

Supplementary information

**Efficient Hydrogen Production by γ -g-C₃N₄/Ag-CdS
Heterojunction Photocatalyst via S-scheme Mechanism**

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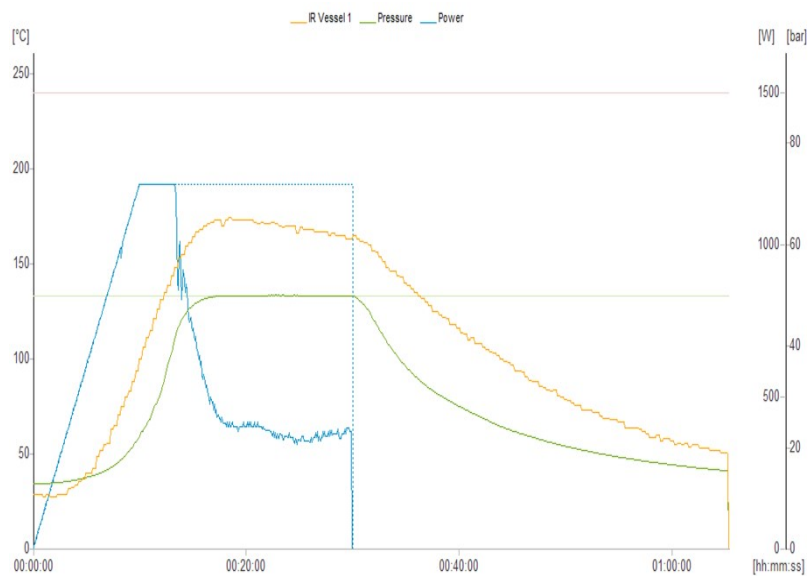


Fig S1: Microwave Hydrothermal experimental conditions (System Generated)

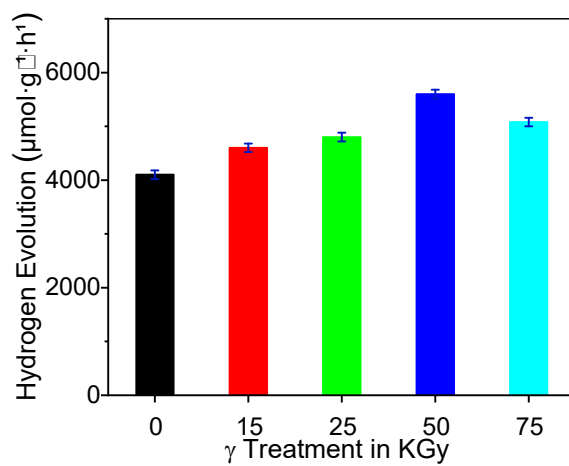


Fig S2: Hydrogen evolution from 15 kGy, 25 kGy, 50 kGy, and 75 kGy gamma irradiated g- $\text{C}_3\text{N}_4/\text{Ag-CdS}$

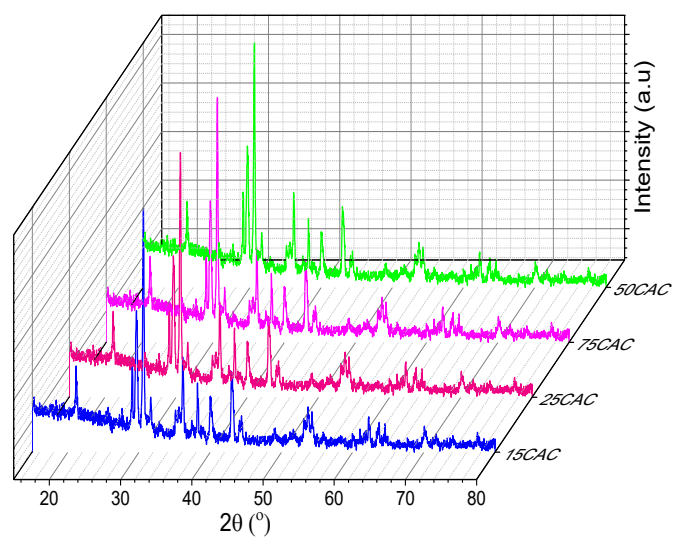


Fig. S3: XRD spectra of the recycled catalyst (15 kGy, 25 kGy, 50 kGy, and 75 kGy) gamma-irradiated $g-C_3N_4/Ag-CdS$

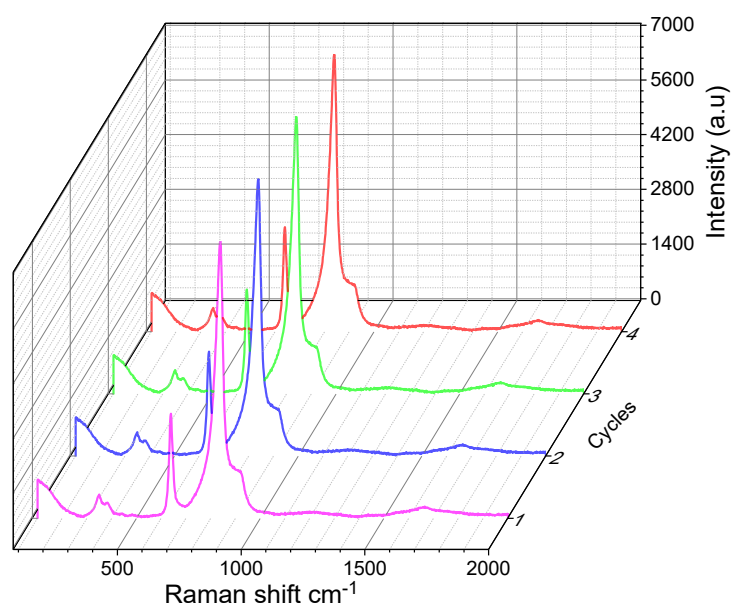


Fig. S4: Raman spectra of 50 kGy gamma-irradiated $g-C_3N_4/Ag-CdS$ recycled catalyst after 4 hr of photocatalytic experiment