Supplementary Materials

Facile fabrication of heterostructured g-C_3N_4/Bi_2MoO_6 microspheres with highly efficient activity under visible light irradiation

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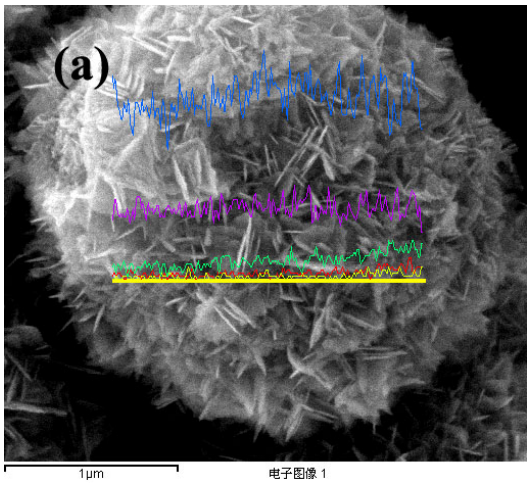

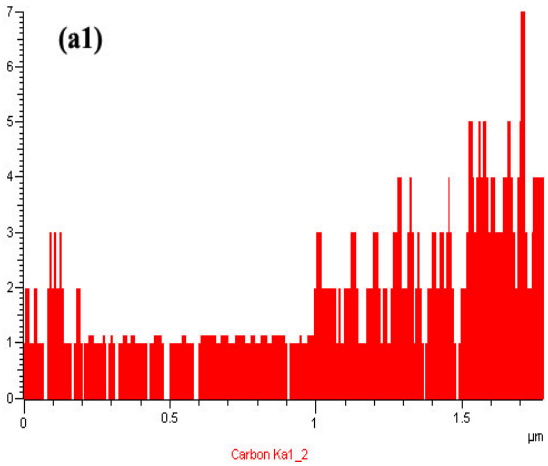

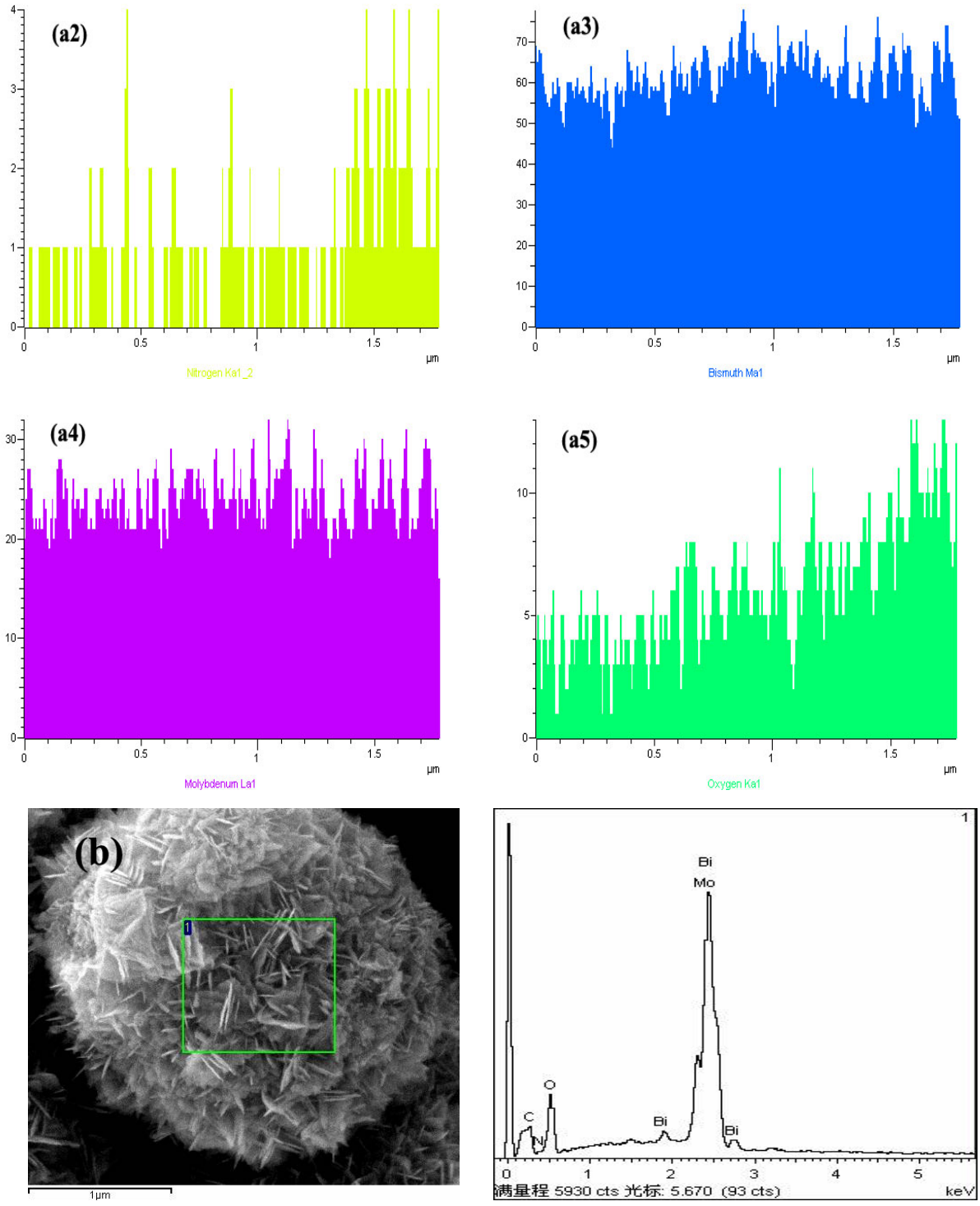

