

Supporting Information

Polyvinyl alcohol as solid proton donor to modify g-C₃N₄ via hydrogen bonding enabling efficient photocatalytic H₂O₂ production in H₂O and O₂

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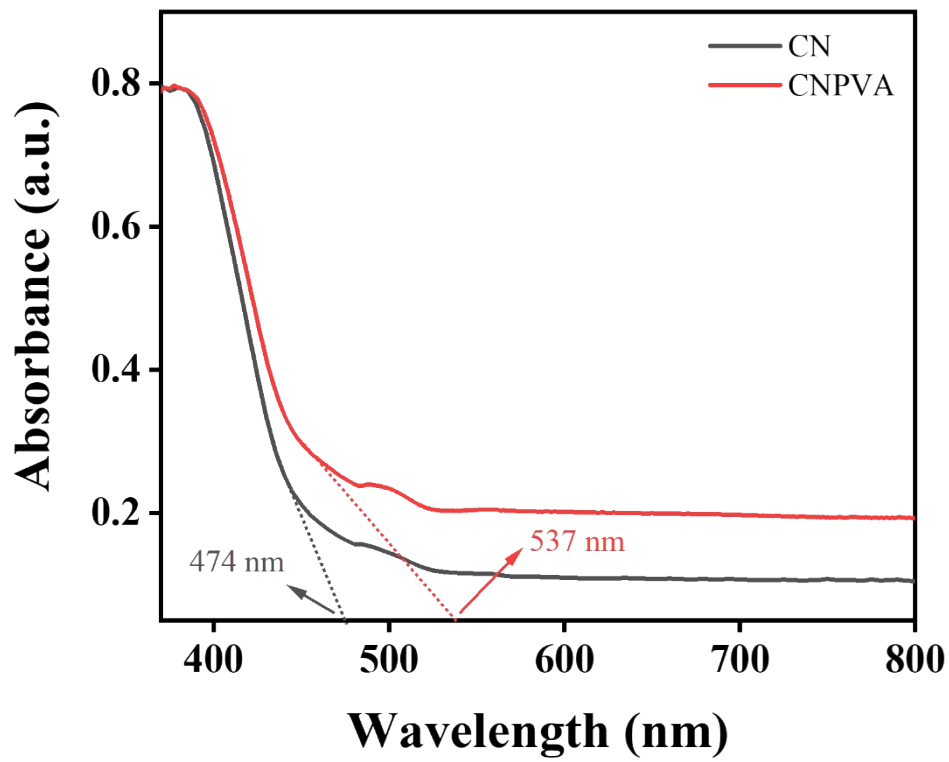


Figure S 1 UV-vis spectra of CN and CNPVA.

