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Titanium Alkoxide Induced BiOBr-Bi₂WO₆ Mesoporous Nanosheet Composites with Much Enhanced Photocatalytic Activity

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Supplementary Information

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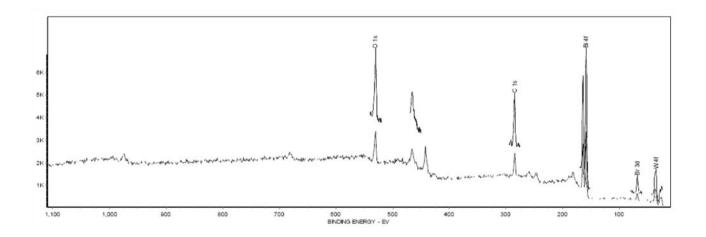


Figure S1. Typical XPS analysis from the BiOBr-Bi₂WO₆ MNCs.

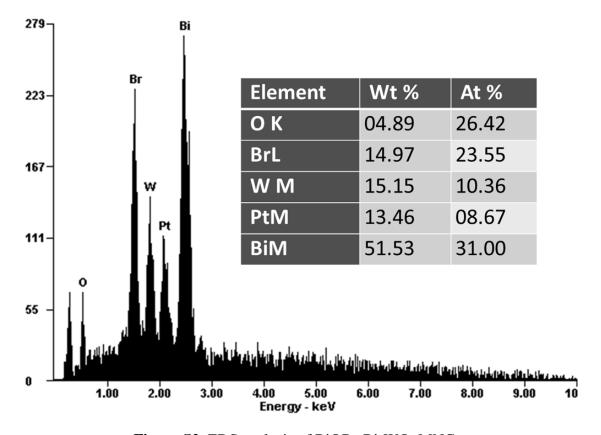


Figure S2. EDS analysis of BiOBr-Bi₂WO₆MNCs.

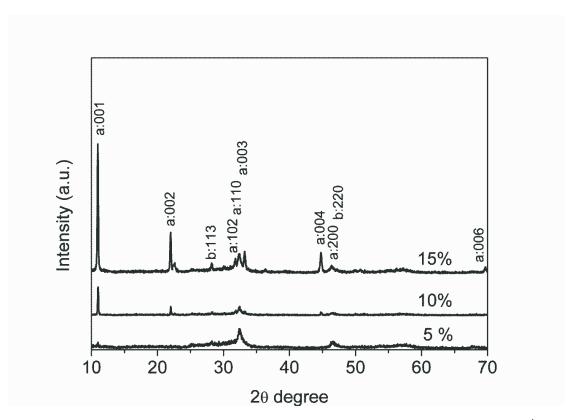


Figure S3. XRD patterns of BiOBr-Bi₂WO₆ MNCs with different fraction of $Ti(O^iPr)_4$. a: BiOBr, b: Bi₂WO₆

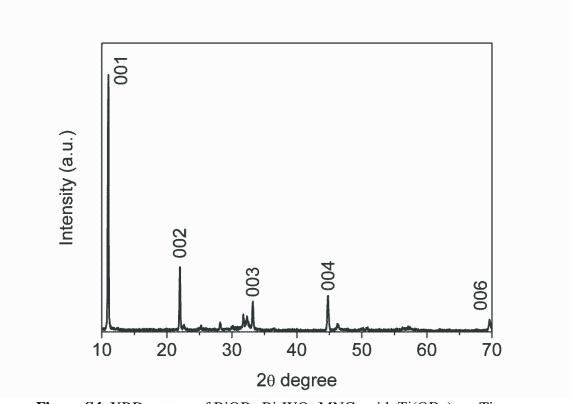


Figure S4. XRD pattern of BiOBr-Bi₂WO₆ MNCs with Ti(OBu)₄ as Ti source.

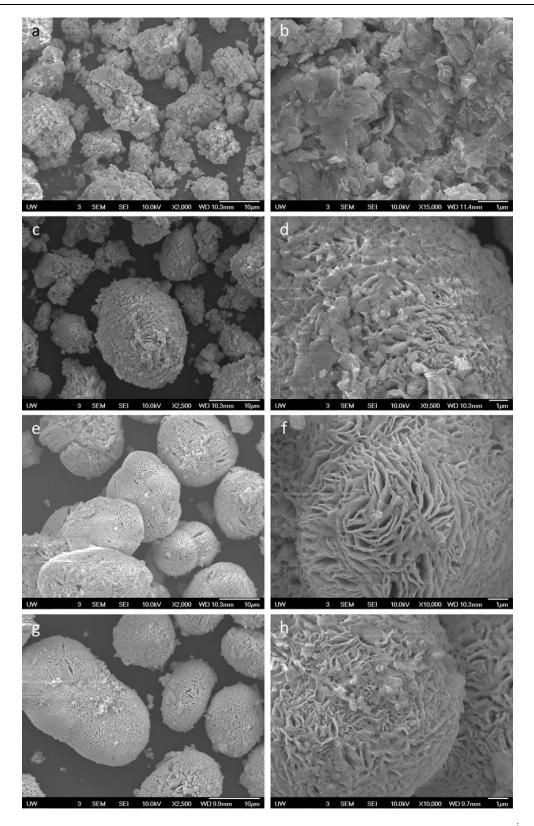


Figure S5. The morphology evolution of BiOBr-Bi₂WO₆ MNCs different fraction of Ti(OⁱPr)₄. (a, b) 0 mol%, (c, d) 5 mol%, (e, f) 10 mol% and (g, h) 15 mol% against Bi, showing the formation of assembled nanosheets to a microsphere involved Ti(OⁱPr)₄.