Figure S1 Characteristic EDX line-scans of CNBM-40 composite. Scanned paths are shown in the SEM images (a). The red, lemon, light blue, lavender and brilliant green areas in (a), (a1), (a2), (a3), (a4) and (a5) show the distribution of C, N, Bi, Mo and O within the scanned distance.

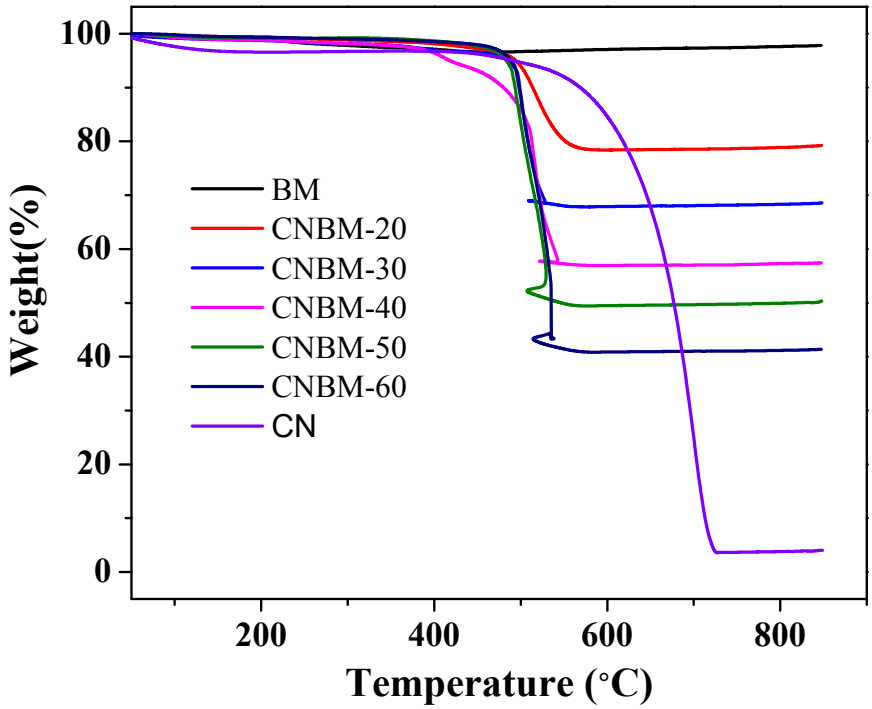

Figure S2 TG analysis for Bi_2MoO_6, g-C_3N_4, and g-C_3N_4/Bi_2MoO_6 composites.

