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# Porous Graphitic Carbon Nitride with High Concentration of Oxygen Promotes Photocatalytic $H_2$ Evolution

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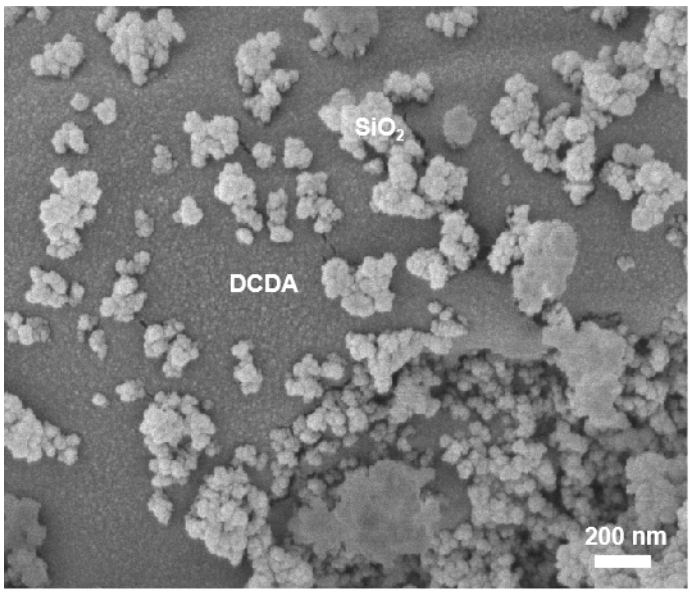


**Fig. S1** SEM image of the $SiO_2$/DCDA mixture.

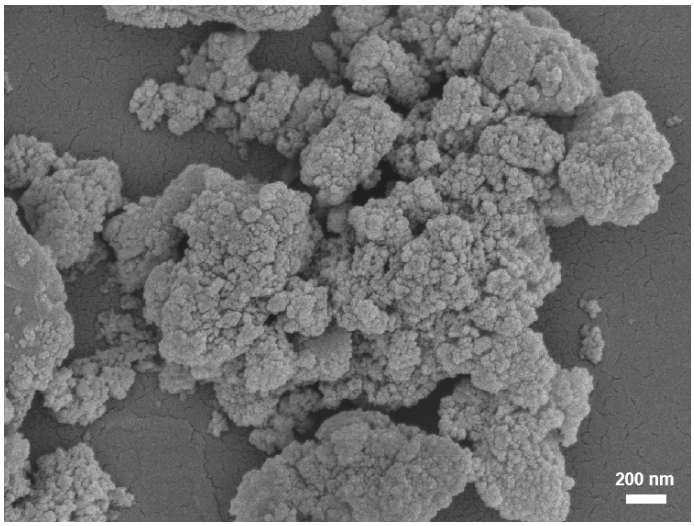


**Fig. S2** SEM image of the $SiO_2$/g-$C_3N_4$ composite.

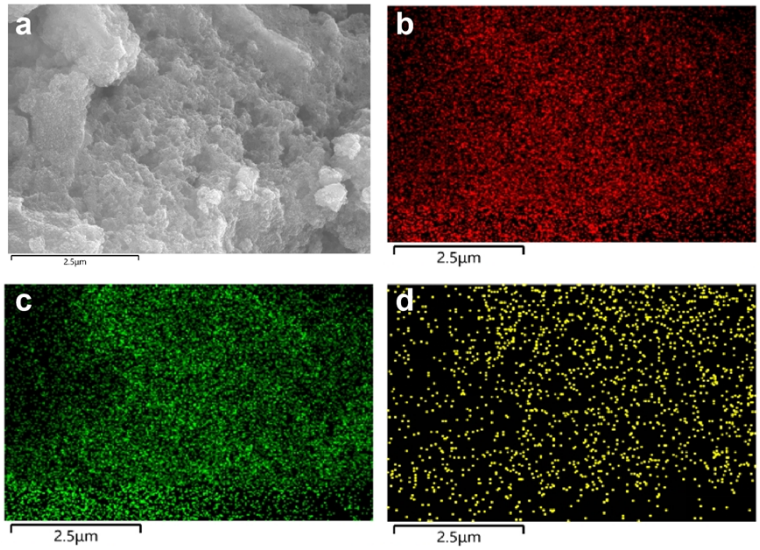


**Fig. S3** (a) SEM image and corresponding (b) C, (c) N and (d) O elemental mapping images of the g-$C_3N_4$-$O_{8.39}$ photocatalyst.

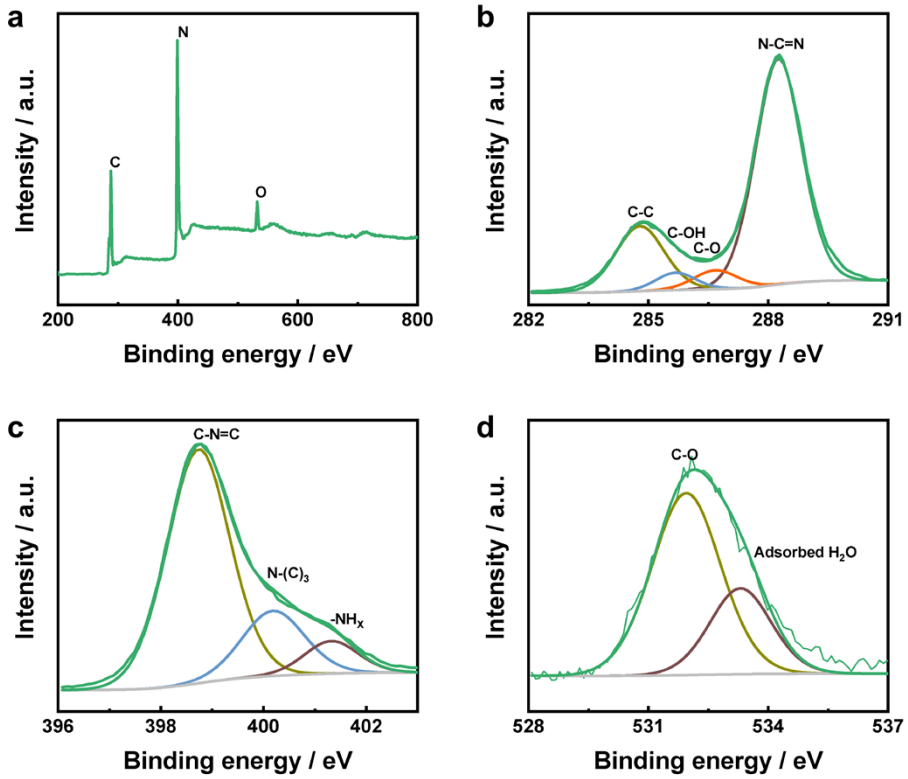


**Fig. S4** (a) Survey XPS spectra, (b) High resolution C 1s XPS spectra, (c) High resolution N 1s XPS spectra and (d) High resolution O 1s XPS spectra of the g-$C_3N_4$-$O_{8.39}$ photocatalyst after cyclic photocatalytic $H_2$ production reaction.