Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supporting Information

of

Structure-Property Relationship of Manganese Oxides: Highly Efficient Removal of Methyl Orange from Aqueous Solution

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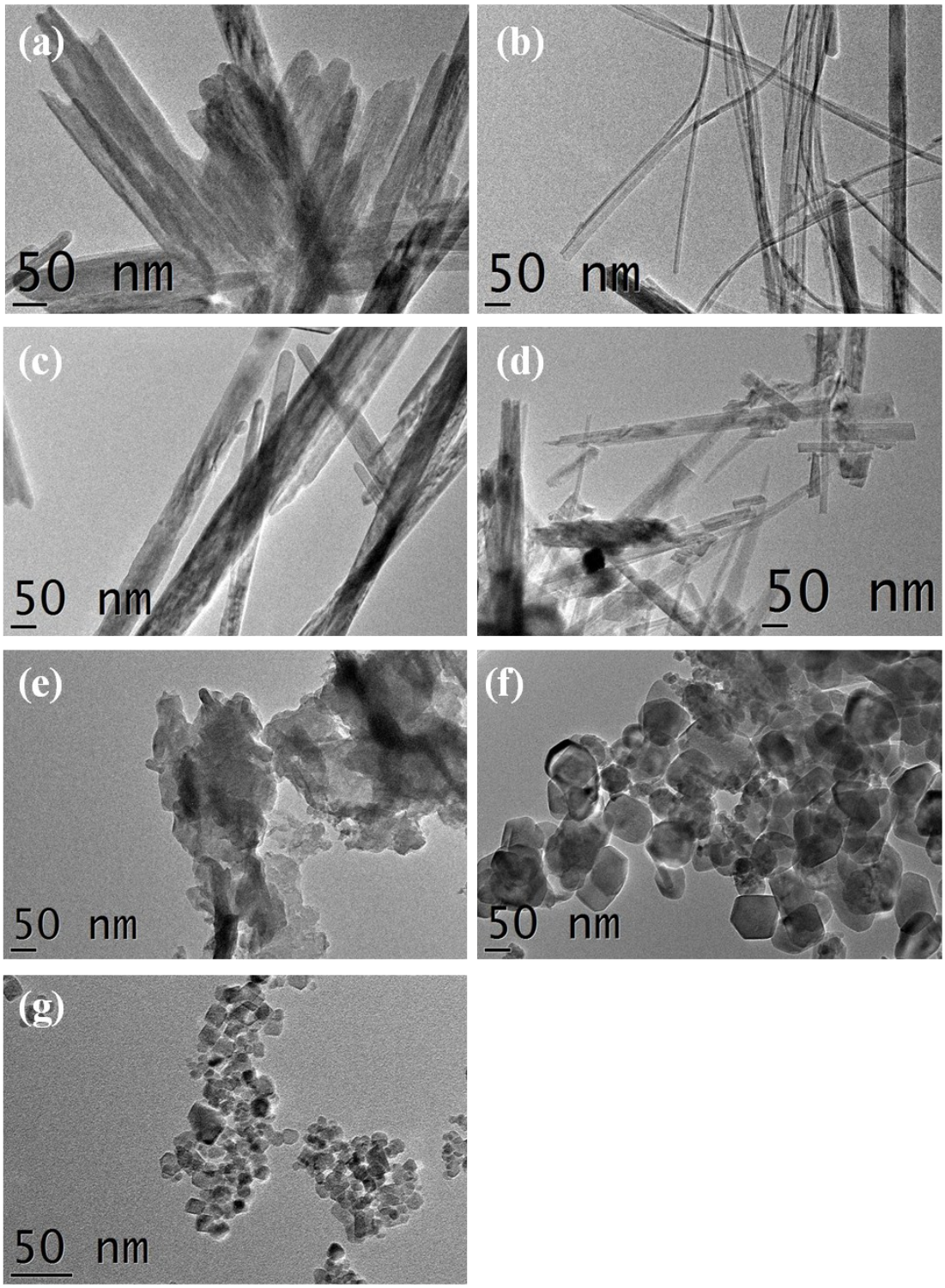

Fig. S1 Representative TEM images for as-prepared nanostuctured materials: (a) α-MnO_2 nanotubes, (b) α-MnO_2 nanowires, (c) β-MnO_2, (d) γ-MnO_2, (e) δ-MnO_2, (f) Mn_2O_3 and (g) Mn_3O_4.