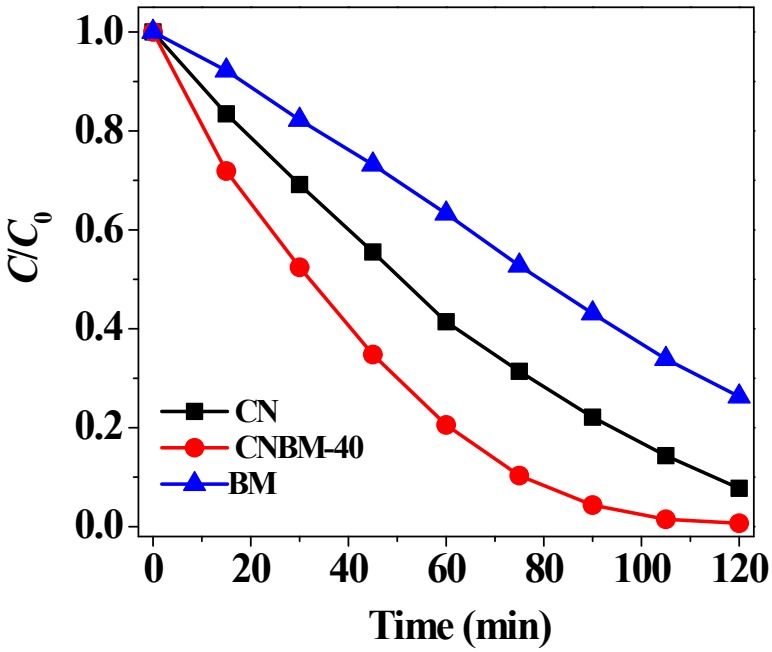

Figure S3 The kinetics of photo-degradation of MB (catalyst: 100 mg, MB concentration: 10 ppm) over different photocatalysts under visible-light (λ>420 nm) irradiation.

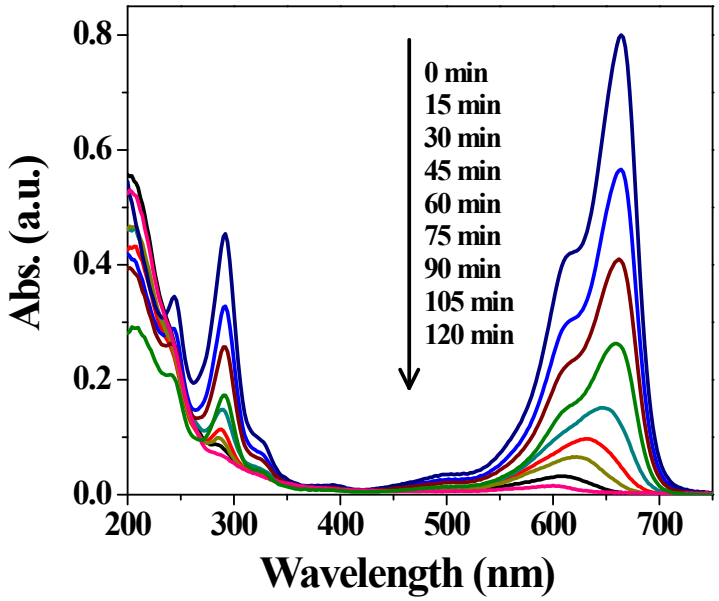

Figure S4 Time-dependent optical absorption spectra of photo-degradation of MB (catalyst: 10 mg/L, MB concentration: 10 ppm).

