Electronic Supplementary Material (ESI) for Catalysis Science & Technology

Supporting Information

Effects of Distortion of PO_4 Tetrahedron on the Photocatalytic Performances of $BiPO_4$

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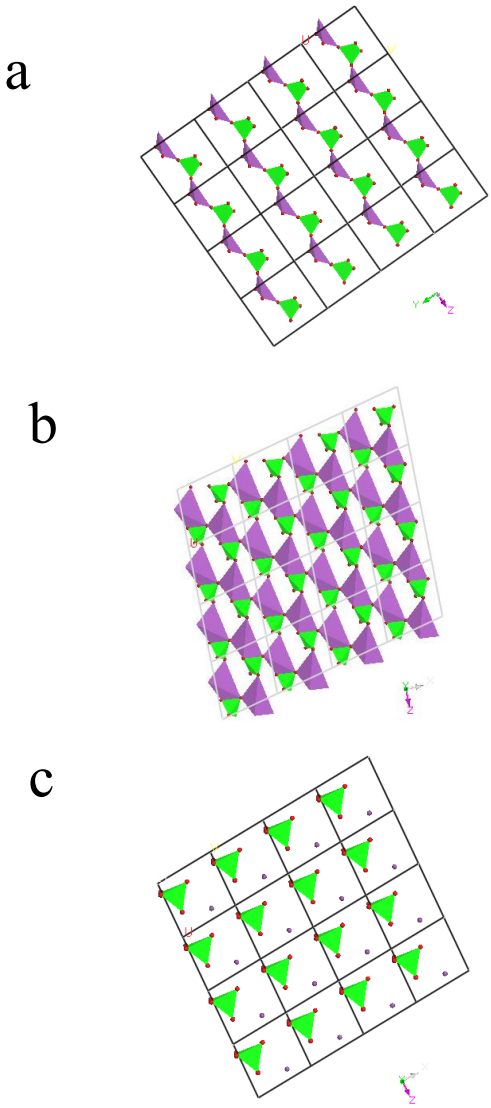

Figure S1. Orthogonal projection onto the (100) plane in HBIP (a) and (010) plane in nMBIP (b) and mMBIP (c). The planes of a layer are all $0.5d_{010}$ thick. In all the drawings, green is represented as PO_4 tethrahedrons; purple is represented as Bi-O

polyhedrons or Bi atoms.

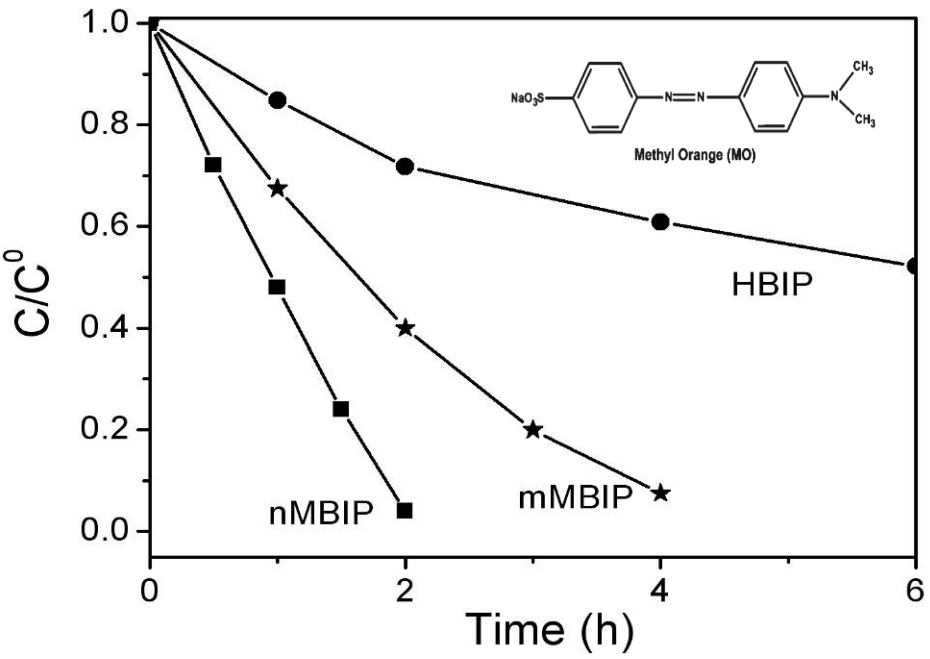

Figure S2. Photocatalytic degradation curves of MO for various $BiPO_4$ crystal phases obtained in 12M H_3PO_4 for 72h at different hydrothermal temperatures: HBIP at 20 ^oC, nMBIP at 100 ^oC, mMBIP at 200 ^oC. Photocatalyst, 0.5 g/L; MO concentration, 2×10^{-5} mol/L. Inset is the structure of MO.

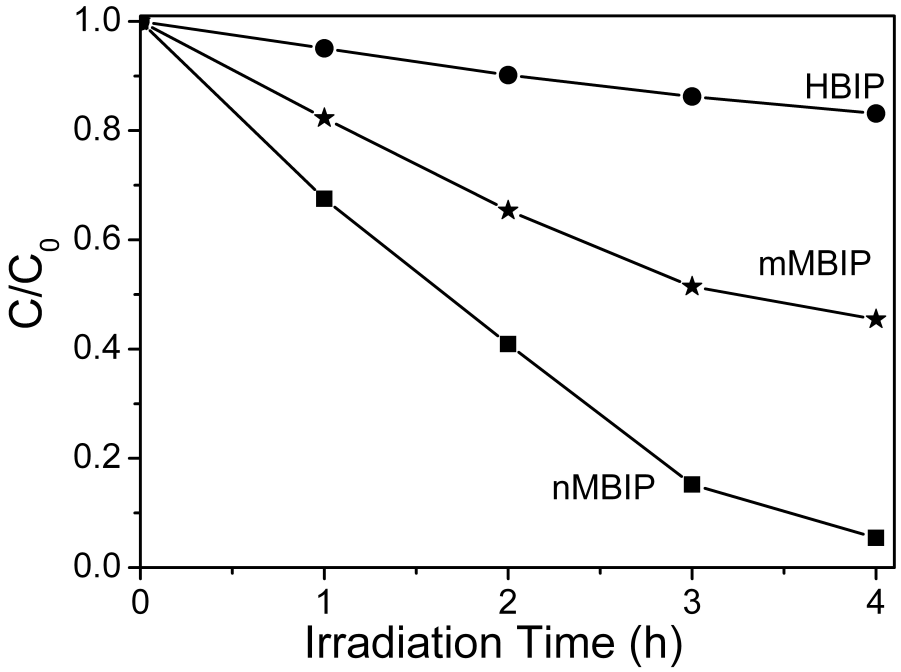

Figure S3. Photocatalytic degradation curves of 4-chlorophenol (4-CP) for various $BiPO_4$ crystal phases obtained in 12M H_3PO_4 for 72h at different hydrothermal temperatures: HBIP at 20 ^oC, nMBIP at 100 ^oC, mMBIP at 200 ^oC. Photocatalyst, 0.5 g/L; 4-CP concentration, 10mg/L. The concentration of 4-CP are determined by the absorption peak at 225nm.