

Electronic Supplementary Information

**Visible-light-enhanced hydrogen evolution from catalytic hydrolysis of ammonia borane using Ru nanoparticles supported on CdS-modified graphitic carbon nitride**

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**Figure caption**

Fig. S1 Schematic of testing setup for photocatalytic hydrolysis of AB to generate hydrogen

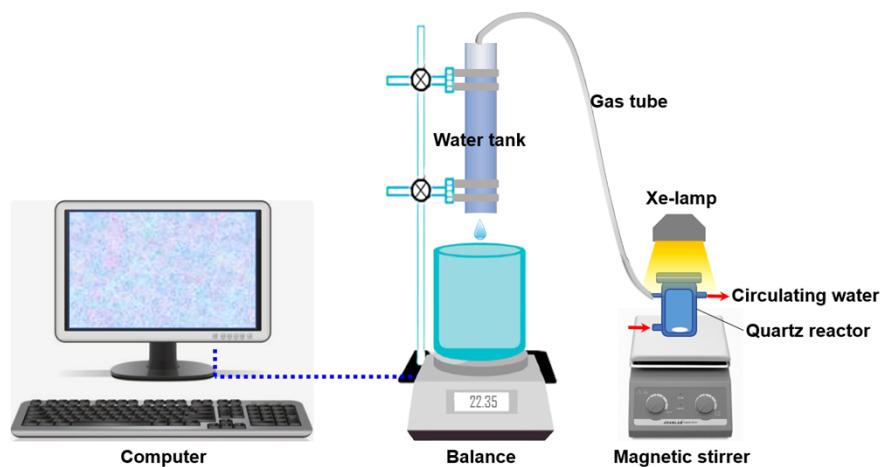
Fig. S2 Particle size distribution of the generated CdS NPs

Fig. S3 Particle size distribution of the deposited Ru NPs

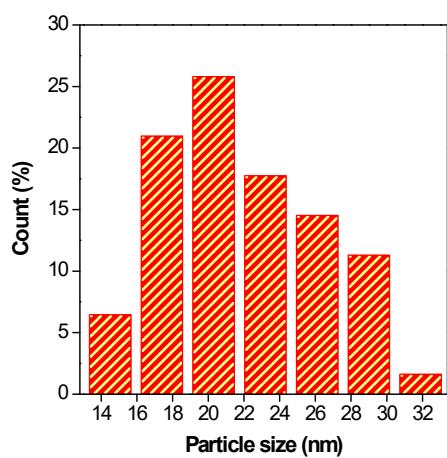
Fig. S4 TR-PL decay curves of the prepared 10-CdS/C<sub>3</sub>N<sub>4</sub> and Ru/CdS/C<sub>3</sub>N<sub>4</sub>

Fig. S5 TEM image of the reused Ru/CdS/C<sub>3</sub>N<sub>4</sub>

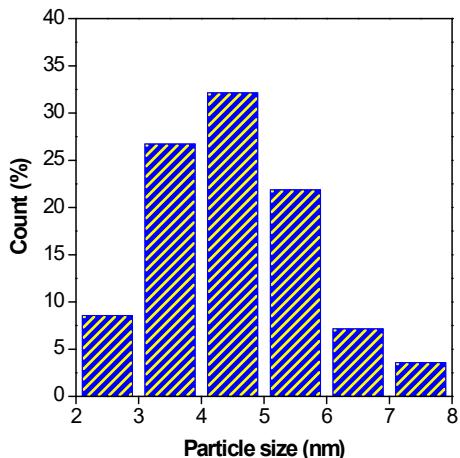
Fig. S6 XPS spectrum of the reused Ru/CdS/C<sub>3</sub>N<sub>4</sub>



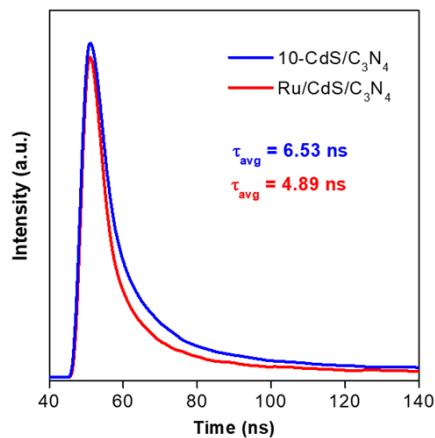
**Fig. S1**



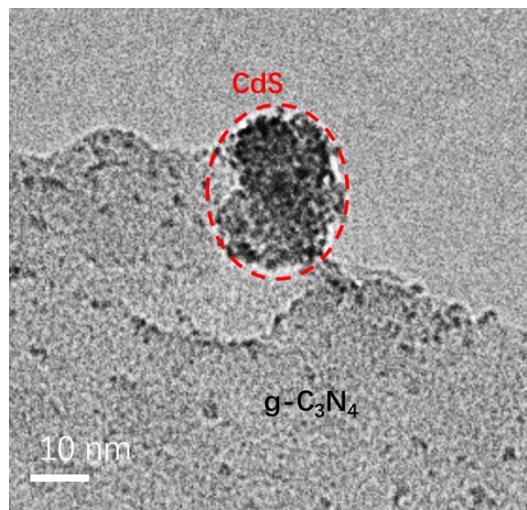
**Fig. S2**



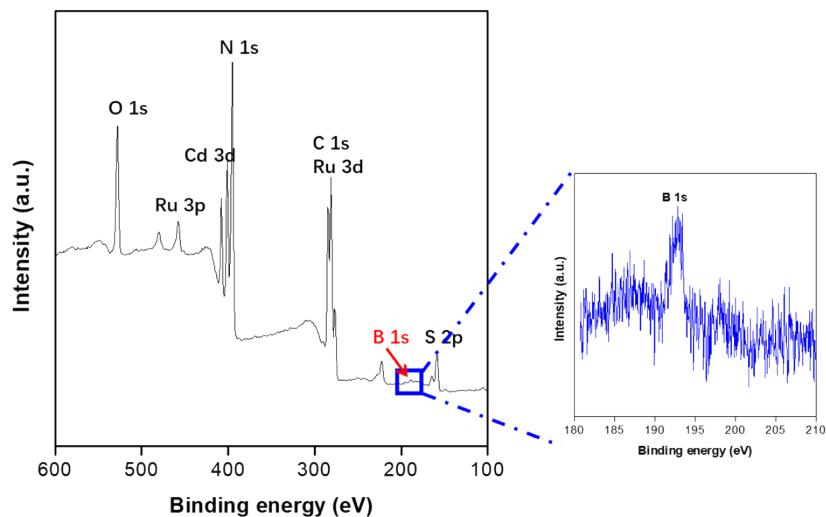
**Fig. S3**



**Fig. S4**



**Fig. S5**



**Fig. S6**