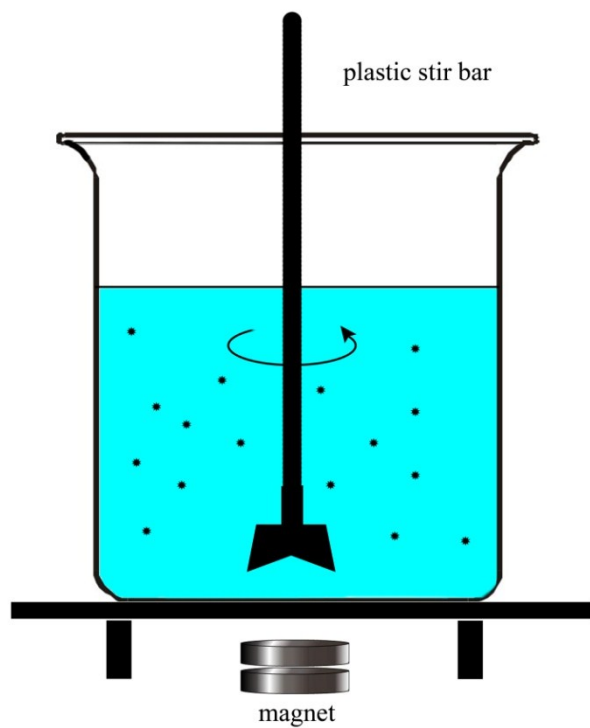


Supplementary Material



Scheme. S1 The simulation diagram of experimental procedure.

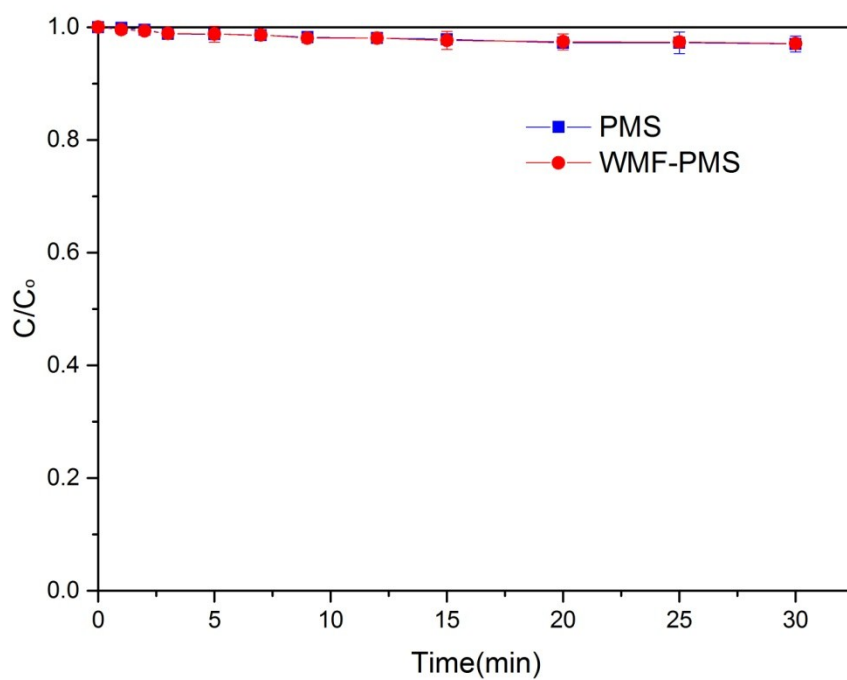


Fig. S1 AO7 minimal removal by PMS. Reaction conditions: $[PMS]_0=5 \times 10^{-4}M$, $[AO7]_0=0.02mM$, $pH=6.0$. C and C_0 are AO7 concentration at time t and initial.

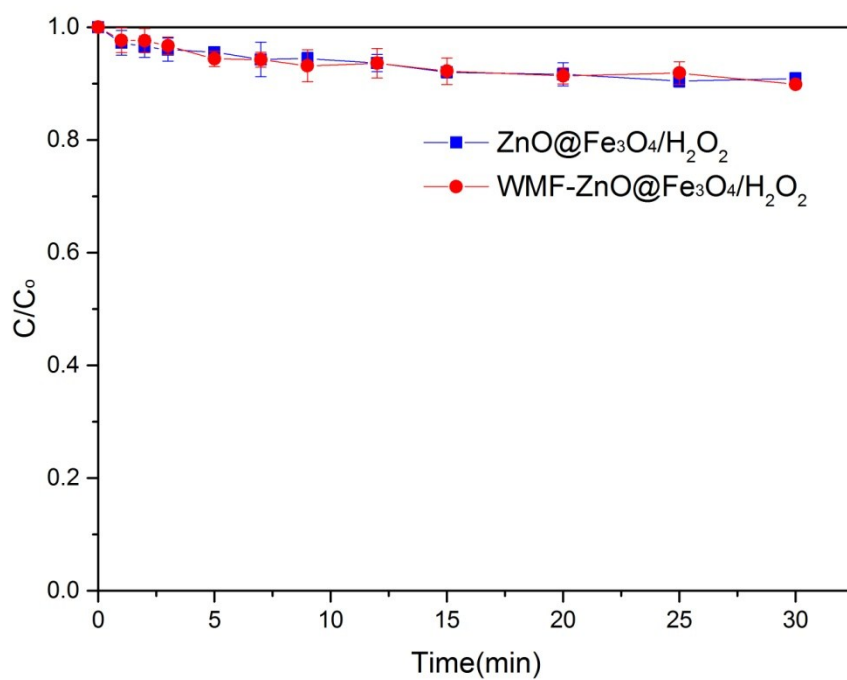


Fig. S2 AO7 minimal removal by ZnO@Fe₃O₄/H₂O₂ system. Reaction conditions: [H₂O₂]₀=5×10⁻⁴M, [AO7]₀=0.02mM, pH=6.0. C and C₀ are AO7 concentration at time t and initial.

