Supporting Information

Porous $CaMnO_3$-promoted g-C_3N_4 as an effective photocatalyst for Tetracycline degradation

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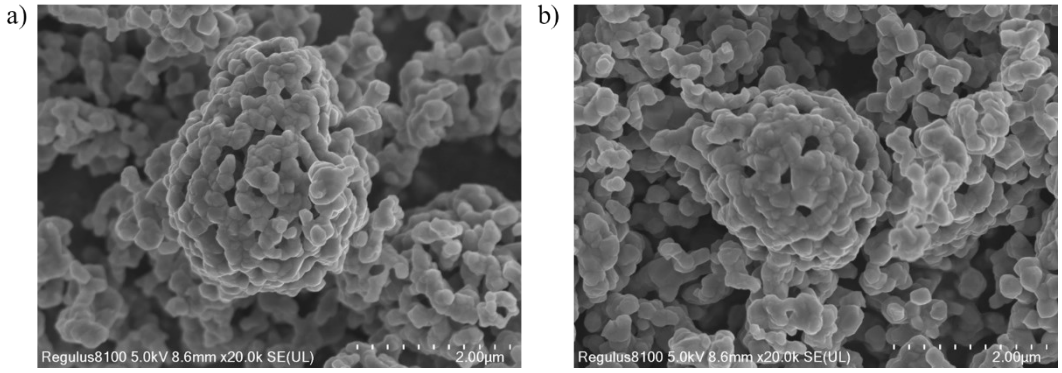

Figure S1. Representative SEM images for the as-prepared $CaMnO_3$ sample.

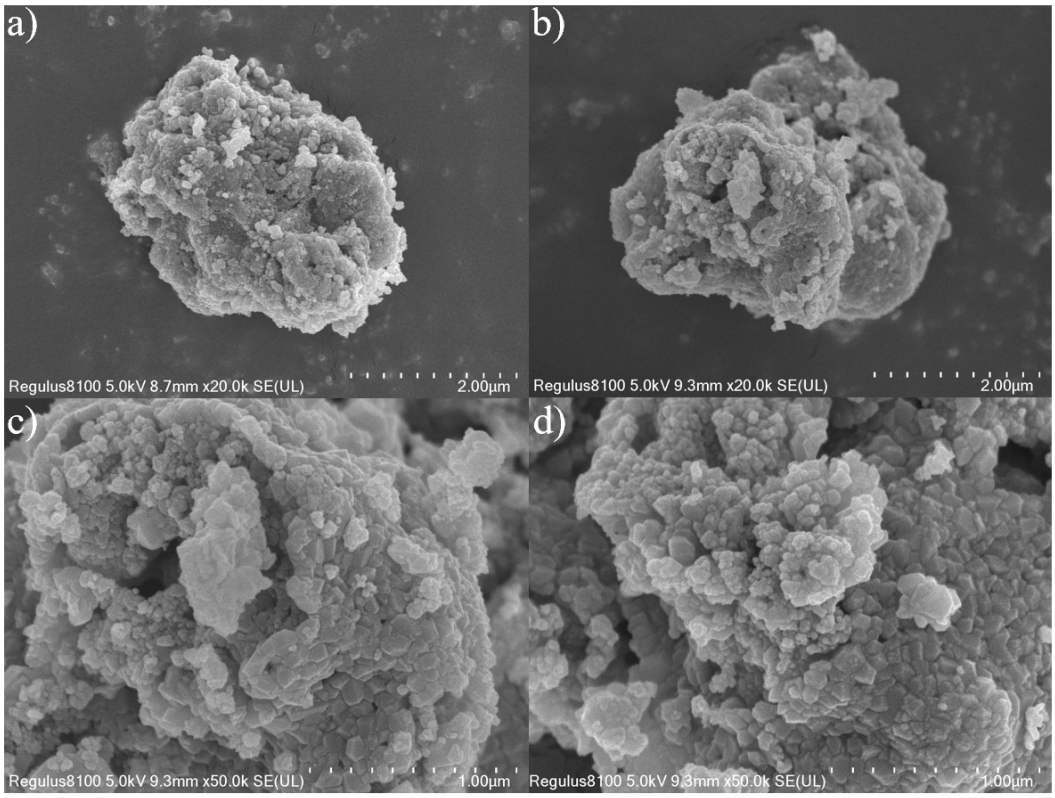

Figure S2. Representative SEM images for the as-prepared $CaMnO_3$/g-C_3N_4 sample, 2 μm for a) and b); 1 μm for c) and d).

