

Supplementary Material

Well-Defined Ultrasmall V-NiP₂ Nanoparticles Anchored g-C₃N₄ Nanosheets as Highly Efficient Visible-Light-Driven Photocatalysts for H₂ Evolution

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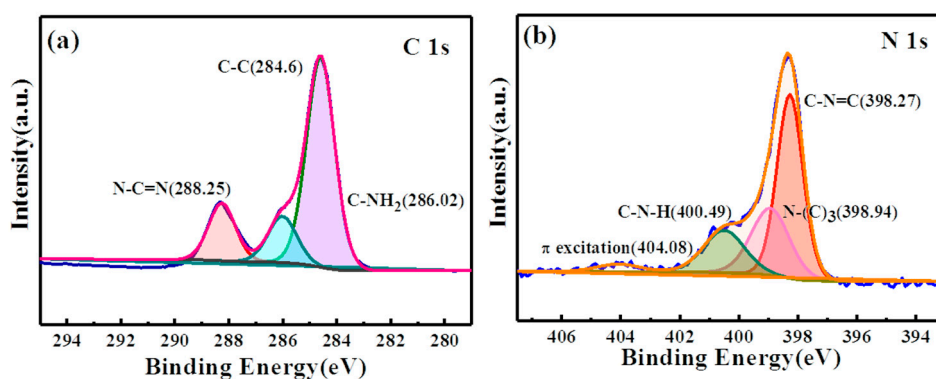


Figure S1. The XPS spectra of (a) C 1s, (b) N 1s for V-NiP₂/g-C₃N₄.