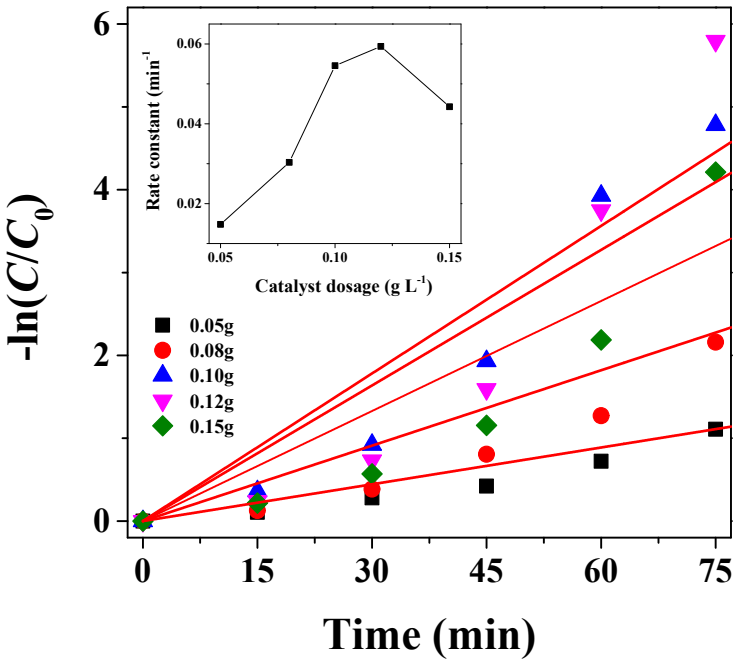

Figure S5 Photocatalytic degradation efficiency of fixed RhB concentration (0.02 mM) for different initial dosages of CNBM-40. Inset describes the change of photocatalytic degradation rates with the initial dosages of CNBM-40 and reaction rate constant, *k*, obtained from linear fitting.

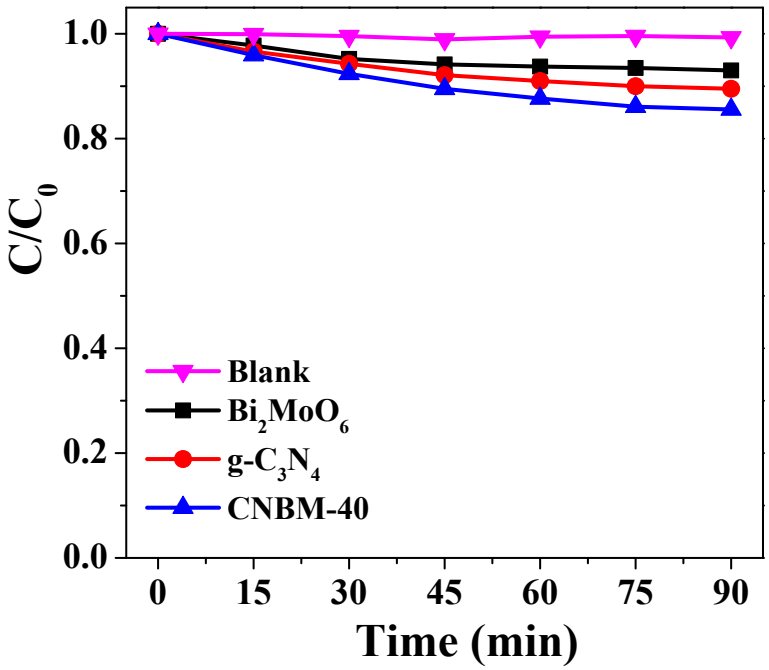

Figure S6 Photocatalytic degradation of RhB aqueous solution in the presence of g-C_3N_4, Bi_2MoO_6 or CNBM-40 photocatalyst under visible light irradiation (λ = 550 ± 15 nm).

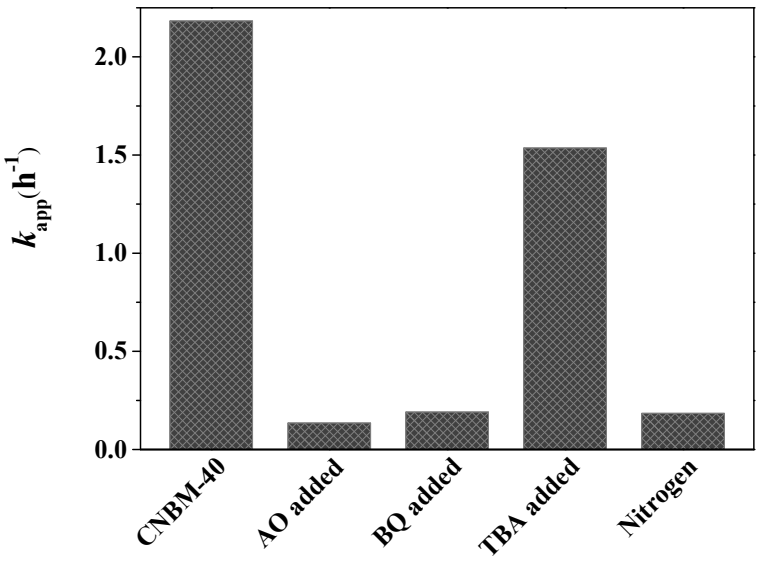

Figure S7 Plots of reaction rate constant (k_{app}) of photo-generated carriers trapping in the system of photo-catalytic degradation of RhB over CNBM-40 under visible-light irradiation.