

Supporting Information

BiVO₄ hollow microplates: controlled synthesis and enhanced photocatalytic activity achieved through one-step boron doping and Co(OH)₂ loading

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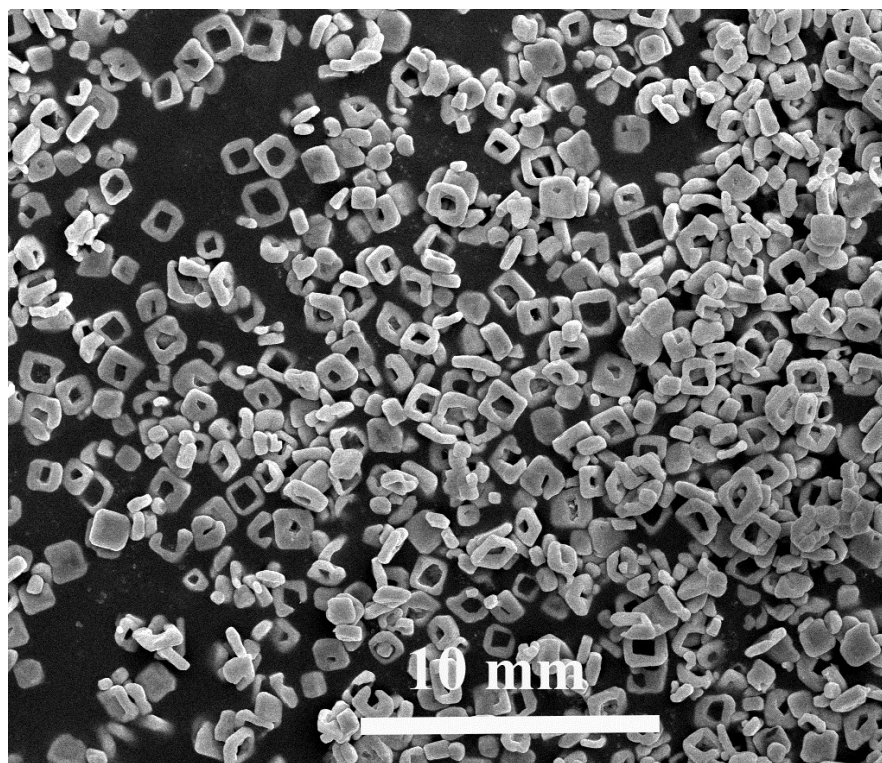


Fig. S1 Panoramic FE-SEM image of the-synthesized BiVO₄ HMPs.

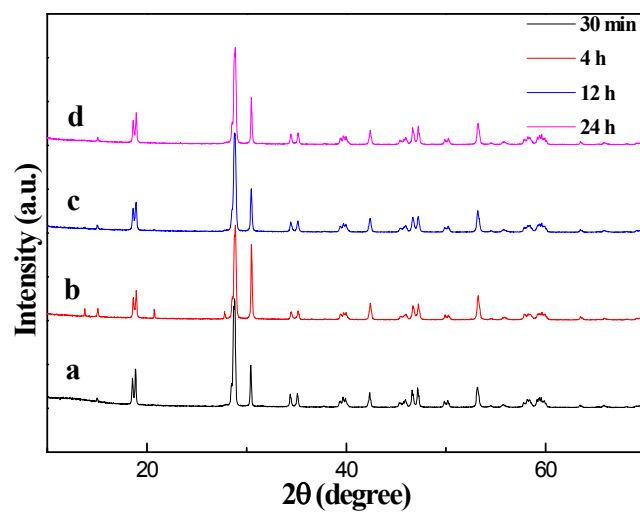


Fig. S2 FE-SEM images of the intermediate products at different reaction stages: a) 30 min, b) 4 h, c) 12 h), and d) 24 h.

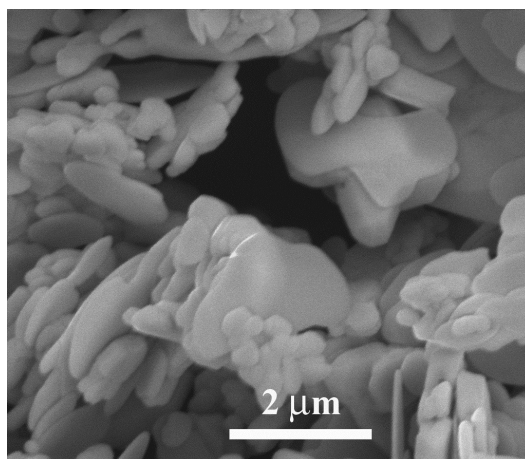


Fig. S3 FE-SEM image of the products obtained in the absence of EDTA.

