

## **Supporting Information**

Fig. S1 Nitrogen absorption-desorption isotherms of BiOBr.



Fig. S2 Photocatalytic activities of as-prepared samples with different reaction conditions: (a) different ammonia addition, and (b) different steeping time.



Fig. S3 XRD of samples which produced when  $AgNO_3$  was added into the

supernatant of water-steeping process