

Supplementary Information

Facile synthesis of Ag/AgCl/BiOCl ternary nanocomposites for photocatalytic inactivation of *S.aureus* under visible light

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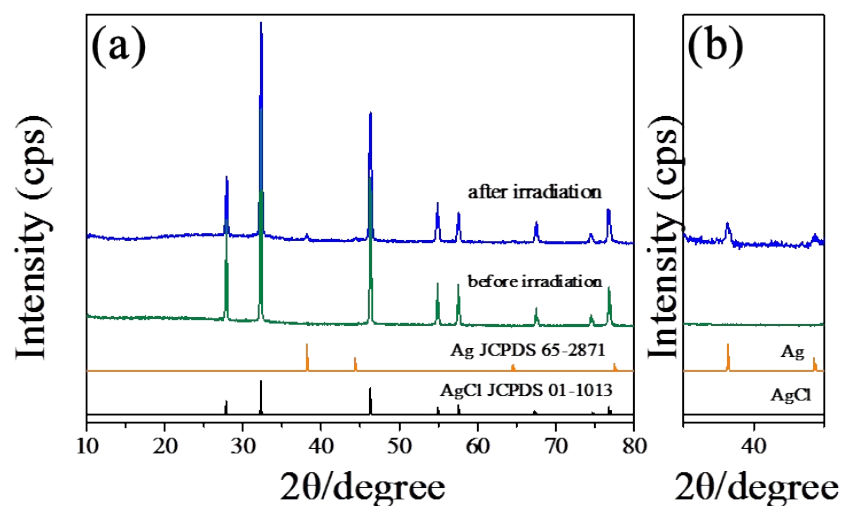


Figure SI 1. (a) XRD patterns of AgCl before and after visible light irradiation, (b) the amplified XRD patterns in the range of $2\theta = 35\text{-}45^\circ$

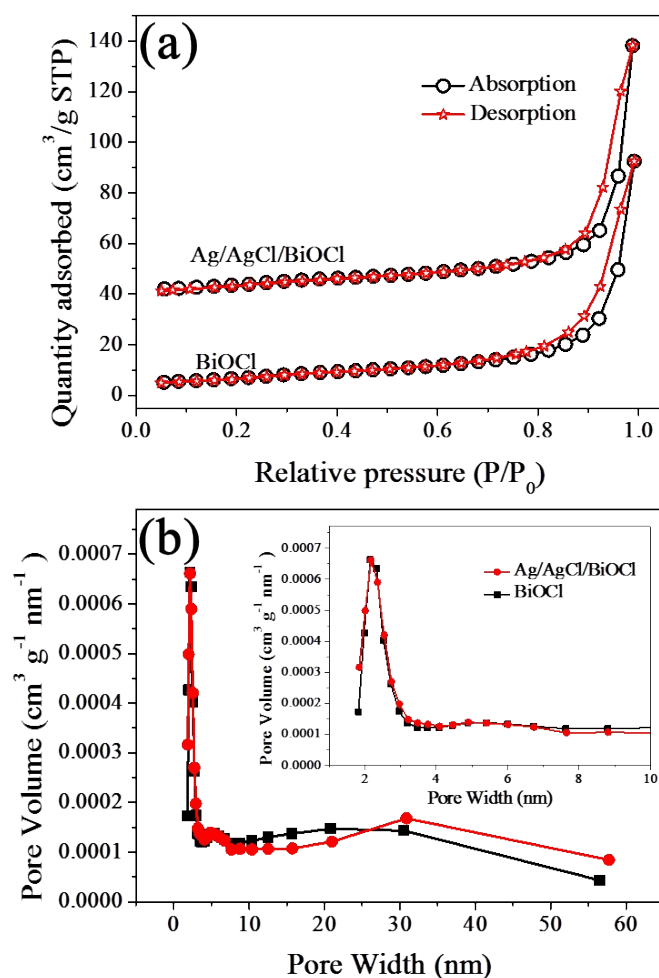


Figure SI 2. Nitrogen adsorption-desorption isotherms (a) and pore size distribution (b) of BiOCl and Ag/AgCl/BiOCl.

