Supplementary material

Taming NO oxidation efficiency by γ-MnO_2 morphology regulation

Lei Chen,[a] Jinping Zhang,[b] Yuxin Li,[c] Xiaomei Wu,[a] Zaoxiao Zhang,[a,b] Qiang Lu,[d] Chi He,[b,e,*]

[a] *Shaanxi Key Laboratory of Energy Chemical Process Intensification, School of Chemical Engineering and Technology, Xi'an Jiaotong University, Xi'an, China*

[b] *State Key Laboratory of Multiphase Flow in Power Engineering, Xi'an Jiaotong University, Xi'an, China*

[c] *Key Laboratory of Thermo-Fluid Science and Engineering of MOE, School of Energy and Power Engineering, Xi'an Jiaotong University, Xi'an 710049, China*

[d] *National Engineering Laboratory for biomass Power Generation Equipment, North China Electric Power University, Beijing 102206, China*

[e] *National Engineering Laboratory for VOCs Pollution Control Material & Technology, University of Chinese Academy of Sciences, Beijing 101408, P.R. China*

[*] To whom correspondence should be addressed:

Tel./Fax: +86 29 82663857; E-mail: chi_he@xjtu.edu.cn (C. He)

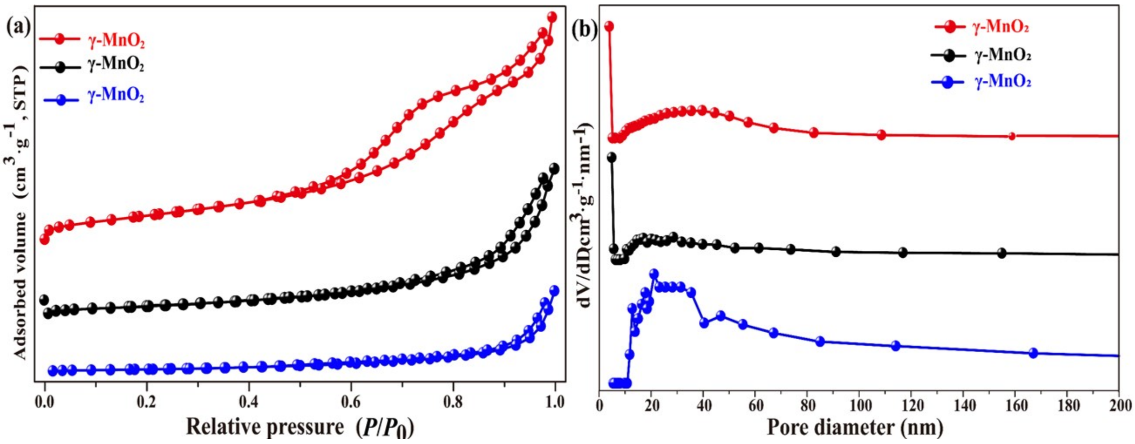

Fig. S1 (a) N_2 adsorption-desorption isotherms and (b) pore distribution of γ-MnO_2 materials

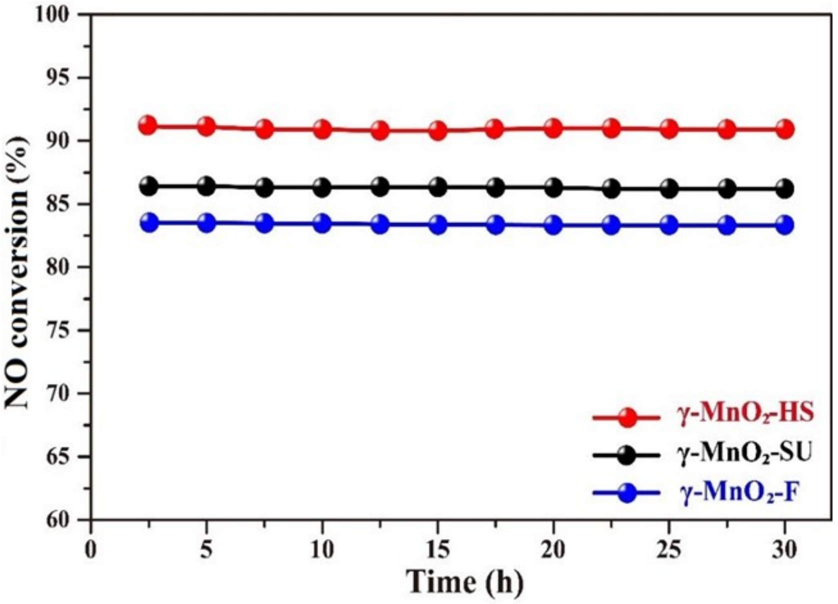

Fig. S2 Long-term stability of NO oxidation over different nanostructured γ-MnO_2 samples.

