Supplementary Materials

Solvent Etching Process for Graphitic Carbon Nitride Photocatalysts Containing Platinum Cocatalyst: Effects of Water Hydrolysis on Photocatalytic Properties and Hydrogen Evolution Behaviors

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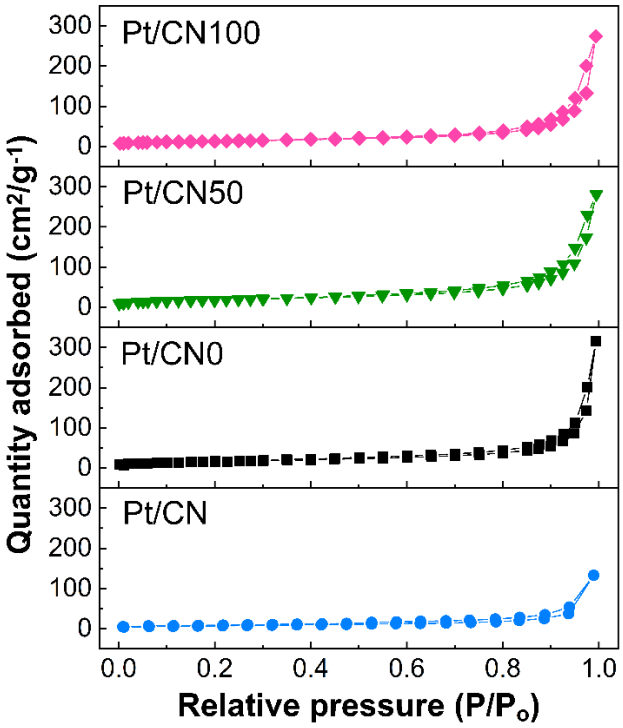

Figure S1. N_2 adsorption-desorption isotherms of the prepared catalysts.

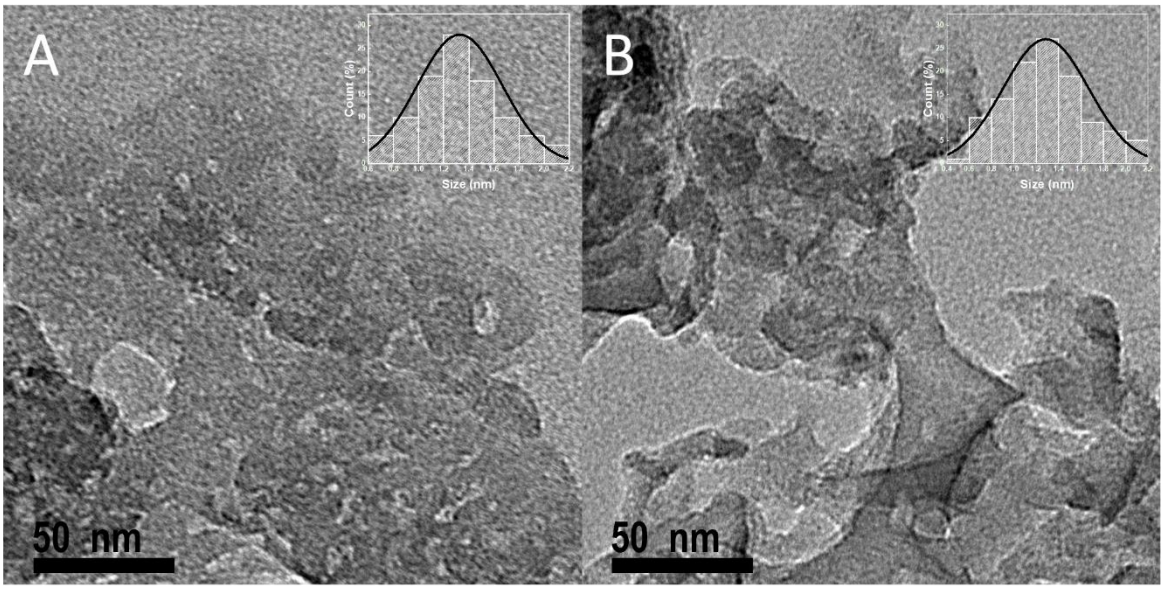

Figure S2. TEM images of Pt/CN50 (**A**) and Pt/CN100 (**B**). The inset represents the size distribution of Pt particles.

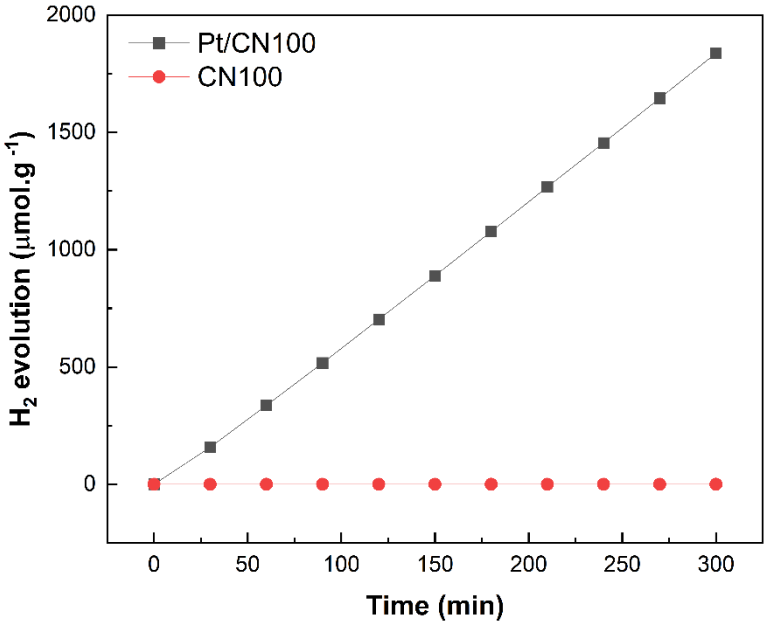

Figure S3. H_2 evolution results of Pt/CN100 and CN100 photocatalysts.

Table S1. The atomic percentages (at%) of COOH, C=O, and C-OH groups for Pt/CNx.

Sample	Pt/CN	Pt/CN0	Pt/CN50	Pt/CN100
COOH [a]	0	36.62	66.10	74.20
C=O [a]	100	37.03	26.88	18.15
C-OH [a]	0	26.35	7.02	7.65

[a] The numbers were obtained from the deconvolution of the N 1s XPS data.

Table S2. The atomic percentage ratios of Pt^0/Pt, Pt^{2+}/Pt, and Pt^{4+}/Pt for Pt/CNx.

Sample	Pt/CN0	Pt/CN50	Pt/CN100
Pt^0/Pt	0.08	0.17	0.14
Pt^{2+}/Pt	0.42	0.57	0.54
Pt^{4+}/Pt	0.50	0.25	0.32