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Supporting Information

Highly efficient TiO_2 single-crystal photocatalyst with spatially separated Ag and F^- bi-cocatalysts: orientation transfer of photogenerated charges and their rapid interfacial reaction

Xuefei Wang,[a] Tianyi Li,[a] Rui Yu,[a] Huogen Yu*[a,b] and Jiaguo Yu[c]

[a] School of Chemistry, Chemical Engineering and Life Sciences, Wuhan University of Technology, Wuhan 430070, PR China

[b] State Key Laboratory of Silicate Materials for Architectures, Wuhan University of Technology, Wuhan 430070, PR China.

[c] State Key Laboratory of Advanced Technology for Material Synthesis and Processing, Wuhan University of Technology, Wuhan 430070, PR China.

E-mail: yuhuogen@whut.edu.cn

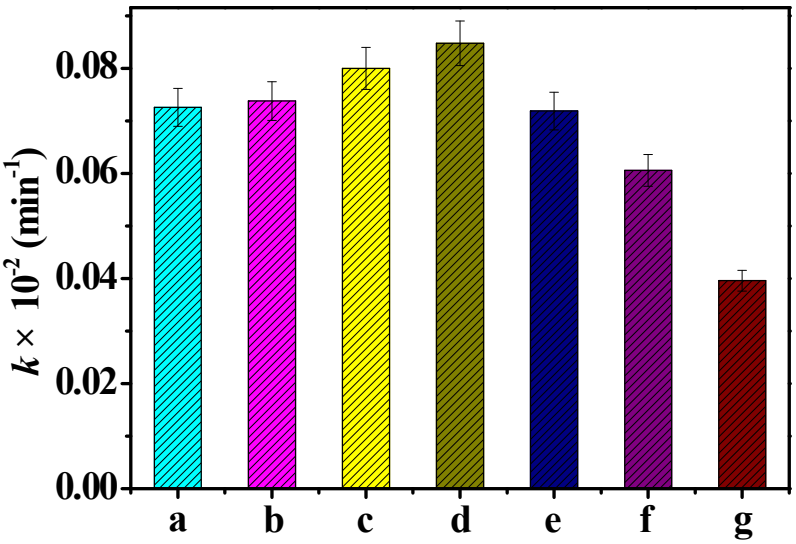

Fig. S1 The rate constant (k) of MO decomposition by Ag/F-TiO_2 single-crystal photocatalysts with various Ag contents: (a) 0 wt%, (b) 0.001 wt%, (c) 0.005 wt%, (d) 0.01 wt%, (e) 0.03 wt%, (f) 0.1 wt%, and (g) 1 wt%.

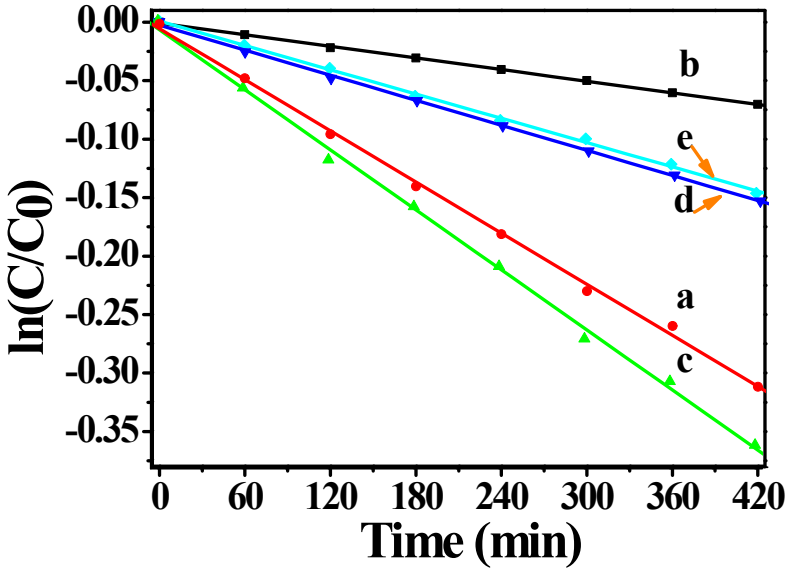

Fig. S2 The dynamic curves of MO decomposition for various samples: (a) F-TiO_2, (b) TiO_2, (c) Ag/F-TiO_2, (d) Ag/TiO_2, and (e) Ag/F-TiO_2(R).