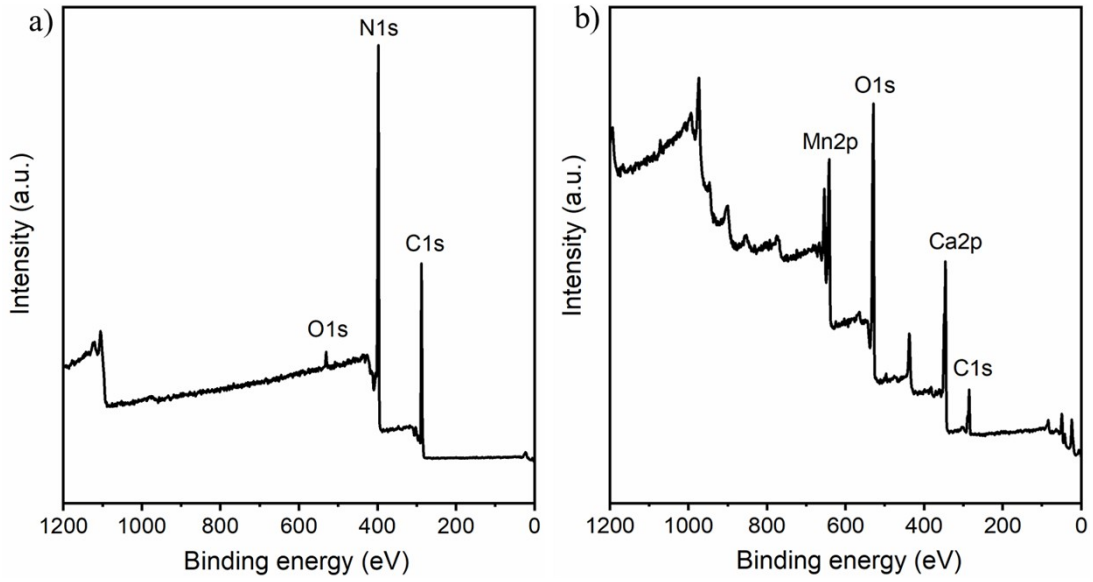

Figure S3. XPS survey spectrum of the g-C_3N_4 (a) and $CaMnO_3$ (b) photocatalyst.

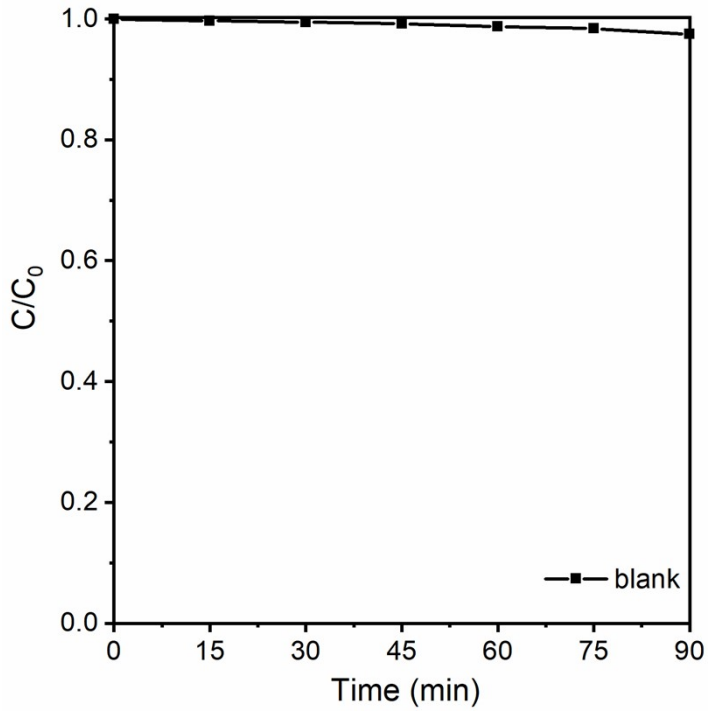

Figure S4. Photocatalytic performance in the absence of catalyst for TC degradation under the irradiation of visible light.

