

Adsorption-photocatalytic degradation of methyl orange over a facile one-step hydrothermally synthesized TiO₂/ZnO-NH₂-RGO nanocomposite

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1. Adsorption Isotherms

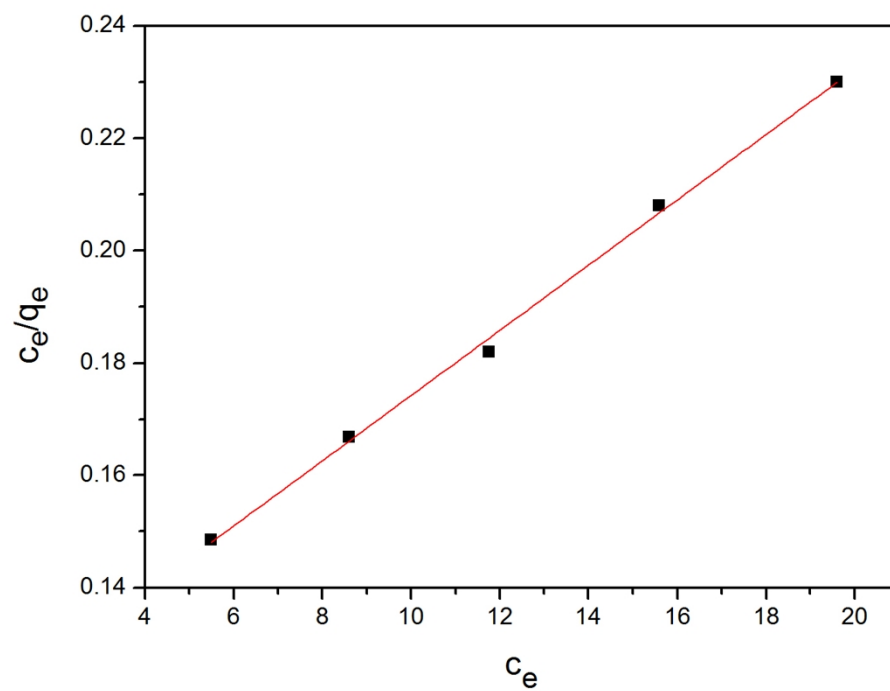


Fig. S1. Langmuir adsorption isotherm of the MO adsorption onto TZ-a-RGO.

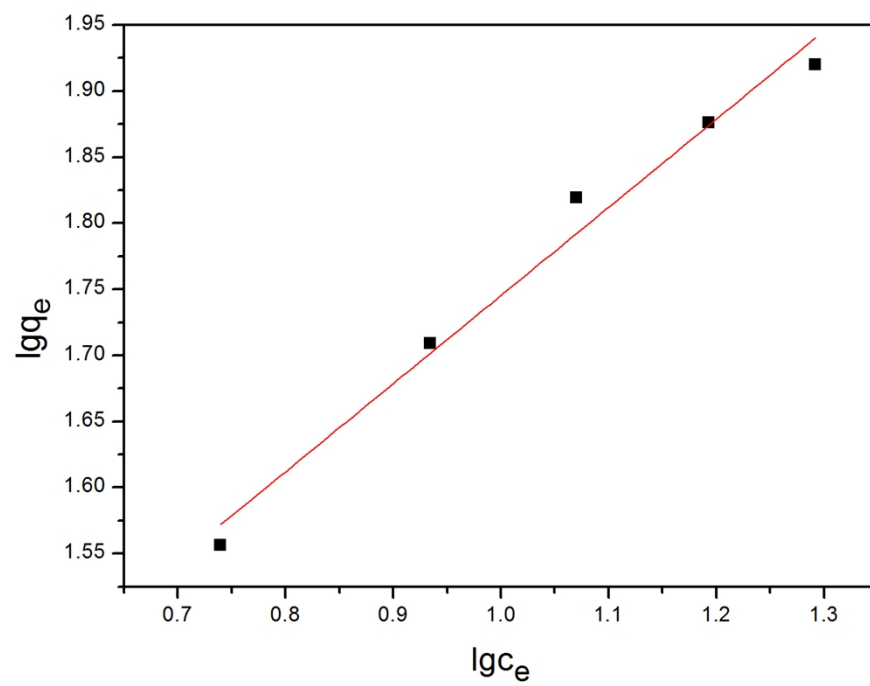


Fig. S2. Freundlich adsorption isotherm of the MO adsorption onto TZ-a-RGO.

