## Efficient Detoxification of Triclosan by S-Ag/TiO<sub>2</sub>@g-C<sub>3</sub>N<sub>4</sub> Hybrid Photocatalyst: Process Optimization and Bio-Toxicity Assessment

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Fig. S1 (a) UV-vis diffused reflectance absorption spectra and (b) Tauc-Motts plots of the prepared catalysts



**Fig. S2**. Desirability ramp for numerical optimization of four goals solution pH, catalyst dose, TS concentration and irradiation time with degradation efficiency



Fig. S3 Mass fragmentation peaks of TS degradation products after 30 min (a) and 60 min (b) of visible light irradiation by  $S/Ag-TiO_2@g-C_3N_4$ 

## (A)



**Fig. S4** *E. coli* colony forming unit assay for toxicity assessment of (a) pure TS, (b) control and (c) its degradation products after 60 min (inoculum *E. coli* = 50  $\mu$ l; TS concentration = 20 mg/L)