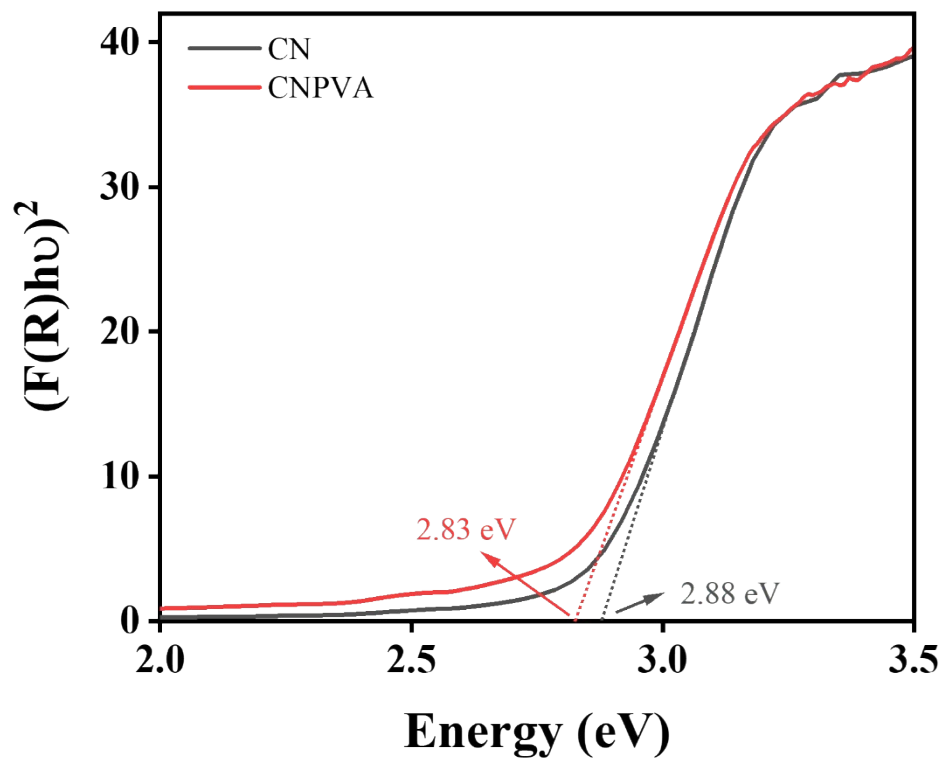


Figure S 2 Tauc plots of CN and CN/PVA.

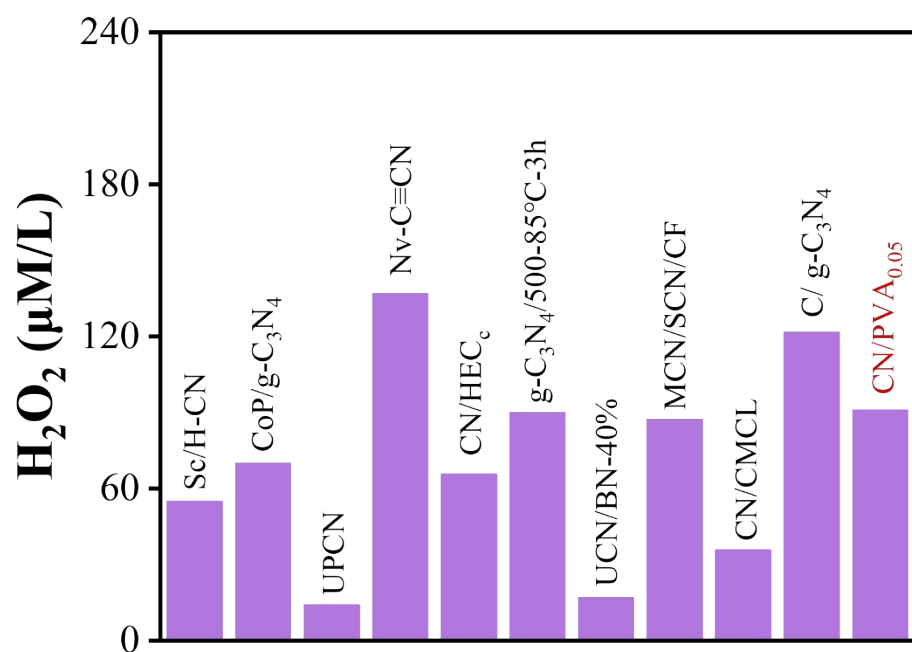


Figure S 3 A comparison of photocatalytic H₂O₂ production rates for g-C₃N₄ related photocatalysts. ¹⁻¹⁰