2. Adsorption Kinetics

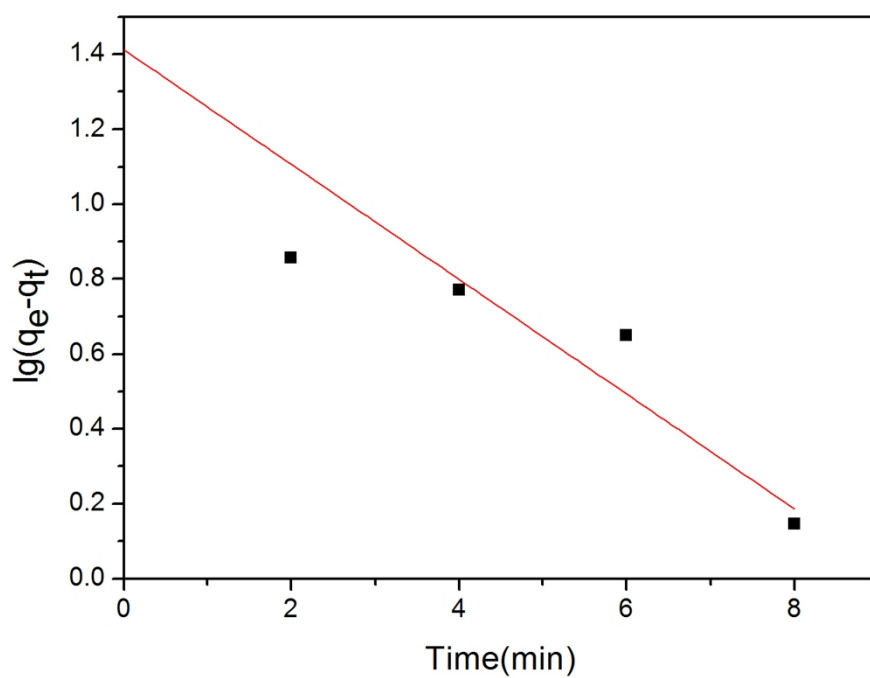


Fig. S3. Plot of the pseudo-first-order kinetic model for MO on TZ-a-RGO.

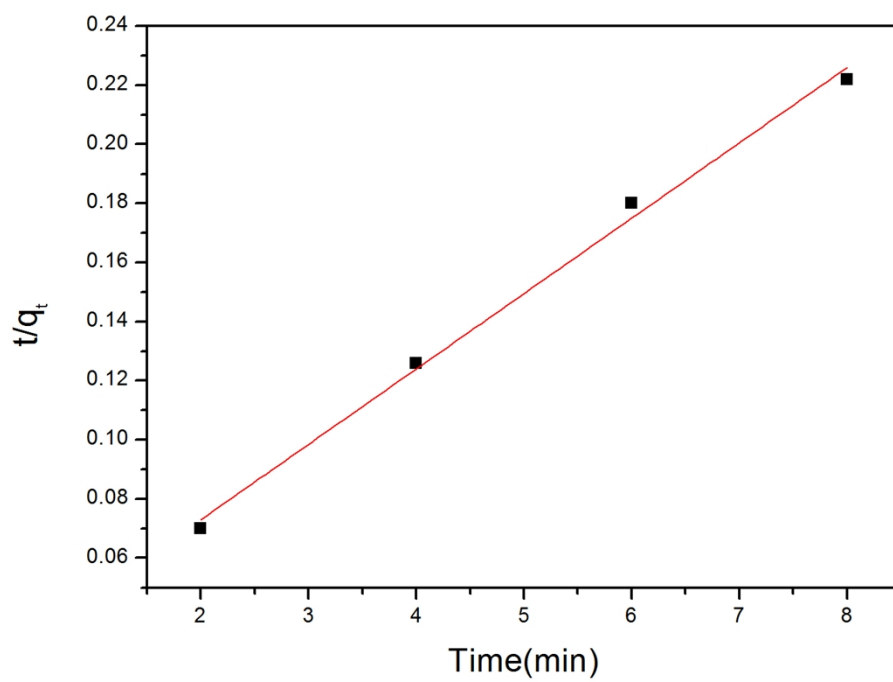


Fig. S4. Plot of the pseudo-second-order kinetic model for MO on TZ-a-RGO.