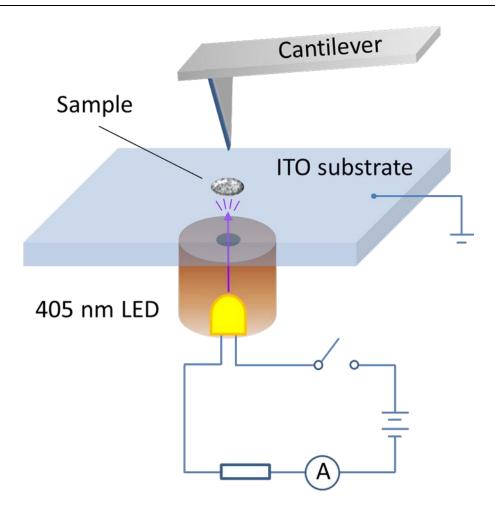


Figure S6. Schematics of the KPFM measurement for photoinduced surface potential.

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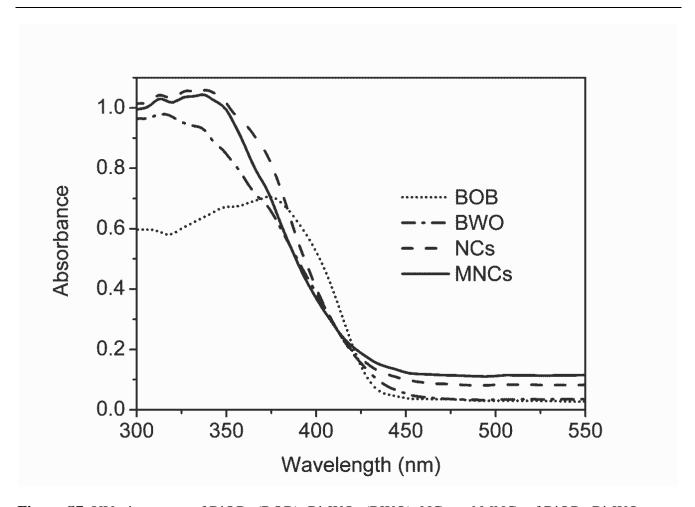


Figure S7. UV-vis spectra of BiOBr (BOB), Bi₂WO₆ (BWO), NCs and MNCs of BiOBr-Bi₂WO₆.

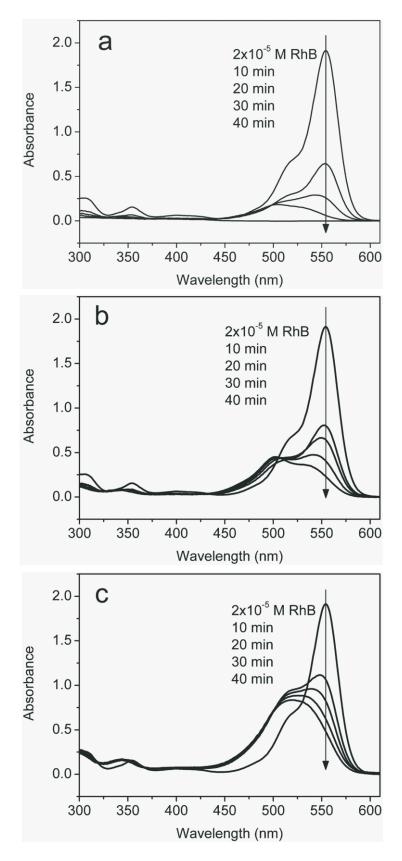


Figure S8. UV-vis spectral variations of RhB aqueous solution after degradation over the materials. (a) MNCs, (b) NCs and (c) BiOBr under visible light irradiation.

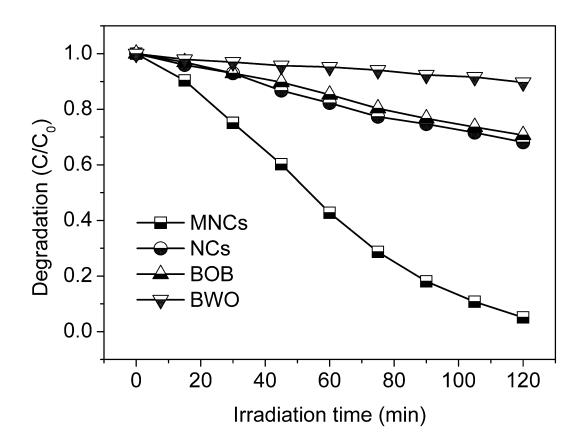


Figure S9. Photodegradation of MO in the presence of MNCs and NCs of BiOBr-Bi₂WO₆, BiOBr (BOB) and Bi₂WO₆ (BWO) under exposure to visible light.