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Electronic Supplementary Information

pH-Controlled growth of ultrathin iron vanadium oxide (FeV3O8) nanoplatelets with high visible-light photo-catalytic activity

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Fig. S1 Stability of ultrathin FeV_3O_8 nanoplatelets as a function of PVP. (a) The product synthesized in the absence of PVP gradually deposited. (b) The product prepared in the presence of PVP was stable for at least 1 month.



Fig. S2 TEM images of the products synthesized at different pH values: (a) pH 3, (b) pH 5, (c) pH

2, and (d) pH 1.

Fe Fe Cu O FeCu Cu	Element At C(K) O(K) U(K) Fe(K) Cu(K) Cl	omic % 15.01 40.80 15.79 5.21 23.20 V Fe	Cu Fe Cu
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Fig. S3 EDS analysis of ultrathin FeV_3O_8 nanoplatelets



Fig. S4 The N_2 adsorption and desorption isotherm of three samples: FeV₃O₈ nanobelt (black square), FeV₃O₈ nanoplatelet (red triangle) and FeV₃O₈ nanosheet (blue circle).



Fig. S5 Photodegradation efficiencies of ultrathin FeV_3O_8 nanoplatelets within 30-min visible-light irradiation under different reaction conditions: open atmosphere (red square) and nitrogen atmosphere (black circle).