Supporting Information

Design of Au@Ag/BiOCl-OV photocatalyst and its application in alcohol selective oxidation driven by plasmonic carries using O_2 as oxidant

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Fig. S1. The photos of Au NPs, Au@Ag-1, Au@Ag-2 and Au@Ag-3.

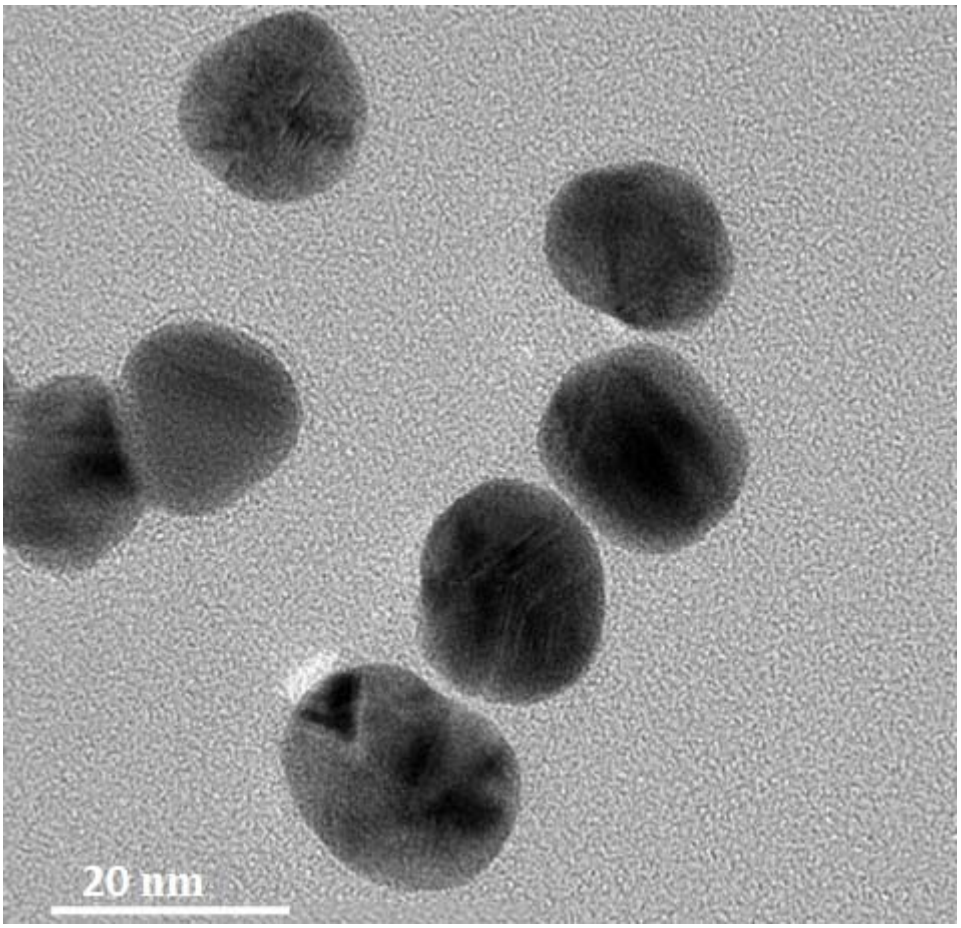

Fig. S2. TEM images of Au NPs

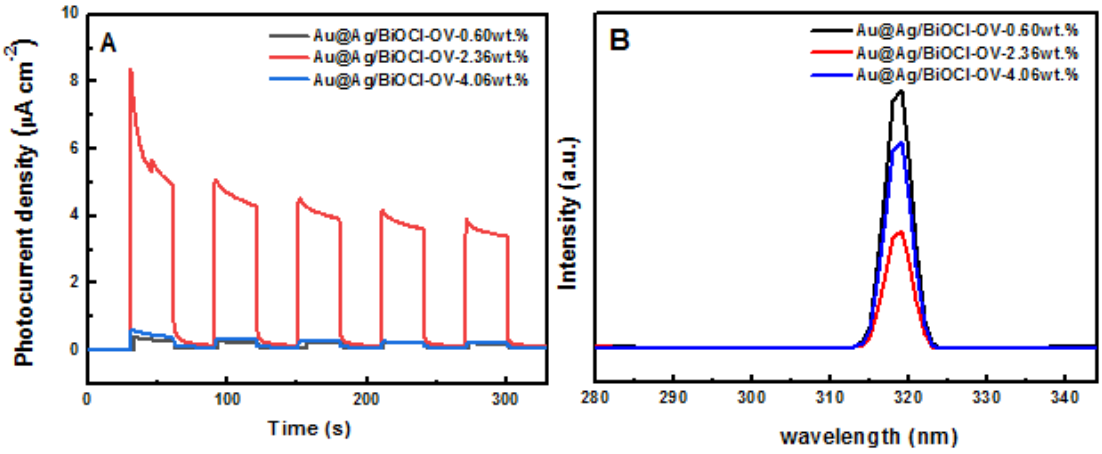

Fig. S3. Photocurrent-time curves (A) and photoluminescent spectra (B) of Au@Ag/BiOCl-OV with different Au@Ag contents.

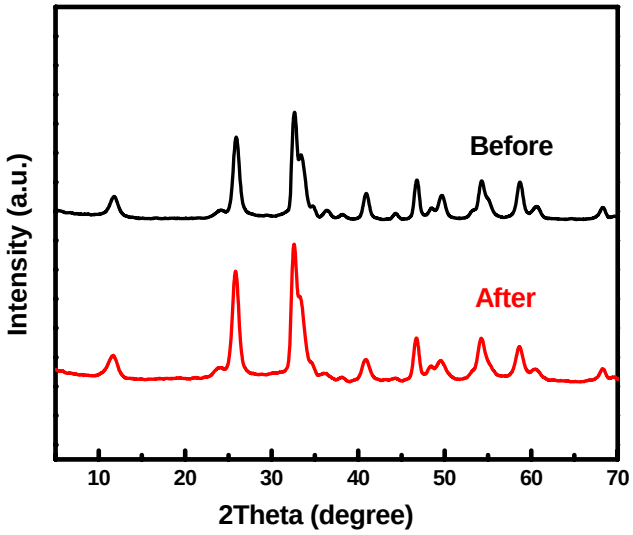

Fig. S4. XRD patterns of Au@Ag/BiOCl-OV before and after cycle experiment.

Table S1. Preparation conditions and Au and Ag contents over series of Au@Ag.

Samples	Dosage of Au NPs (ml)	Dosage of $AgNO_3$ (ml)	Au content (wt.%)	Ag content (wt.%)
Au@Ag-1	5	0.1	71.12	28.88
Au@Ag-2	5	0.3	45.10	54.90
Au@Ag-3	5	0.5	33.03	66.97