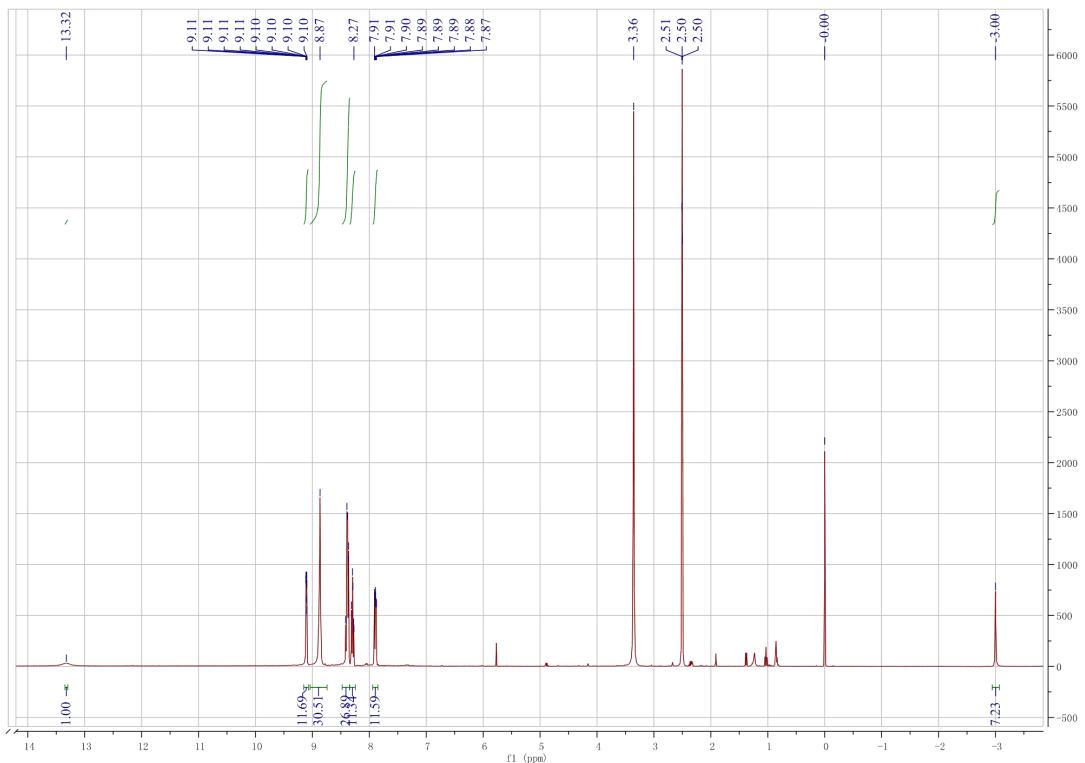


Figure S6. ^1H NMR (in DMSO-d_6) spectrum of the molecular ion of $\text{H}_2\text{Py-2}$.

