Supporting information

Boosting the photogenerated charge separation of g-C_3N_4 by constructing Ni@Ni_2P cocatalyst with core-shell structure

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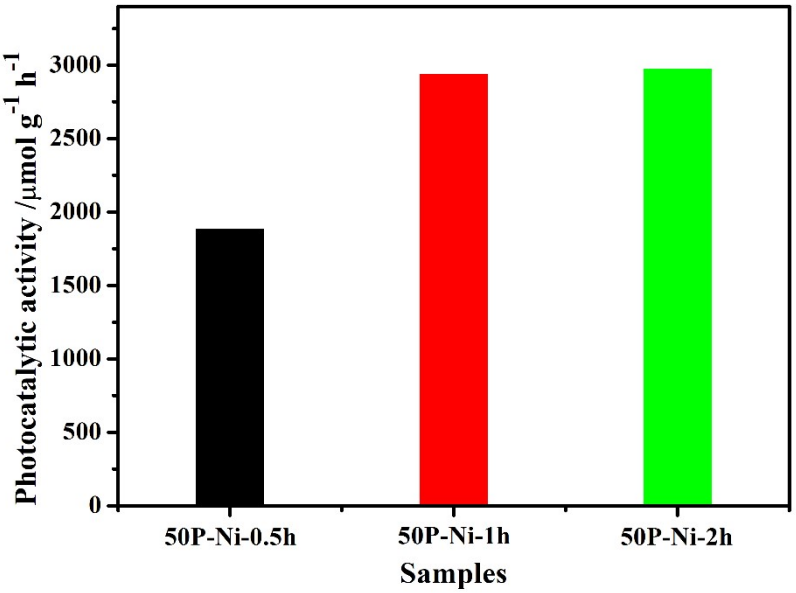

Fig. S1. Comparison of photocatalytic hydrogen evolution rate of Ni_2P@Ni/g-C_3N_4 photocatalysts with different phosphating time, triethanolamine as sacrificial electron donor under 300 W Xe lamp irradiation.

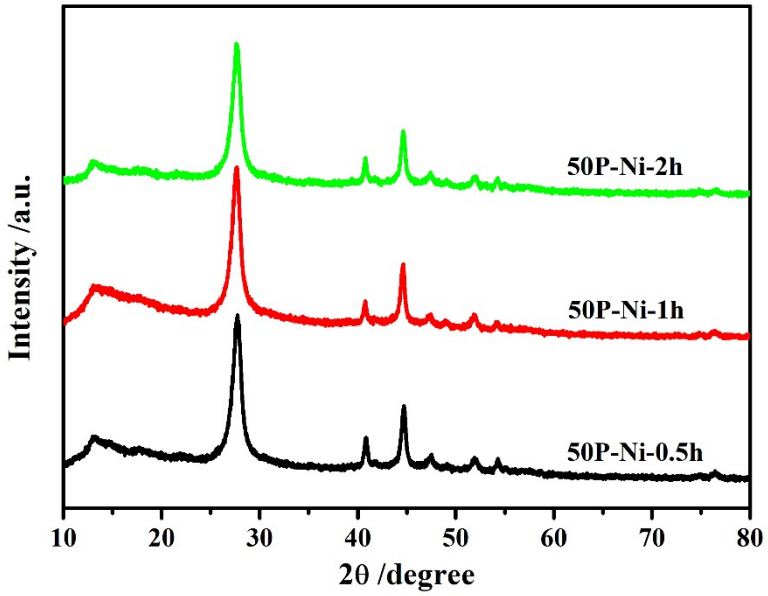

Fig. S2. XRD patterns of Ni_2P@Ni/g-C_3N_4 photocatalysts with different phosphating time.