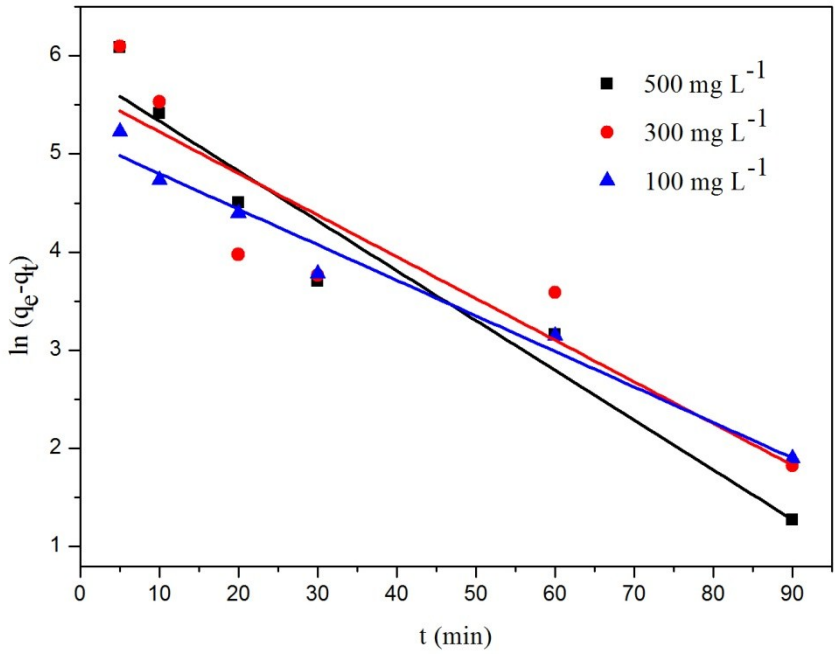

Fig. S2 Plots of the pseudo-first-order kinetic model for MO adsorption on A-MnO_2.

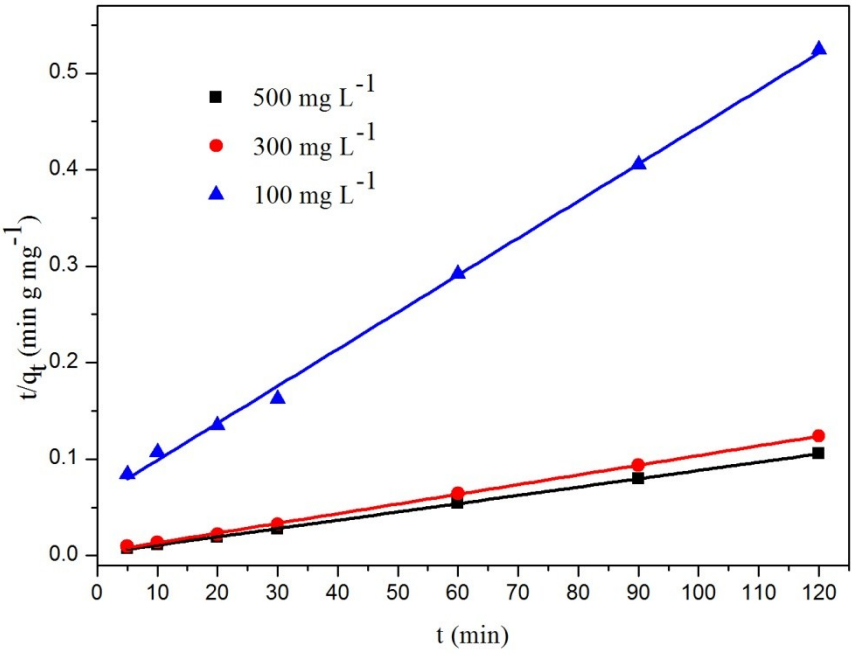

Fig. S3 Plots of the pseudo-second-order kinetic model for MO adsorption on A-MnO_2.