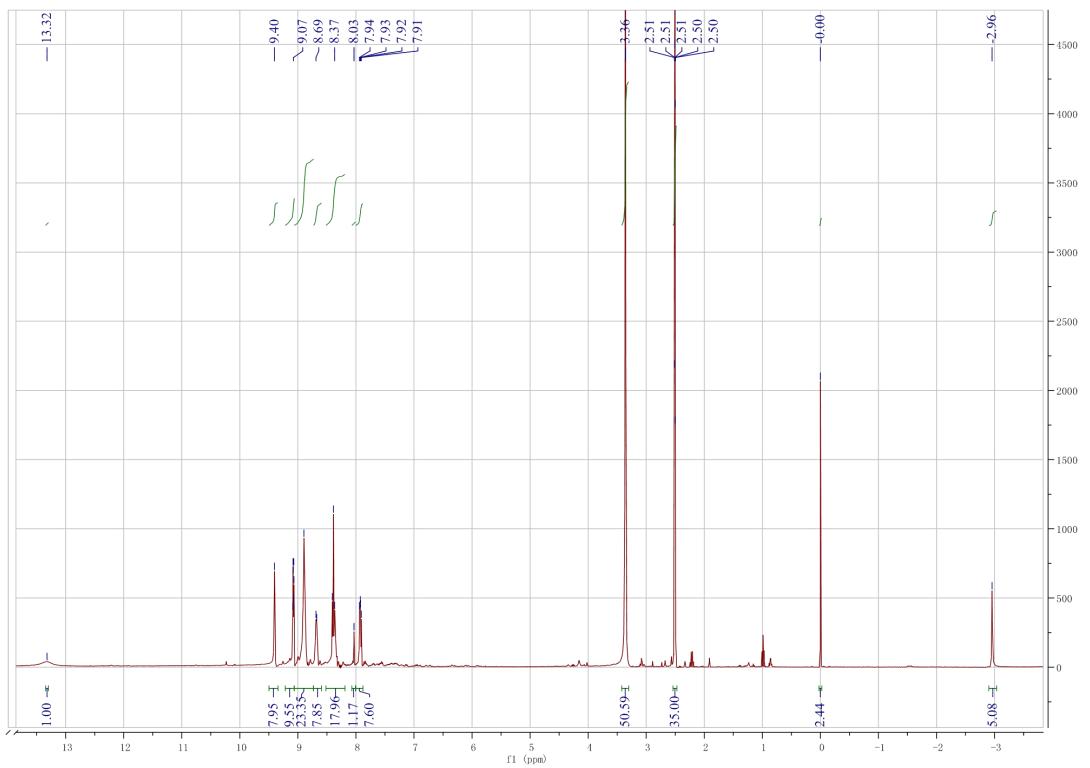


Figure S7. ^1H NMR (in DMSO-d_6) spectrum of the molecular ion of $\text{H}_2\text{Py-3}$.

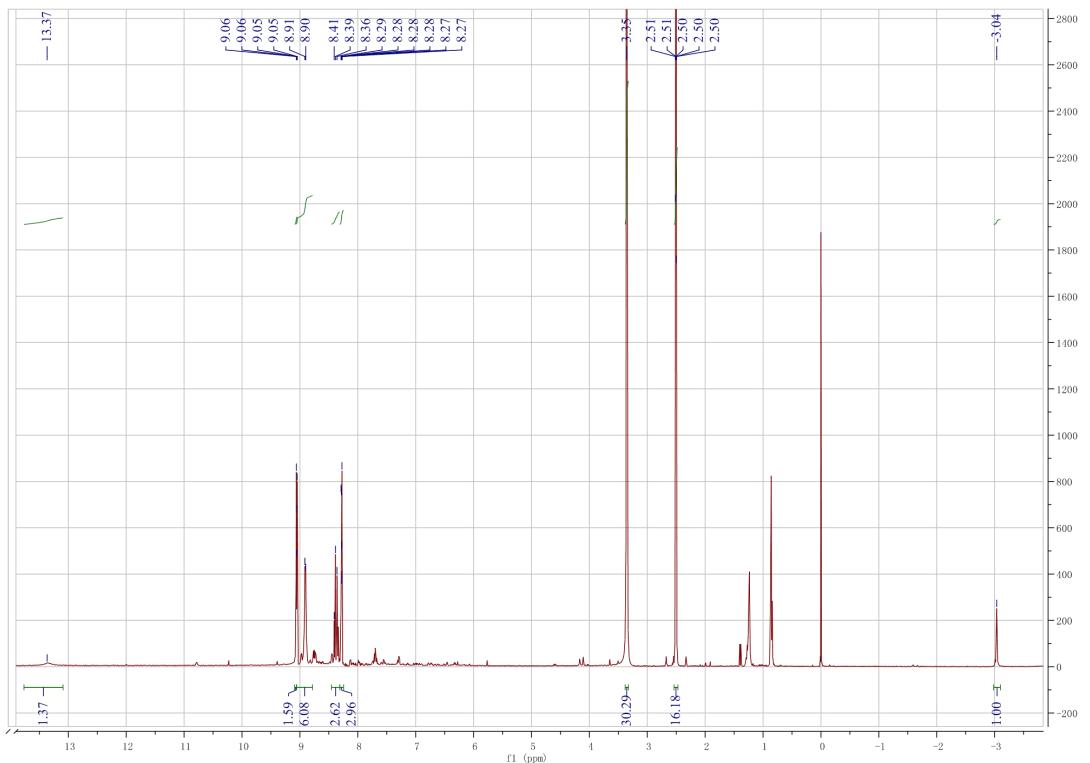


Figure S8. ^1H NMR (in DMSO-d_6) spectrum of the molecular ion of $\text{H}_2\text{Py-4}$.

