Supplementary Materials

Enhanced photodegradation activity of methyl orange over Z-scheme type MoO_3/g-C_3N_4 composite under visible light irradiation

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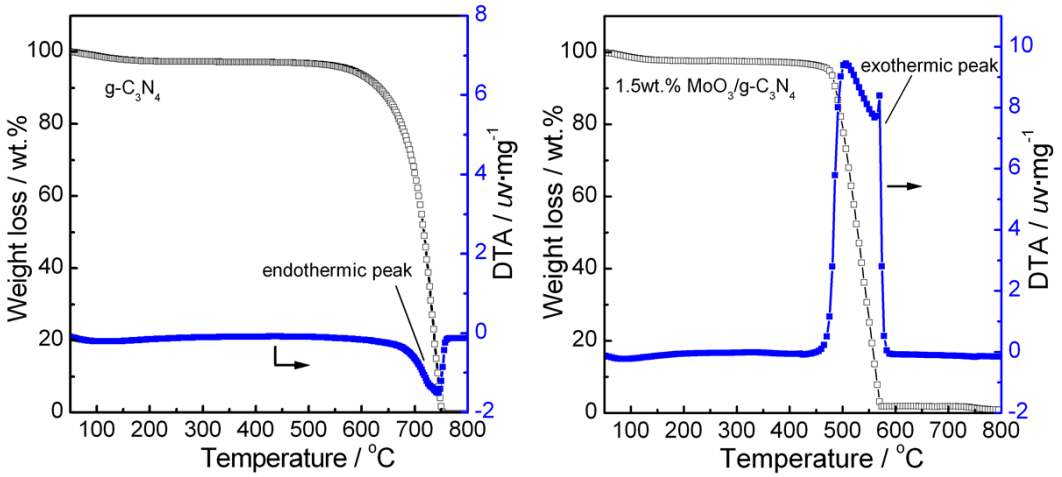

Fig. S1 TG-DTA profiles of pure g-C_3N_4 and 1.5wt.% MoO_3/g-C_3N_4 composite.

(The decreased decomposition temperature of g-C_3N_4 and the exothermic peak verified the catalytic role of MoO_3.)

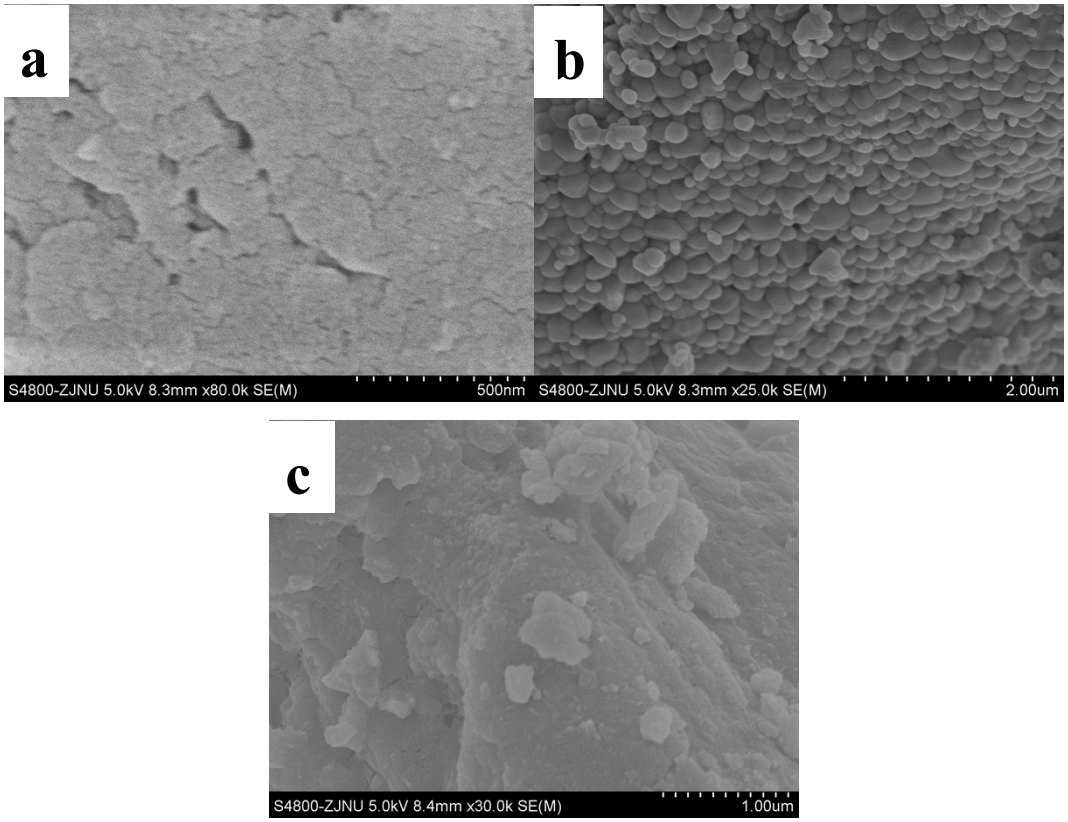

Fig. S2 SEM pictures of pure g-C_3N_4 (a), MoO_3(b), and 1.5wt.% MoO_3/g-C_3N_4 (c) composite.

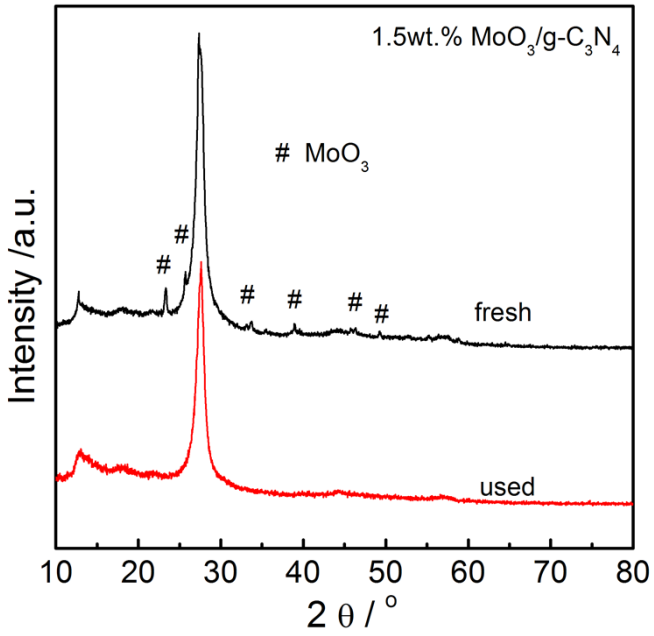

Fig. S3 XRD patterns of 1.5wt.% MoO_3/g-C_3N_4 before and after reaction

Table S1 The elemental concentration in 1.5 wt% MoO_3/g-C_3N_4 photocatalyst

	C1s	N1s	O1s	Mo3d
Peak area /a.u.	25610	63498	62177	6191
Calibration Factor	0.25	0.42	0.66	6.0
Calibrated Area /a.u.	102440	151186	94207	1032
Content /%	29.4	43.4	27.1	0.10
MoO_3 content XPS result	1.0 mol%			

TG result	1.2 mol%