Supporting Information

## A floating photocatalytic fabric integrated with AgI/UiO-66-NH<sub>2</sub> heterojunction as a facile strategy of wastewater treatment

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Fig. S1 Fourier-Transform Infrared spectroscopy (FT-IR) analysis of carboxymethylated cotton, UiO@cotton and AgI/UiO@cotton.



Fig. S2 Wide scan XPS spectra of (a) UiO@cotton, (b) AgI@cotton, and (c) AgI/UiO@cotton.



**Fig. S3** High resolution XPS spectra of (a) Zr 3d of UiO@cotton, (b) Zr 3d of AgI/UiO@cotton, (c) N 1s of UiO@cotton and (d) N 1s of AgI/UiO@cotton.



Fig. S4 Band gap energy (Eg) estimation by Kubelka-Munk equation from DRS spectra.



Fig. S5 Changes of UV-vis absorbance of Rhodamine B with AgI@fabric.



Fig. S6 UV-vis absorbance spectra of distilled water after 2 hr of irradiation with AgI@fabric and AgI/UiO@fabric