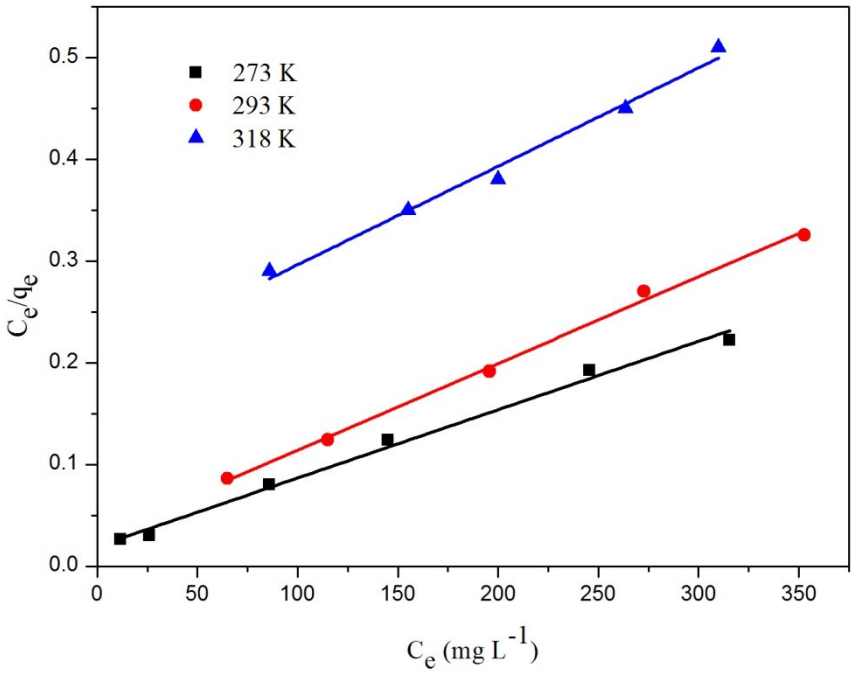

Fig. S4 Langmuir adsorption isotherm plots for MO adsorption onto A-MnO_2.

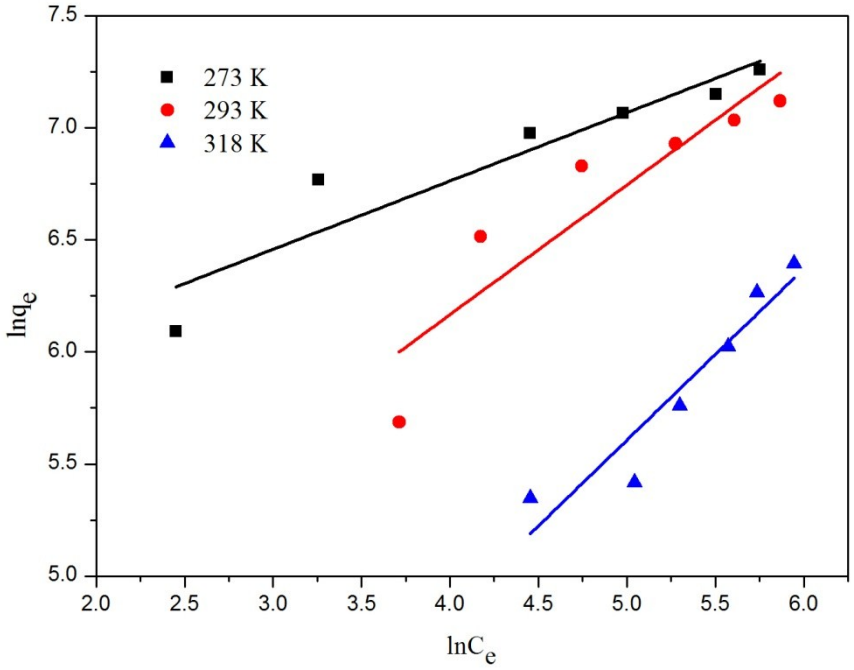

Fig. S5 Freundlich adsorption isotherm plots for MO adsorption onto A-MnO_2.

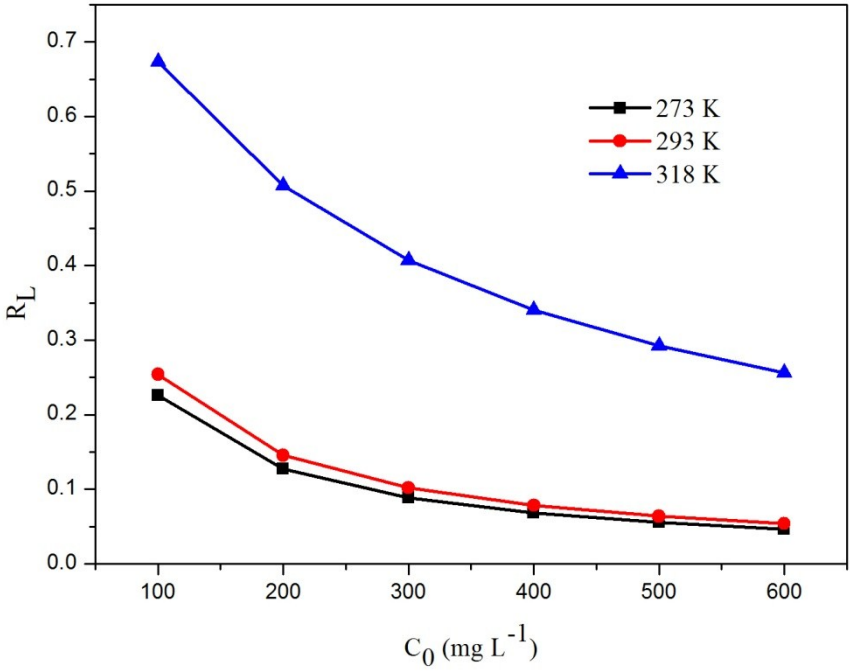

Fig. S6 Separation factor of MO adsorbed onto A-MnO_2 at different temperatures.

