Supporting Information

Temperature sensitive long-term stability of MnO_x/TiO_2 catalysts for selective catalytic reduction of NO_x with NH_3 at low temperature

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Figures

Figures

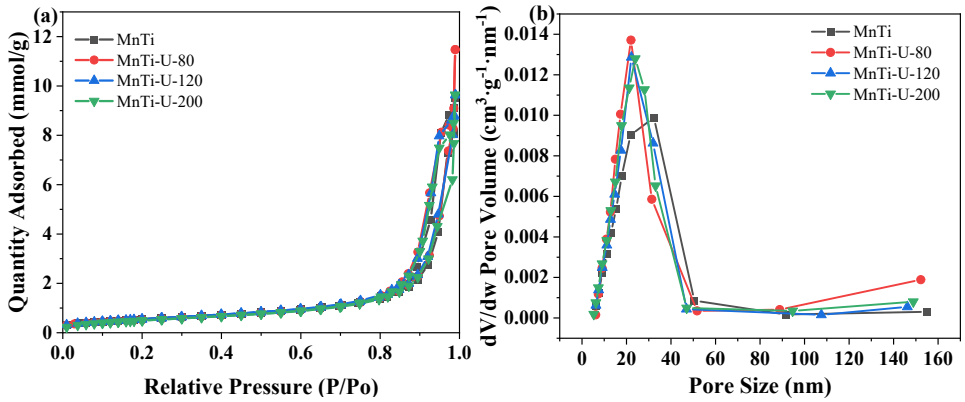

Fig. S1. (a) N_2 adsorption-desorption isotherms and (b) BJH pore size distributions of catalysts

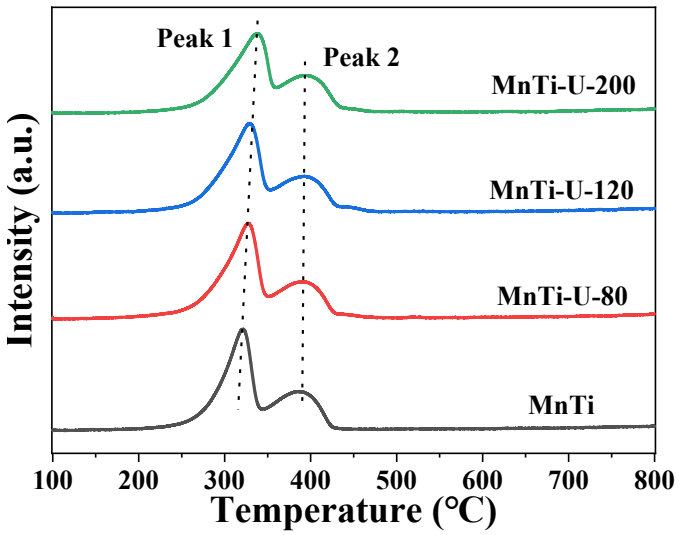

Fig. S2. H_2-TPR profiles of catalysts

Two distinct H_2 consumption peaks could be clearly observed: the two peaks at 320 °C (Peak 1) and the peak at 390 °C (Peak 2) could be attributed to the reduction of Mn^{4+} to Mn^{3+} and the reduction of Mn^{3+} to Mn^{2+} [1-3].

Reference

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[2] Q. Liu, J. Yang, M. Luo, et al., Low-Temperature Selective Catalytic Reduction of NO with NH_3 Over Mn-Ti Oxide Catalyst: Effect of the Synthesis Conditions, J. Catalysis Letters, 151 (4) (2021) 966-979, https://doi.org/10.1007/s10562-020-03365-y

[3] Y. Zeng, F. Lyu, Y. Wang, et al., New insight on N_2O formation over MnO_x/TiO_2 catalysts for selective catalytic reduction of NO_x with NH_3, J. Molecular Catalysis, 525 (2022) 112356, https://doi.org/10.1016/j.mcat.2022.112356