## **Supplementary Information**

## Shape-dependent photocatalytic hydrogen evolution activity over Pt

## nanoparticles coupled g-C<sub>3</sub>N<sub>4</sub> photocatalyst

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Fig. S1 Fourier transform infrared spectrum of g- $C_3N_4$  sample.

**Table S1** Atomic ratio of  $g-C_3N_4$  from elemental analysis (a) and XPS spectrum (b).

sample	C/N <sup>a</sup>	C/N <sup>b</sup>
g-C <sub>3</sub> N <sub>4</sub>	0.693	0.714



Fig. S2 HRTEM image of triangle-like Pt nanoparticles (tetrahedron).