## Enhanced adsorption capacity of polypyrrole/TiO<sub>2</sub> composite modified by carboxylic acid with hydroxyl group

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Fig.S1. FT-IR spectra of the as-prepared composites



Fig.S2. Adsorption equilibrium curves of ARG ( $\blacksquare$ ,  $\bullet$ ,  $\blacktriangle$ ) and MB ( $\Box$ ,  $\circ$ ,  $\triangle$ ) with various initial concentrations on the as-prepared composites



Fig.S3 Pseudo-first-order kinetics plot and fitting line for ARG and MB adsorbed onto the asprepared composites



Fig.S4. Experimental dots and Langmuir isotherm models of ARG and MB adsorbed onto CI-PPy/TiO<sub>2</sub> at different kelvin temperature