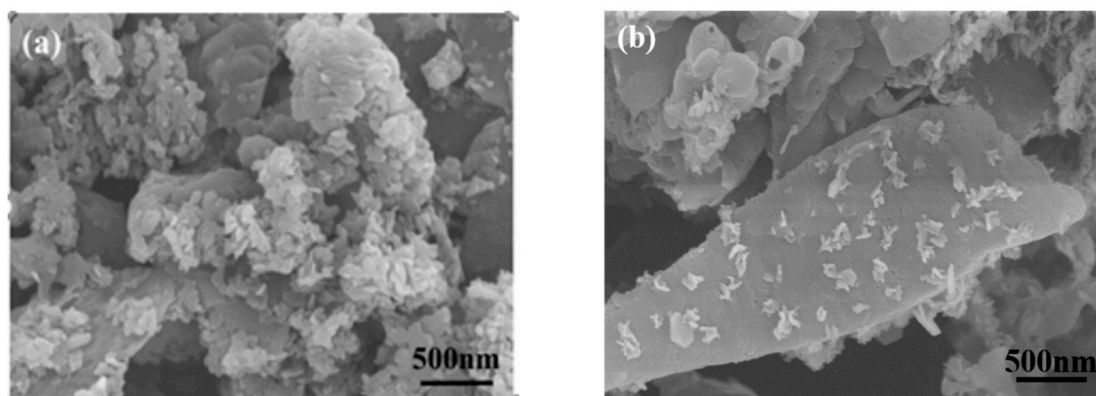


Figure S2. SEM of (a) g-C₃N₄, (b) V-NiP₂/g-C₃N₄

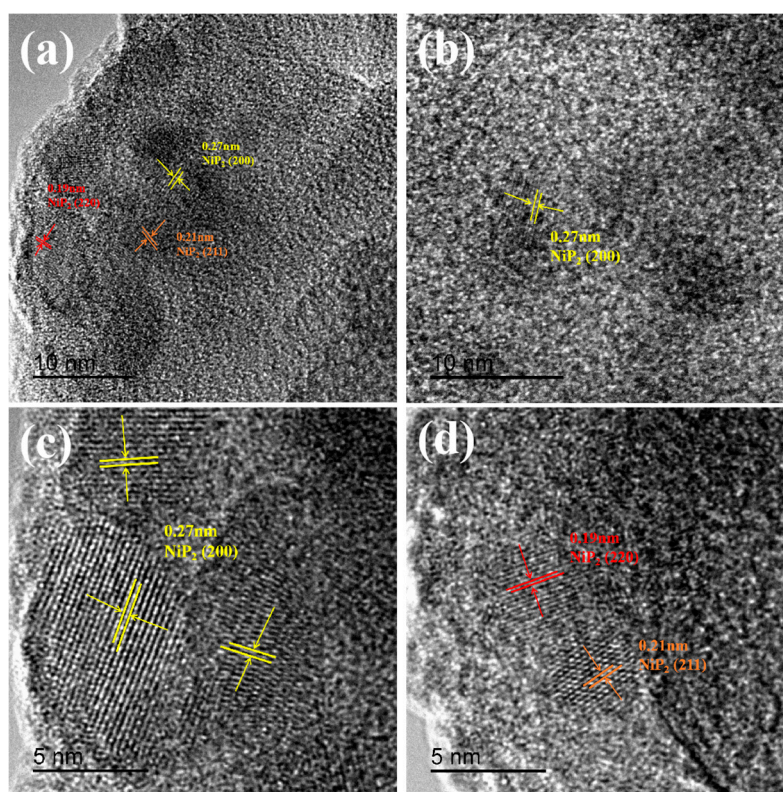


Figure S3. HRTEM of V-NiP₂/g-C₃N₄

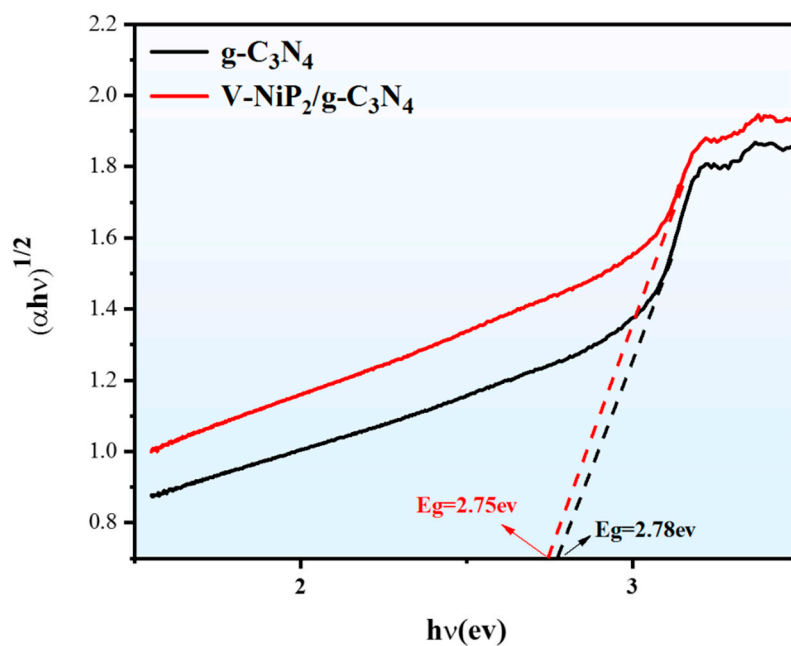


Figure S4. The banding energy of pure g-C₃N₄ and V-NiP₂/g-C₃N₄

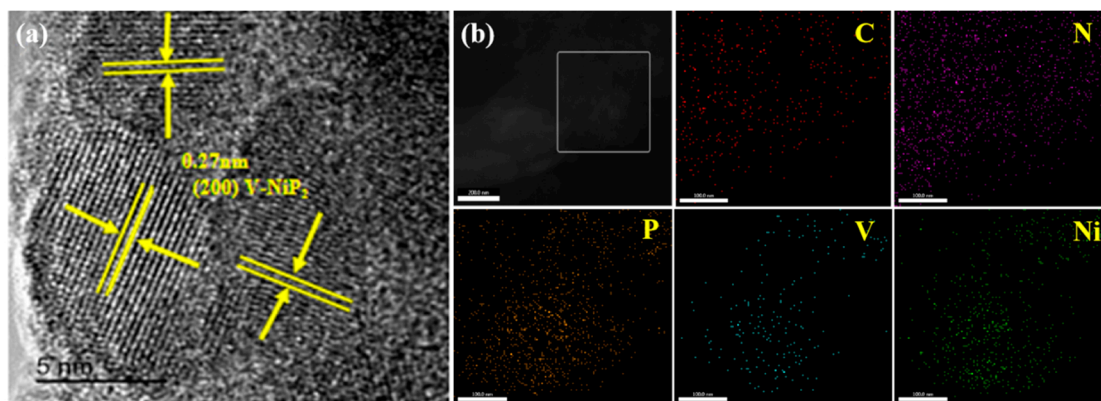


Figure S5. HRTEM and elemental mapping of V-NiP₂/g-C₃N₄ after test

Table S1. Summary of the Photocatalytic H₂ Evolution on g-C₃N₄-Based Photocatalysts

photocatalysts	Co-catalysts	Light Source	Activity ($\mu\text{mol h}^{-1} \text{g}^{-1}$)	reference
g-C ₃ N ₄	V-NiP ₂	300 W	356.7	This work
g-C ₃ N ₄	Co ₂ P	300 W	128.4	23

g-C ₃ N ₄	FeP	300 W	177.9	26
g-C ₃ N ₄	MoP	300 W	327.5	27
g-C ₃ N ₄	NiP ₂	300 W	105	30
g-C ₃ N ₄	Ni ₂ P	300 W	5.67	36
g-C ₃ N ₄	RP	300 W	2110	37
g-C ₃ N ₄	Ni	500 W	168.2	38
g-C ₃ N ₄	NiS	150 W	84	39