

**Fig. S1.** FTIR spectra of PSCN and BiOBr/PSCN/Ag/AgCl heterojunction.



**Fig. S2.** EDX analysis of (a) PSCN, (b) BiOBr/A/AgCl and (c)BiOBr/PSCN/Ag/AgCl.



**Fig. S3.** XPS Spectra of (a) C and (b) N in g-C3N4.