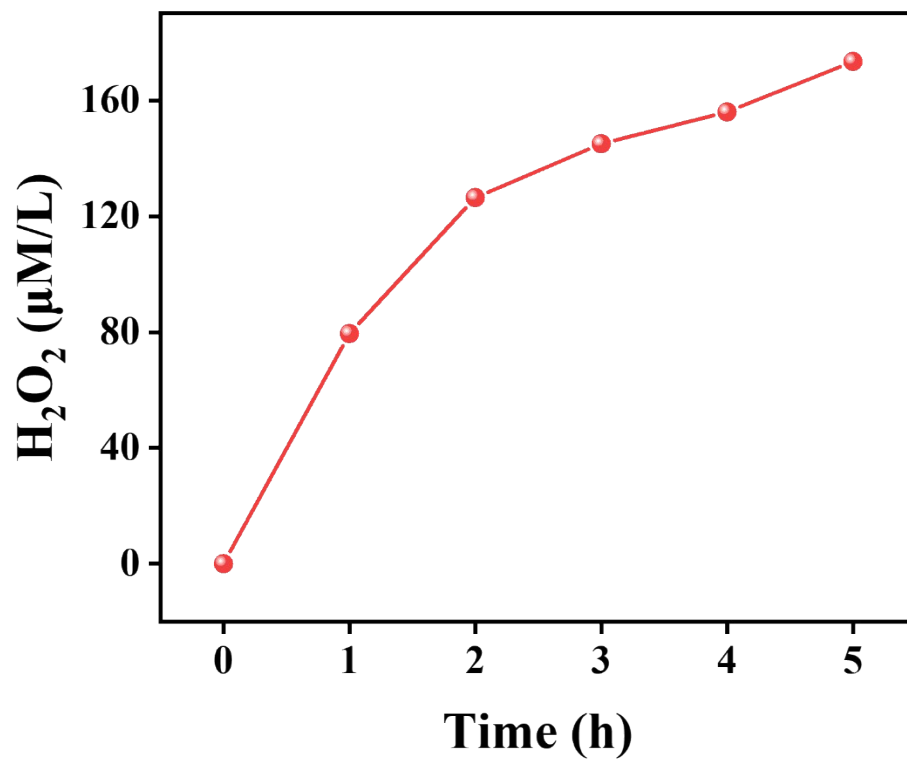


Figure S 4 H_2O_2 photosynthesis of CN/PVA in a prolonged test.

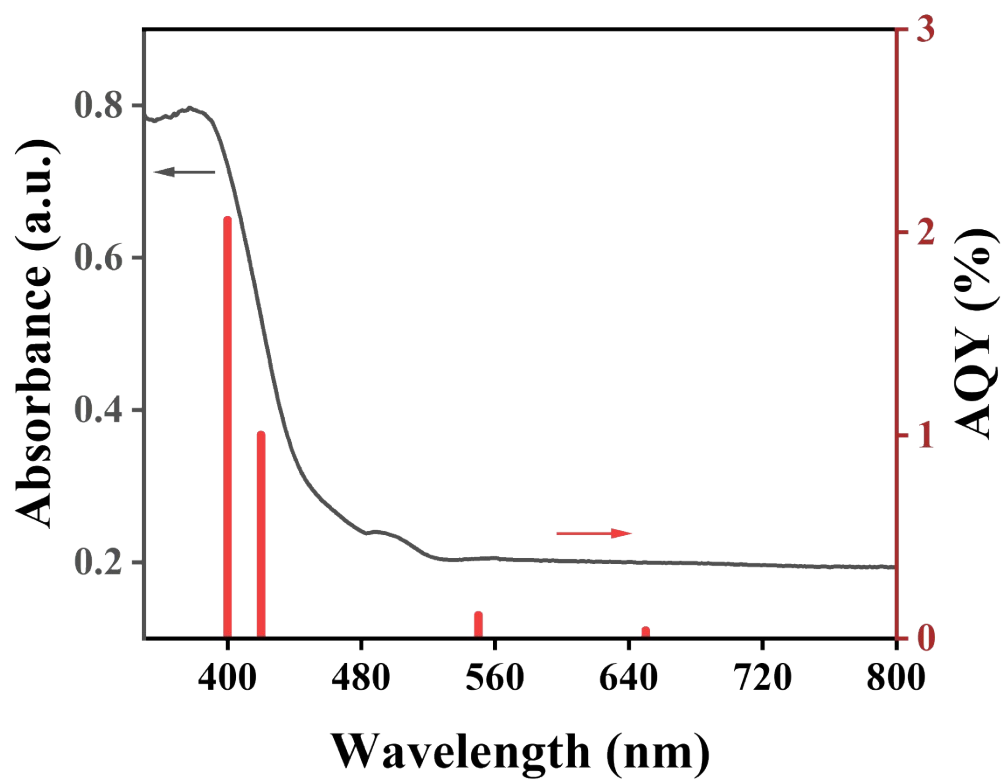


Figure S 5 Wavelength dependence of AQY for H_2O_2 production over CN/PVA under monochromatic light irradiation.

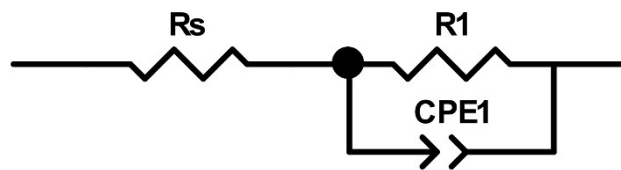


Figure S 6 Equivalent circuit diagram simulation of electrochemical impedance spectroscopy nyquist.