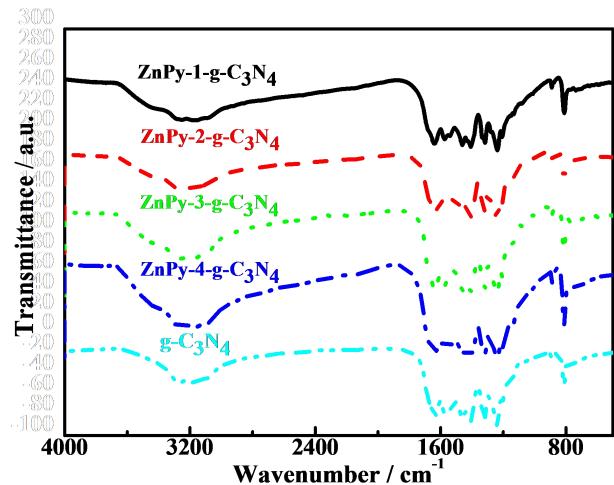


Figure S9. Comparison of the FTIR spectra of $\text{g-C}_3\text{N}_4$ and its ZnPy-sensitized products.

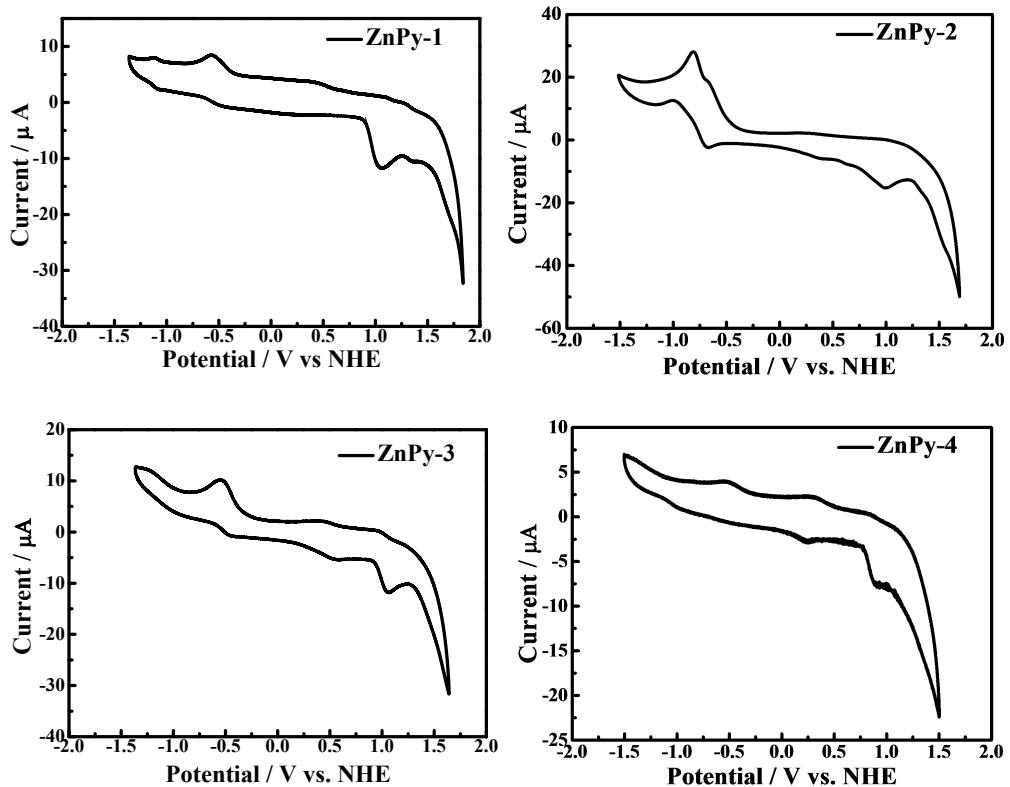


Figure S10. The typical cyclic voltammogram of ZnPys in DMF containing 0.1 M $[\text{NBu}_4][\text{ClO}_4]$ at a scan rate of $100 \text{ mV} \cdot \text{S}^{-1}$.