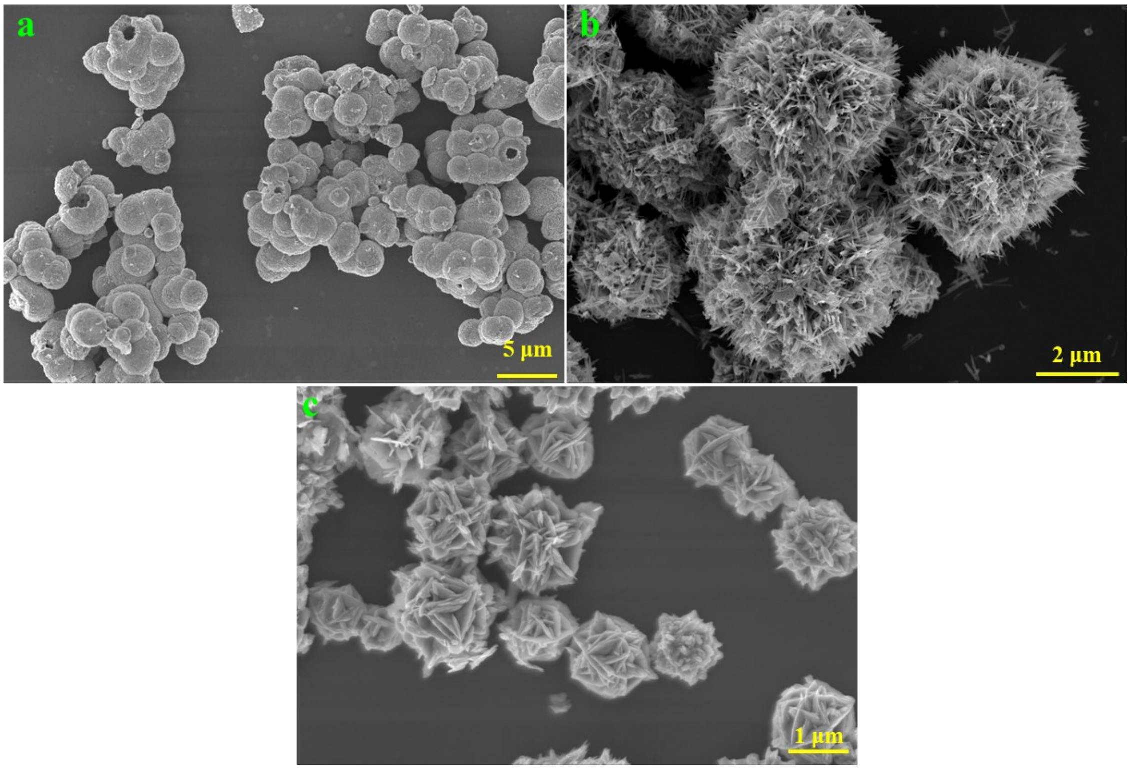

Fig. S3 FE-SEM images of the tested γ-MnO_2 materials.

Table S1. Textural properties of the prepared materials.

Sample	S_{BET}[a] ($m^2 \cdot g^{-1}$)	D_v[b] ($cm^3 \cdot g^{-1}$)	D_p[c] (nm)
γ-MnO_2-HS	86.6	0.23	52.6
γ-MnO_2-SU	35.7	0.15	82.8
γ-MnO_2-F	9.6	0.08	166.6

[a] Specific surface area calculated at P/P_0 = 0.05-0.30; [b] Total pore volume measured at P/P_0 = 0.99; [c] BJH pore diameter obtained from the adsorption branch.