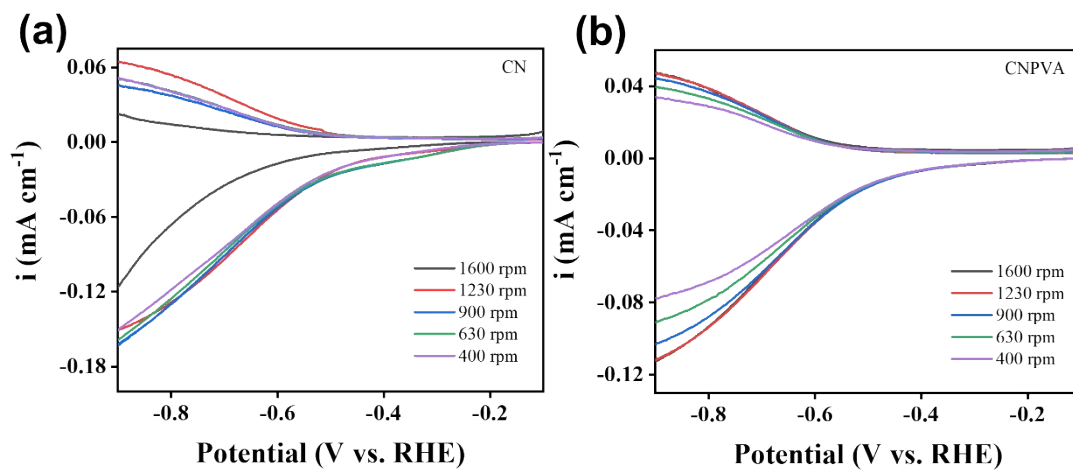


Figure S 7 LSV curves of the photocatalysts on RRDE in O₂-saturated 0.1M Na₂SO₄ at different rotating speeds.

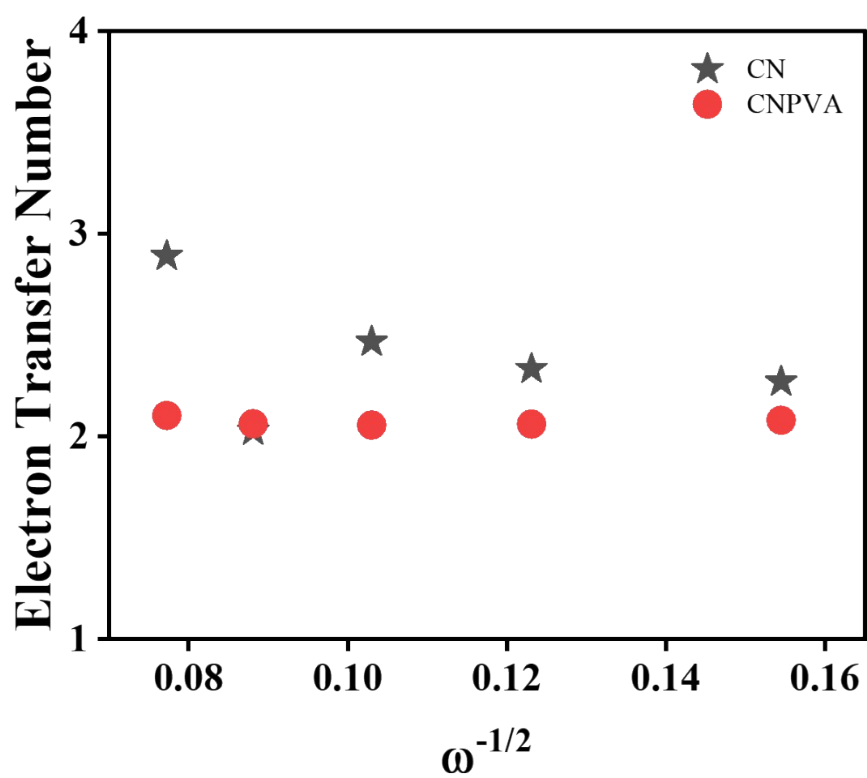


Figure S 8 Electron transfer number of CN and CNPVA at different rotating speeds.

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