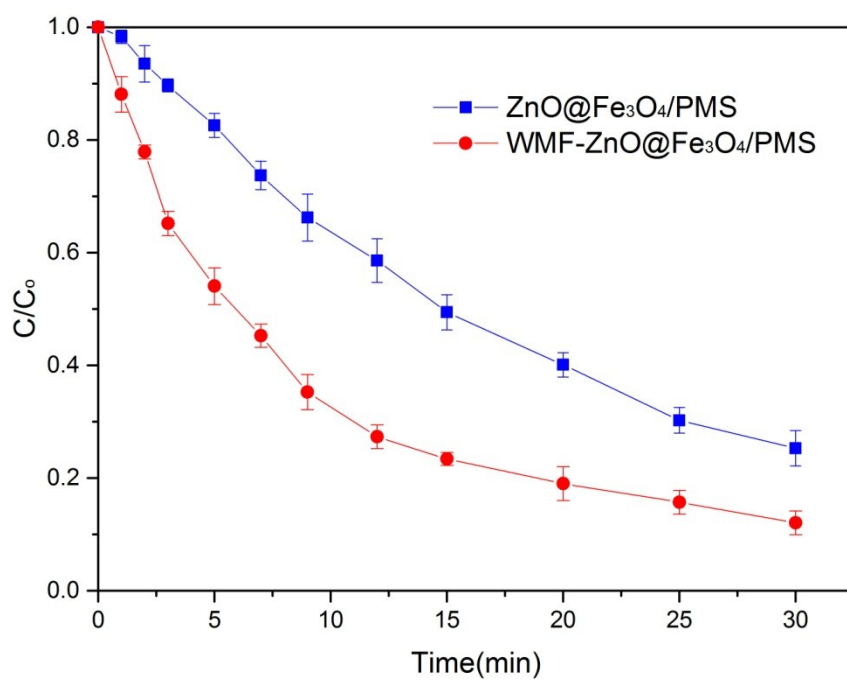


Fig. S3 AO7 removal by ZnO@Fe₃O₄/PMS system under N₂ inert atmosphere. Reaction conditions: [PMS]₀=5 × 10⁻⁴M, [AO7]₀=0.02mM, pH=6.0, DO=0.07mgL⁻¹. C and C₀ are AO7 concentration at time t and initial.

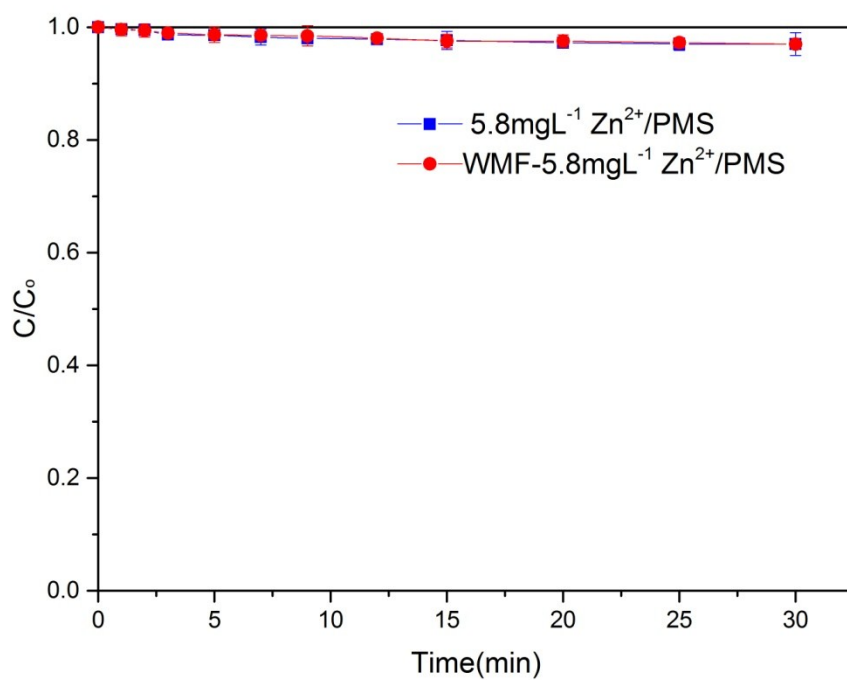


Fig. S4 AO7 minimal removal by 5.8mgL⁻¹ Zn²⁺. Reaction conditions: [PMS]₀=5×10⁻⁴M, [AO7]₀=0.02mM, pH=6.0. C and C₀ are AO7 concentration at time t and initial.