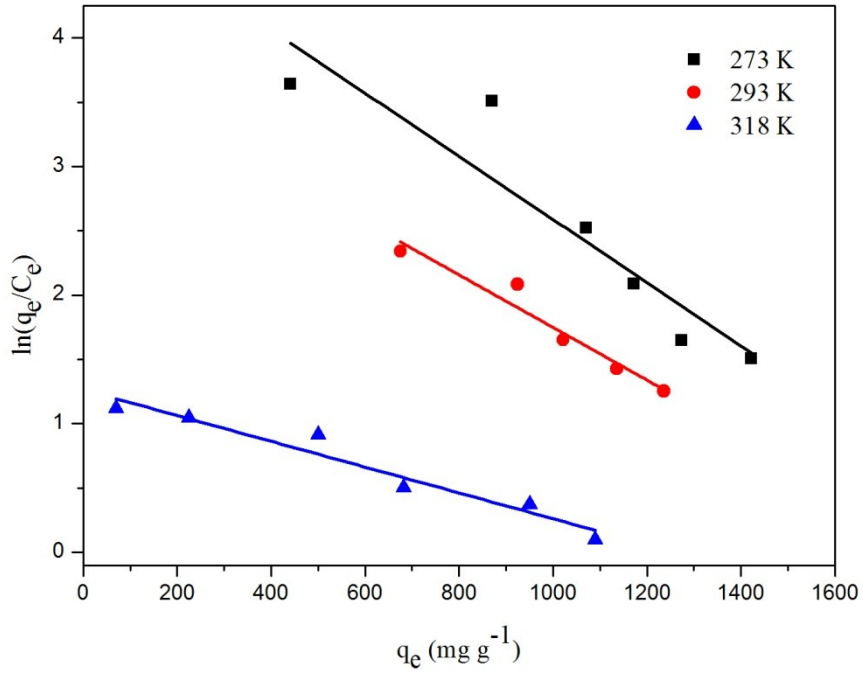

Fig. S7 Plots of ln q_e/C_e *vs.* q_e for calculation of thermodynamic parameters.

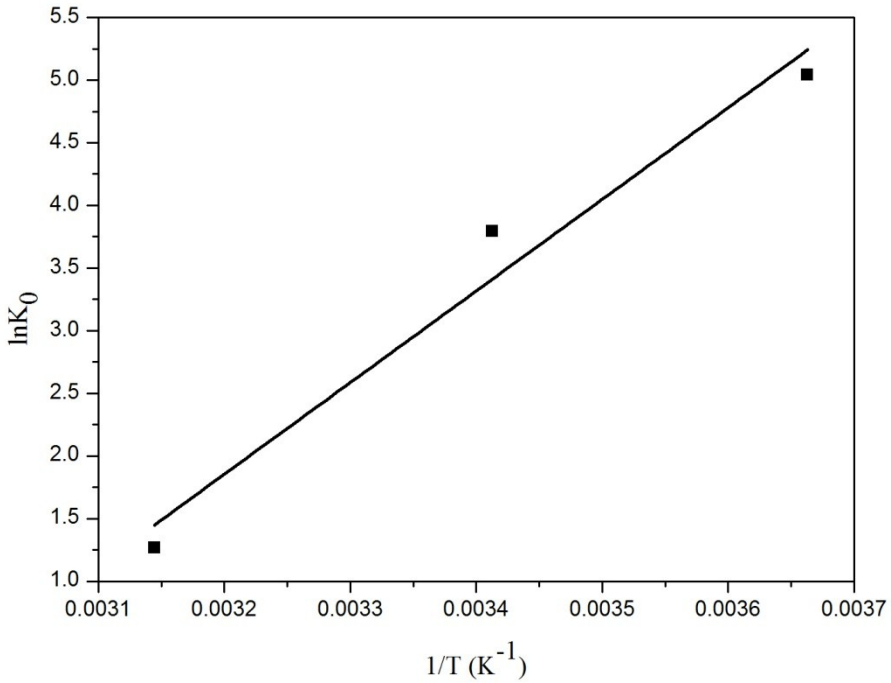

Fig. S8 Van't Hoff plot for the adsorption of MO onto A-MnO_2.