

## Electronic Supplementary Information

### HCl post-processing BiOBr photocatalyst: Structure, morphology, and composition and their impacts to activity

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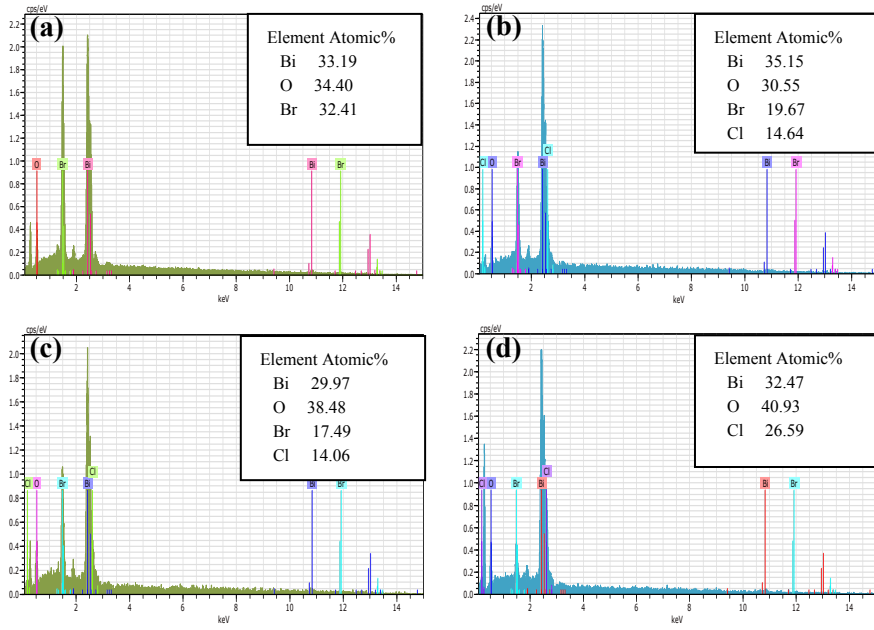


Fig. S1. EDX patterns of (a) BOB, (b) BOB-HC2, (c) BOB-HC3, and (d) BOB-HC5 samples

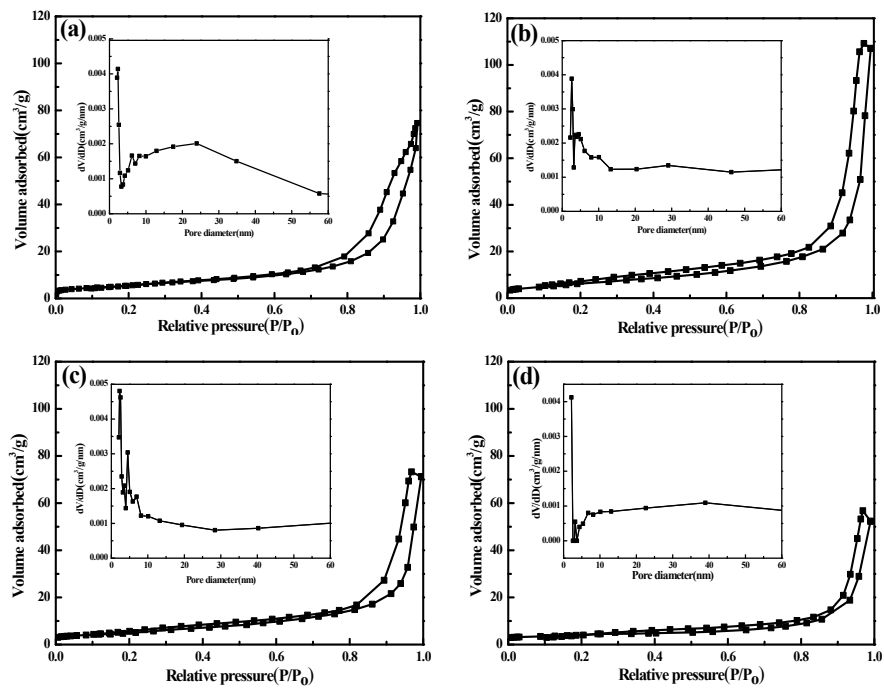
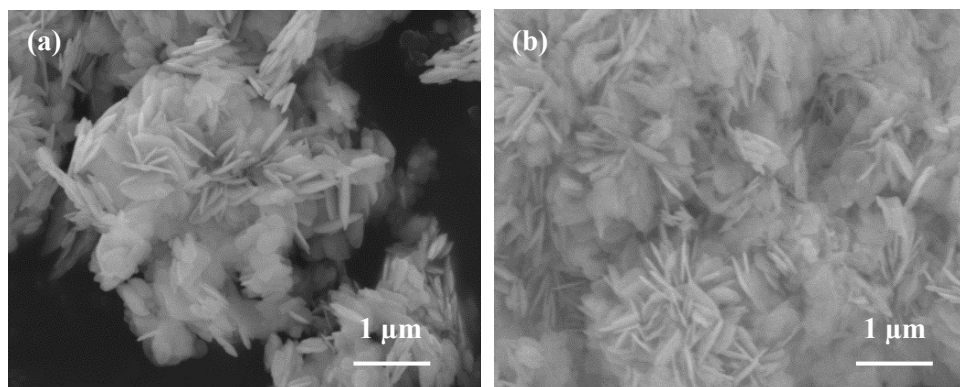
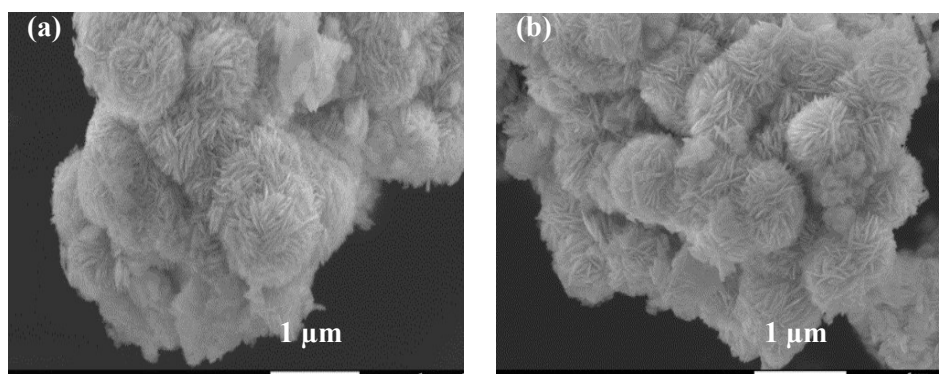


Fig. S2. Nitrogen adsorption-desorption isotherms and pore size distribution for: (a) BOB, (b) BOB-HC2, (c) BOB-HC3, and (d) BOB-HC5 samples



**Fig. S3. SEM images of (a) fresh and (b) used BOB-HC3 catalysts**



**Fig. S4. SEM images of (a) BOB-NC and (b) BOB samples**

**Table S1 Values of electronegativity of atoms calculated from the ionization energy and the electron affinity energy**

Atoms	The ionization energy (kJ/mol)	The electron affinity energy (kJ/mol)	electronegativity (eV)
Bi	703.0	91	4.11
O	1313.9	141	7.54
Cl	1251.2	349	8.29
Br	1139.9	324	7.59