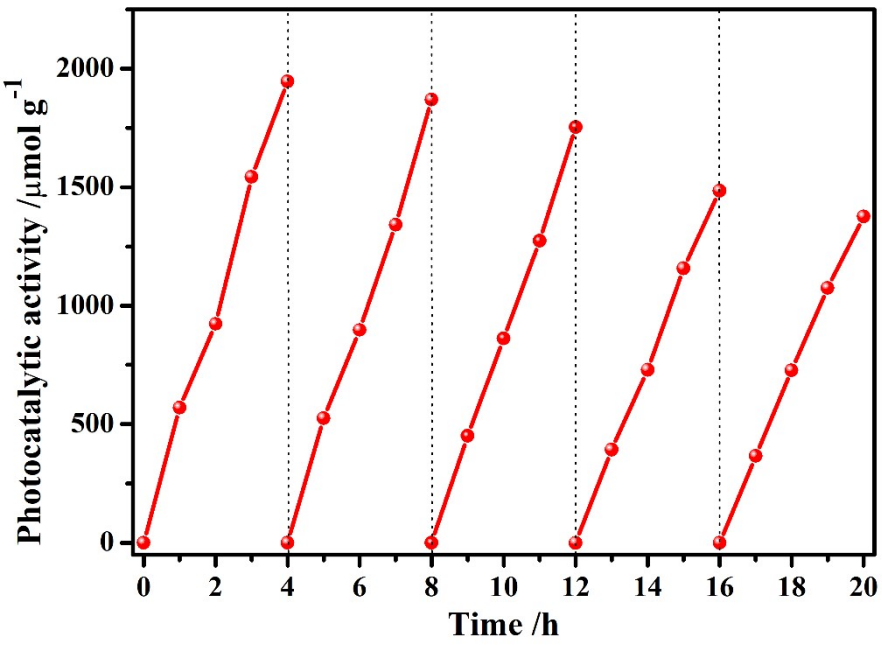

Fig. S3. The stability of photocatalytic H_2 performance of 50P-Ni under visible light irradiation (λ> 400 nm).

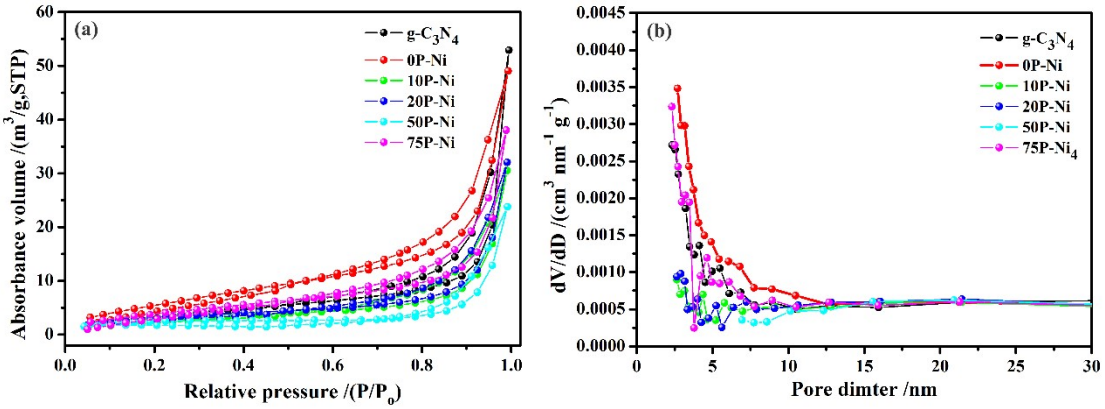

Fig. S4. Nitrogen gas sorption isotherms and pore size distribution of g-C_3N_4, Ni/g-C_3N_4 and Ni@Ni_2P/g-C_3N_4 photocatalysts

Table S1 The BET specific surface area of g-C_3N_4, Ni/g-C_3N_4 and Ni@Ni_2P/g-C_3N_4 photocatalysts

Samples	g-C_3N_4	0P-Ni	10P-Ni	20P-Ni	50P-Ni	75P-Ni
BET surface area(m^2/g)	13.51	23.77	10.19	10.43	7.72	15.69