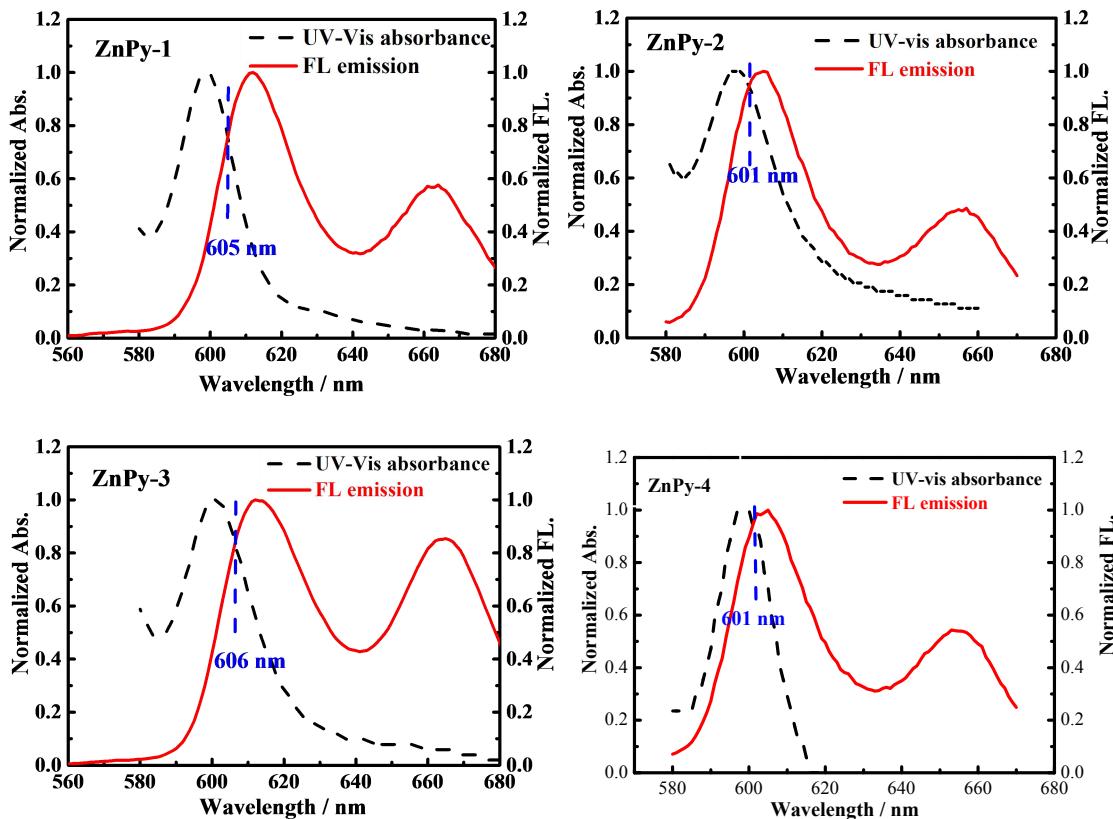


Figure S11. UV-vis absorption and fluorescence emission spectra of ZnPys in DMF solution with excitation fixed at 426 nm.