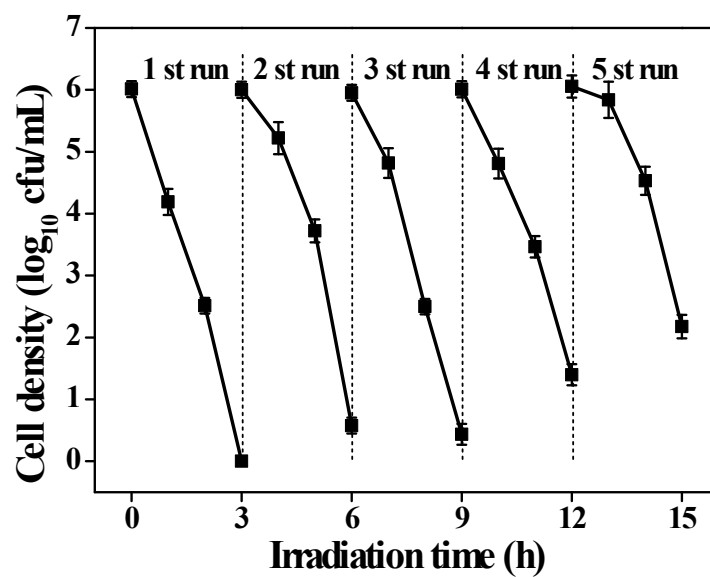


Figure SI 3. Cycle runs of inactivation experiment in the presence of Ag/AgCl/BiOCl under visible light.

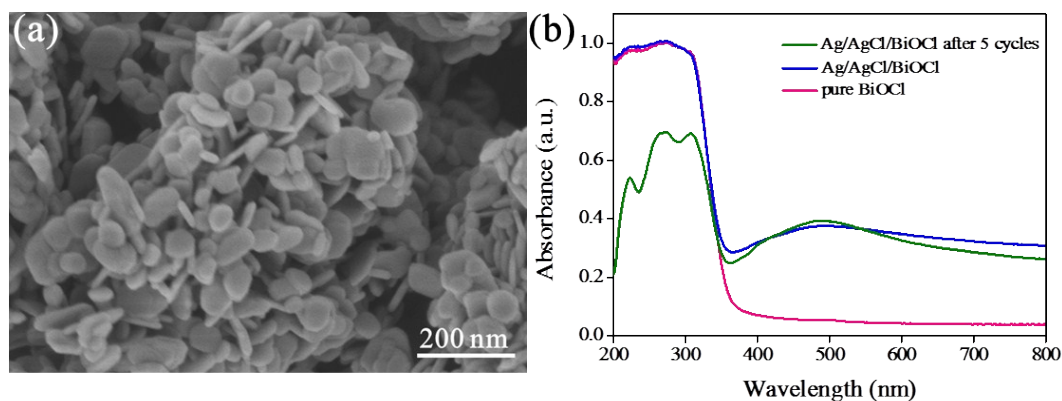


Figure SI 4. (a) SEM of Ag/AgCl/BiOCl after 5 cycles, (b) UV-vis diffuse reflectance spectra of BiOCl, Ag/AgCl/BiOCl and Ag/AgCl/BiOCl after 5 cycles.

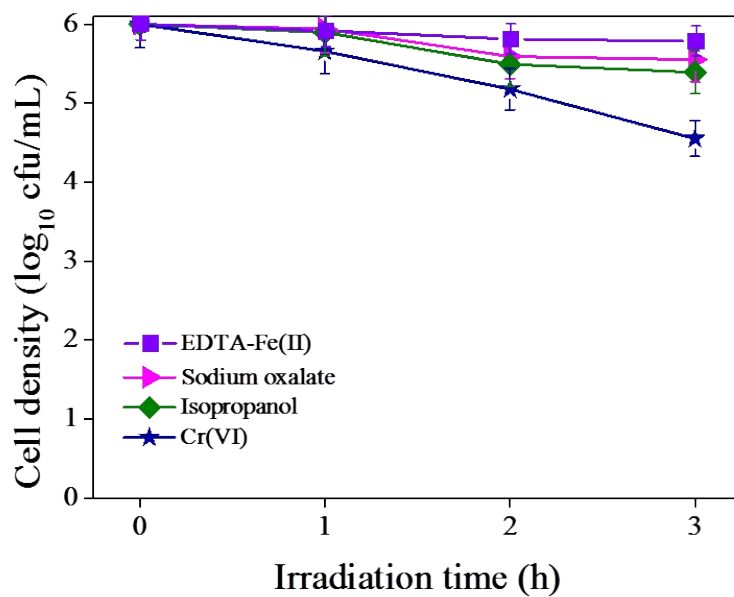


Figure SI 5. Photocatalytic disinfection efficiency of *S. aureus* in absence of Ag/AgCl/BiOCl with different scavengers (0.5 mM sodium oxalate, 5 mM isopropanol, 0.05 mM Cr(VI), 0.1 mM EDTA- Fe(II)) under VL irradiation.

Table SI 1. ICP-MS analysis of Ag/AgCl/BiOCl

Concentration (ppb)		Atomic ratio of Bi/Ag
Bi	Ag	
2947.943	55.671	27.38