

## Supporting information

# Improving Photocatalytic Activity for Formaldehyde Degradation by Encapsulating C<sub>60</sub> Fullerenes into Graphite-like C<sub>3</sub>N<sub>4</sub> through the Enhancement of Built-in Electric Fields

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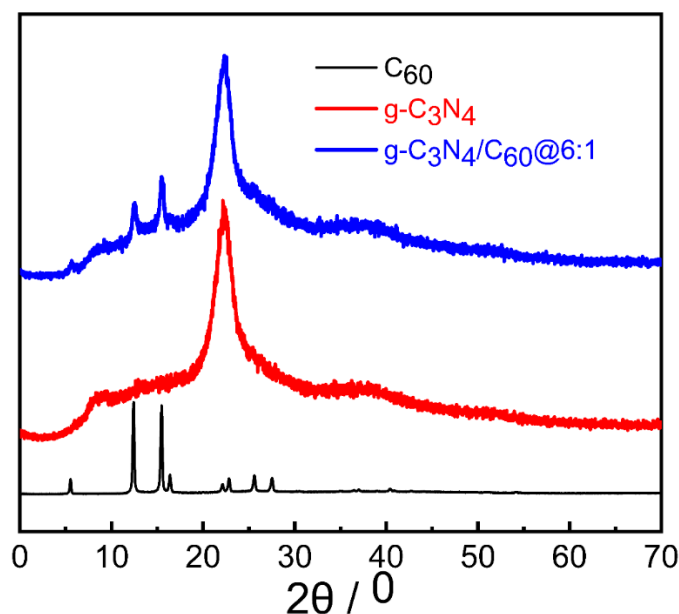
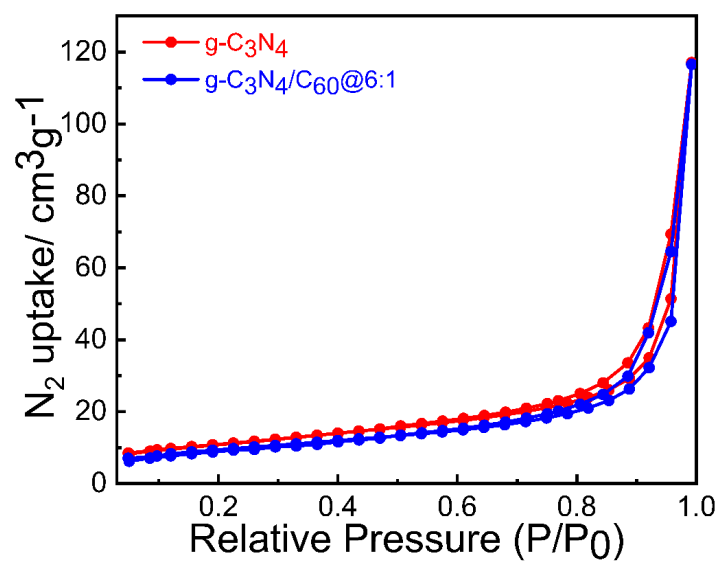
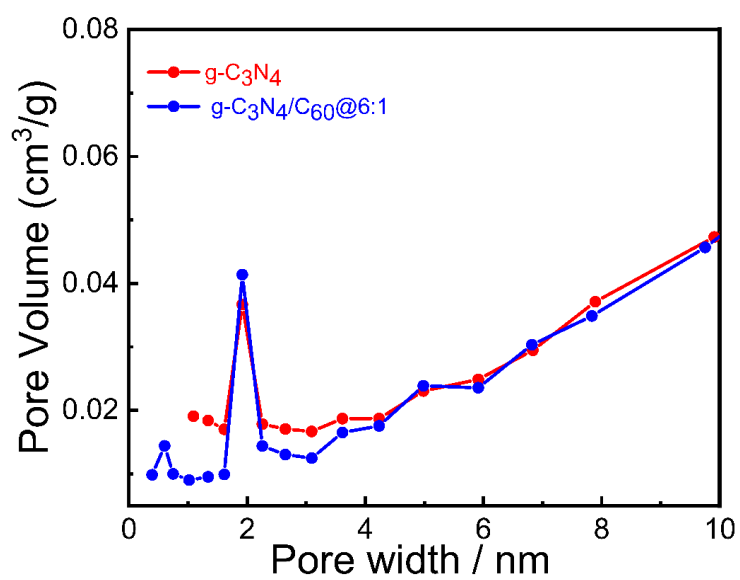


Figure S1. XRD for C<sub>60</sub>, g-C<sub>3</sub>N<sub>4</sub>, and g-C<sub>3</sub>N<sub>4</sub>/C<sub>60</sub>@6:1.

These observations indicate that C<sub>60</sub> was successfully deposited onto g-C<sub>3</sub>N<sub>4</sub> without changing the crystal structure (Figure S1).



**Figure S2.** Nitrogen adsorption and desorption isotherms of  $g\text{-C}_3\text{N}_4$ , and  $g\text{-C}_3\text{N}_4/\text{C}_{60}@6:1$  at 77 K.



**Figure S3.** pore size distribution for  $g\text{-C}_3\text{N}_4$  and  $g\text{-C}_3\text{N}_4/\text{C}_{60}@6:1$ .