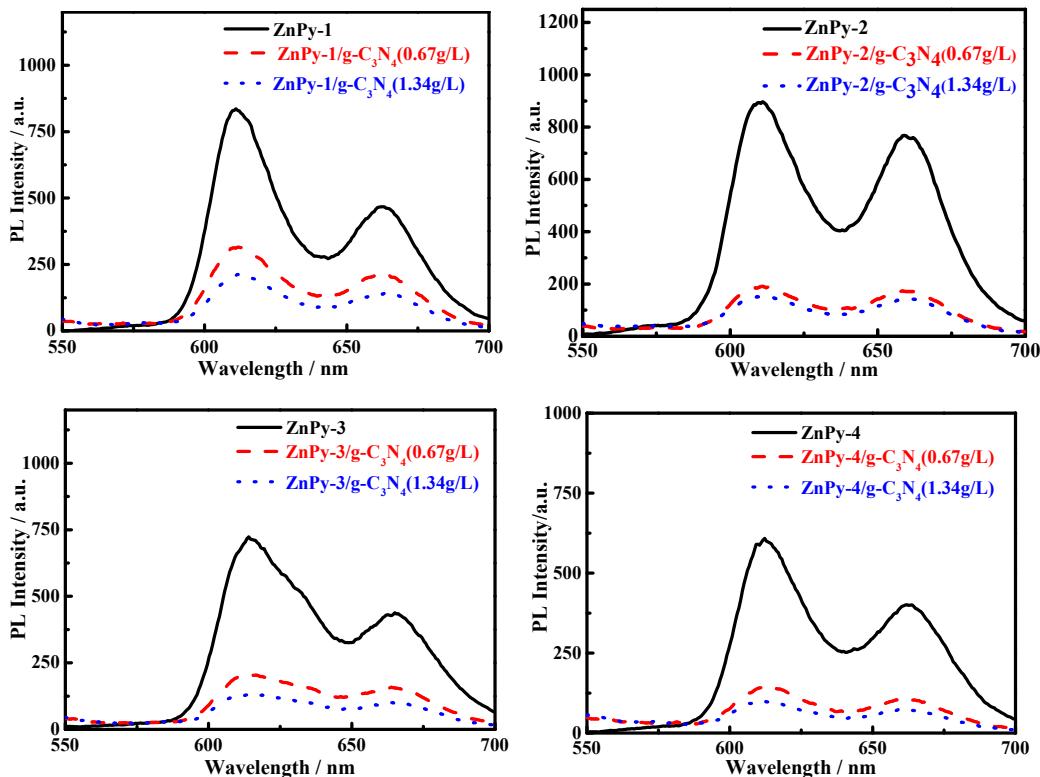


Figure S12. Photoluminescence spectra (excited at 426 nm) of ZnPys and g-C₃N₄/ZnPys dispersion (0.67 g L⁻¹ and 1.34 g L⁻¹), DMF was used as the solvent.

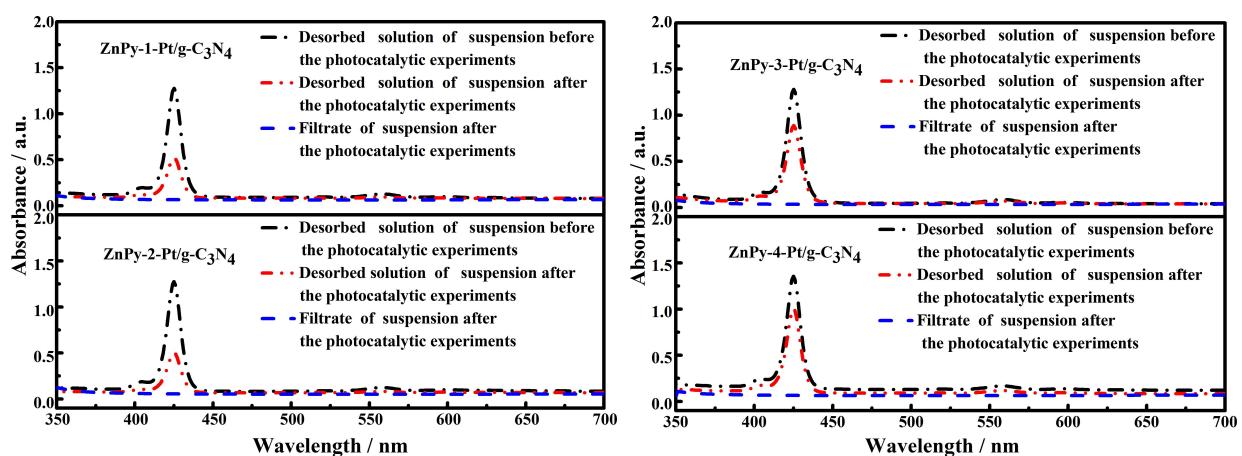


Figure S13. The UV-vis absorption spectra of ZnPys-Pt/g-C₃N₄ before and after the photocatalytic experiments.