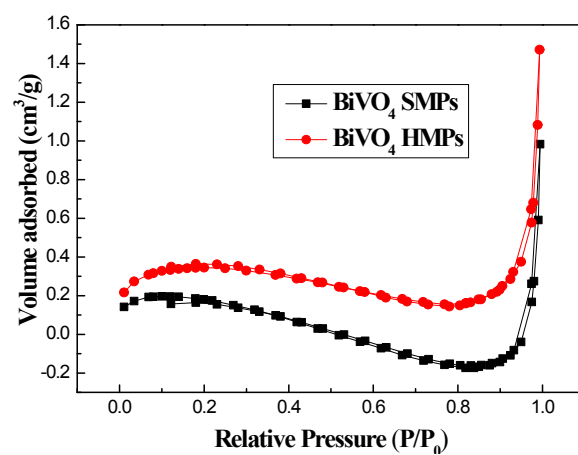


Fig. S4 N_2 adsorption–desorption isotherms of $BiVO_4$ SMPs and HMPs.

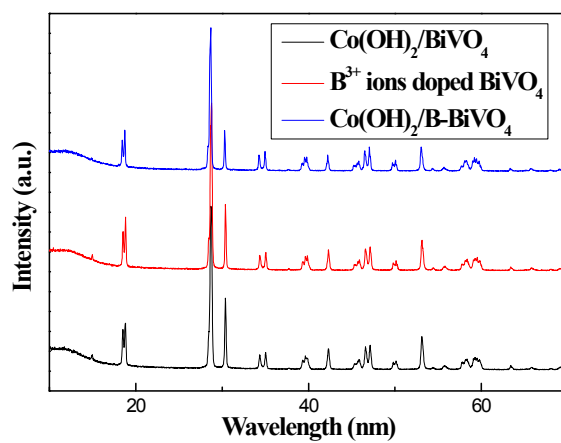


Fig. S5 XRD patterns of the as-synthesized B^{3+} ions doped $BiVO_4$ HMPs, $Co(OH)_2/BiVO_4$ HMPs, and $Co(OH)_2/B-BiVO_4$ HMPs.

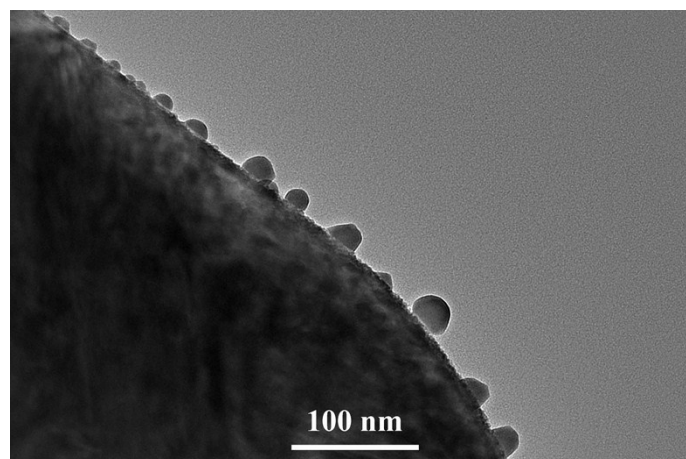


Fig. S6 Magnified TEM image of $\text{Co(OH)}_2/\text{B-BiVO}_4$ HMPs.

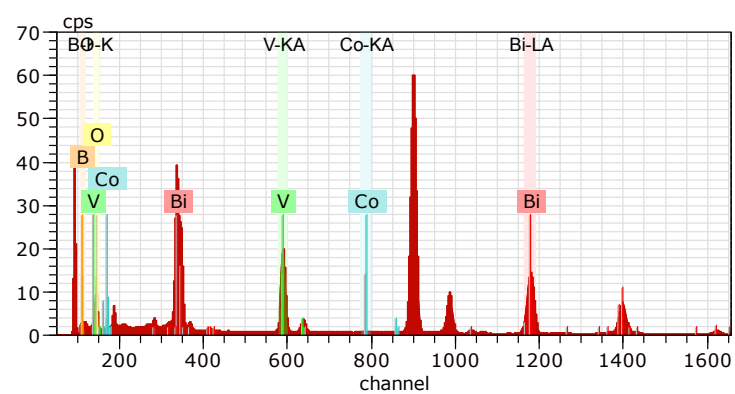


Fig. S7 EDX spectrum of $\text{Co(OH)}_2/\text{B-BiVO}_4$ HMPs.