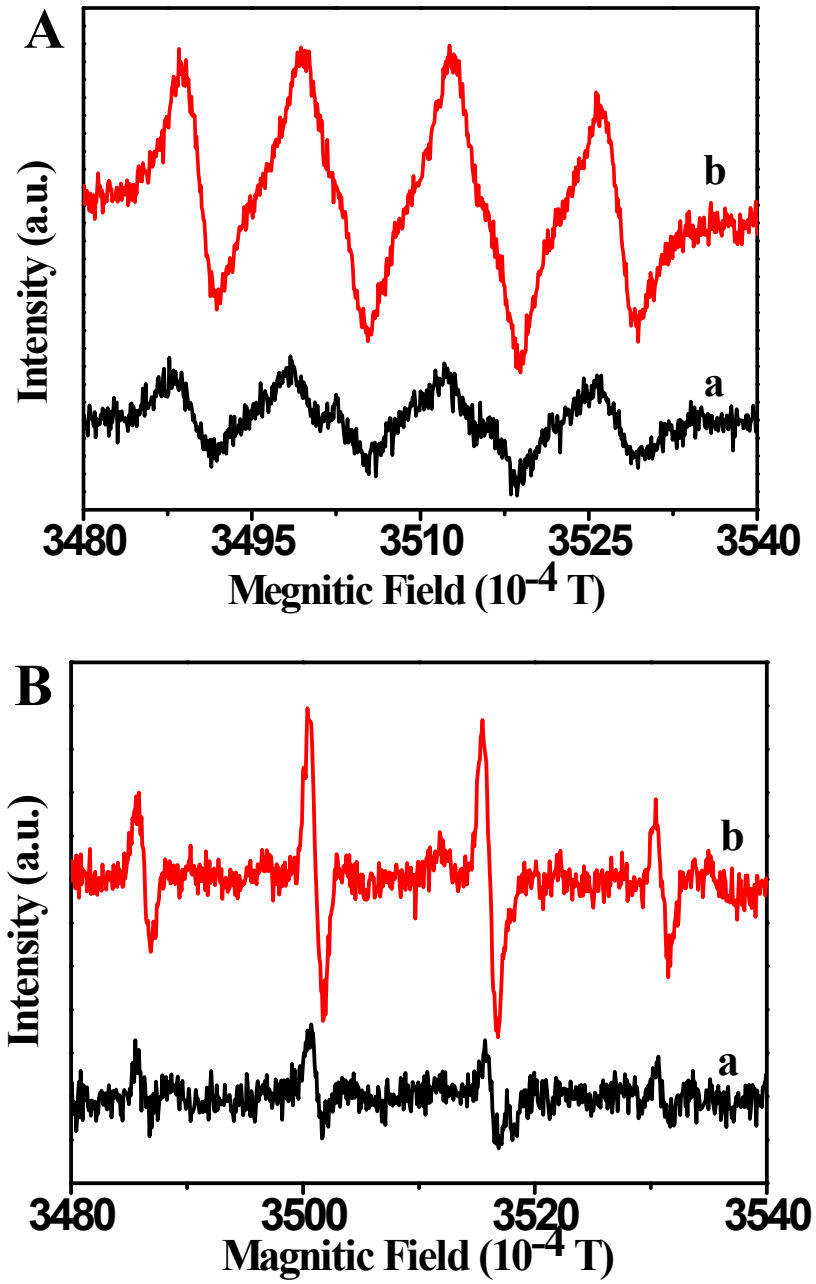

Fig. S3 ESR spectra of DMPO trapped (A) O_2^- and (B) ·OH radicals with (a) TiO_2 and (b) Ag/F-TiO_2 under UV-light irradiation.