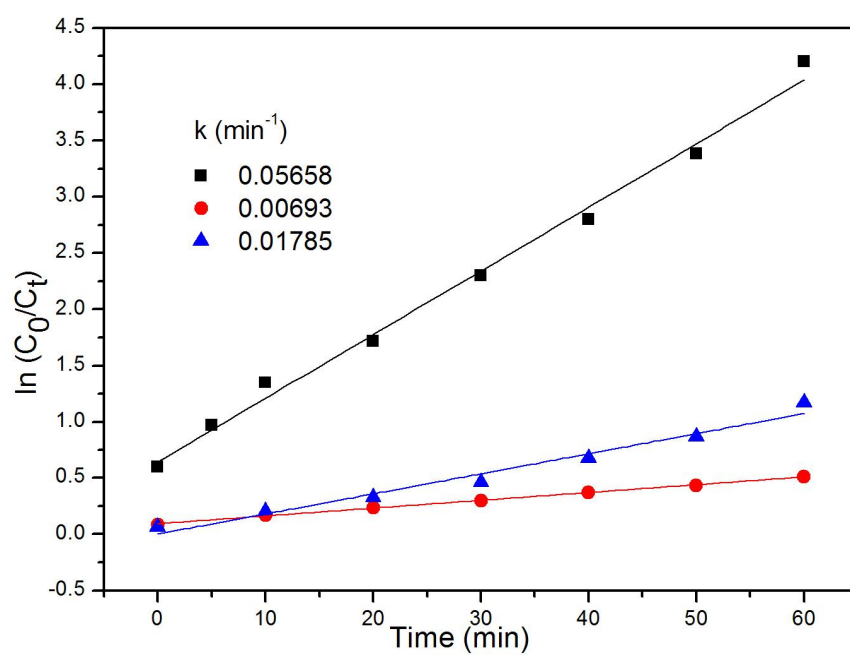


Fig. S5. $\ln(C_0/C_t)$ for the photodegradation of MO by P25, ZnO/TiO₂, TZ-a-RGO.

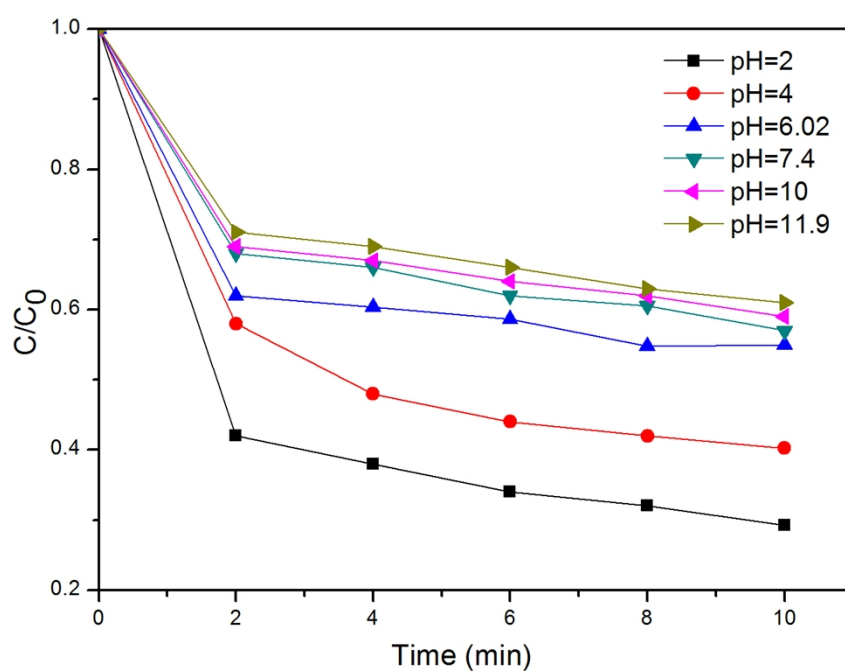


Fig. S6. Effect of initial pH for MO adsorption on TZ-a-RGO.