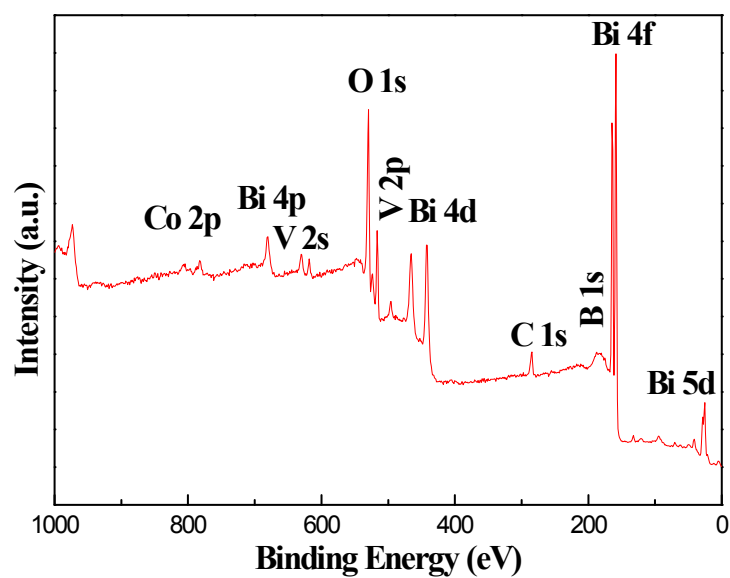


Fig. S8 XPS survey spectrum of $\text{Co}(\text{OH})_2/\text{B-BiVO}_4$ HMPs.

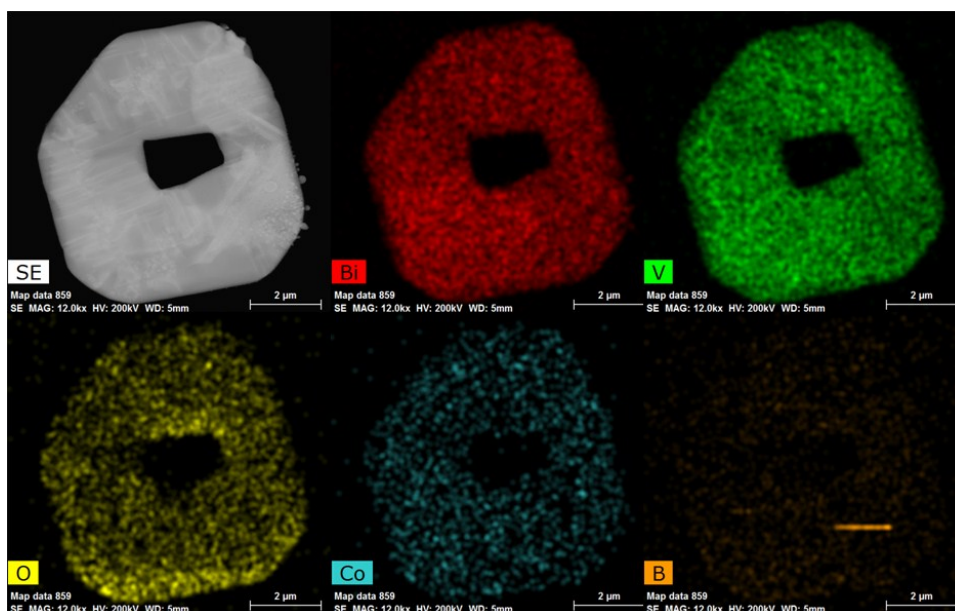


Fig. S9 STEM image of an individual $\text{Co}(\text{OH})_2/\text{B-BiVO}_4$ HMP and its corresponding elemental mapping.

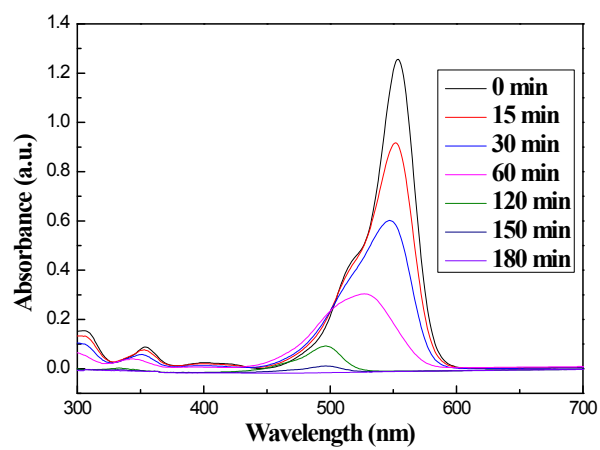


Fig. S10 UV-vis absorption spectrum changes of RhB aqueous solution in the presence of Co(OH)₂/B-BiVO₄ HMPs.