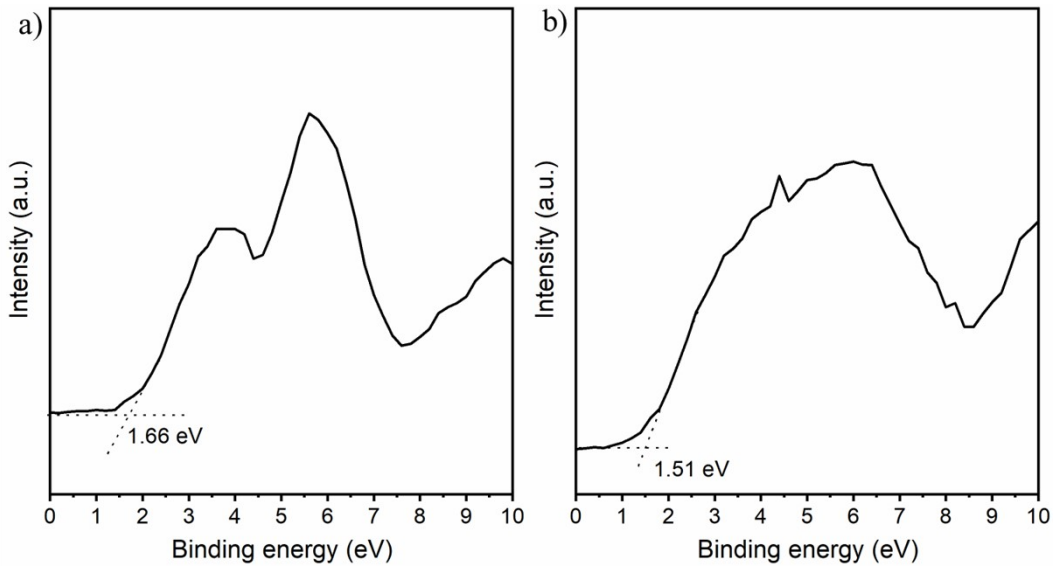

Figure S5. VB-XPS patterns of a) the pristine g-C_3N_4 and b) $CaMnO_3$/g-C_3N_4 photocatalyst.

Table S1 The specifc surface areas, pore volumes, and pore sizes of fabricated g-C_3N_4, $CaMnO_3$ and $CaMnO_3$/g-C_3N_4 photocatalyst

Sample	Surface area (m^2 g^{-1})	Pore size (nm)	Pore volume (cm^3 g^{-1})
$CaMnO_3$	4.07	8.06	0.008
g-C_3N_4	23.07	23.19	0.134
$CaMnO_3$/g-C_3N_4	25.72	16.29	0.105

Table S2 Comparison of the photocatalytic performance of $CaMnO_3$/g-C_3N_4 with other reported photocatalysts

Material	catalyst dosage (mg)	TC solution (mg/L)	Degradation	Light irradiation	Ref.
g-C_3N_4/$BiVO_4$	50	10	90%	180 min	1
γ-Fe_2O_3/g-C_3N_4	50	10	73.8%	120 min	2
MoO_3/g-C_3N_4	50	10	85.9%	100 min	3
g-C_3N_4/WO_3	40	10	79.8%	180 min	4
WO_3/g-C_3N_4/Bi_2O_3	100	10	80.2%	60 min	5
$CuBi_2O_4$/g-C_3N_4	50	10	83%	60 min	6
$CuInS_2$/g-C_3N_4	50	20	83.7%	60 min	7
Bi_2O_3 QDs/g-C_3N_4	50	10	72.9%	120 min	8
α-MnO_2/B@g-C_3N_4	50	10	87%	80 min	9
B-TiO_2	20	10	66.2%	240 min	10
P25	50	20	54%	60 min	11
$SrTiO_3$/TiO_2	20	30	98.2%	120 min	12
TiO_2/BiOCl	50	20	86.9%	100 min	13
Ce-TiO_2	10	20	77.7%	110 min	14
$CaMnO_3$/g-C_3N_4	50	10	95%	90 min	This work

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