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Electronic supplementary information (ESI)

Novel β -Ag₂MoO₄/g-C₃N₄ heterojunction catalysts with highly enhanced visible-light-driven photocatalytic activity

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Figure S1 The picture of the Xe lamp (300 W, HSX-F300, Beijing NBeT Technology Co., Ltd.) coupled with a UV-cutoff filter (420 nm).



Figure S2 XRD patterns of as-prepared bulk g-C₃N₄ (B-CN), thin g-C₃N₄ nanosheets (T-CN), β -Ag₂MoO₄ and standard XRD pattern of β -Ag₂MoO₄ (JCPDS 08-0473).



Figure S3 FSEM images of (A) B-CN and (B) T-CN.



Figure S4 (A) FSEM and (B-E) corresponding elemental mapping images of AMOCN3.



Figure S5 TEM images of (A) AMOCN1, (B) AMOCN2, (C) AMOCN4, and (D) AMOCN5.



Figure S6 TEM images of (A) AMOCN1, (B) AMOCN2, (C) AMOCN3, (D) AMOCN4, and

(E) AMOCN5.



Figure S7 Nitrogen adsorption-desorption isotherms of (A) B-CN, (B) T-CN, and (C) AMOCN3.



Figure S8 Linear transform Ln (C_0/C) of the kinetic curves and rate constants of (A) MO or (B) MB under visible light irradiation without catalysts and in the presence of different catalysts.



Figure S9 Linear transform Ln (C_0/C) of the kinetic curves and rate constants of (A) RhB, (B) MO, or (C) MB with different initial concentrations degradation under visible light irradiation in the presence of AMOCN3 (30 mg).



Figure S10 (A) Survey XPS spectrum of AMOCN3 before and after photocatalytic reaction; high-resolution XPS spectra of Ag 3d from AMOCN3 after the RhB (B), MO (C), or MB (D) photodegradation.