

Supporting Information

MnO_x-CeO₂ supported on a three-dimensional and networked SBA-15 monolith for NO_x-assisted soot combustion

Hui Zhang^{a,b}, Fangna Gu^{b,*}, Qing Liu^b, Jiajian Gao^b,

Lihua Jia^{a,*}, Tingyu Zhu^b, Yunfa Chen^b, Ziyi Zhong^c, and Fabing Su^{b,*}

^a *College of Chemistry and Chemical Engineering, Qiqihaer University, Qiqihaer, Heilongjiang Province, China 161006*

^b *State Key Laboratory of Multiphase Complex Systems, Institute of Process Engineering, Chinese Academy of Sciences, Beijing, China 100190*

^c *Institute of Chemical Engineering and Sciences, A*star, 1 Pesek Road, Jurong Island, Singapore 627833*

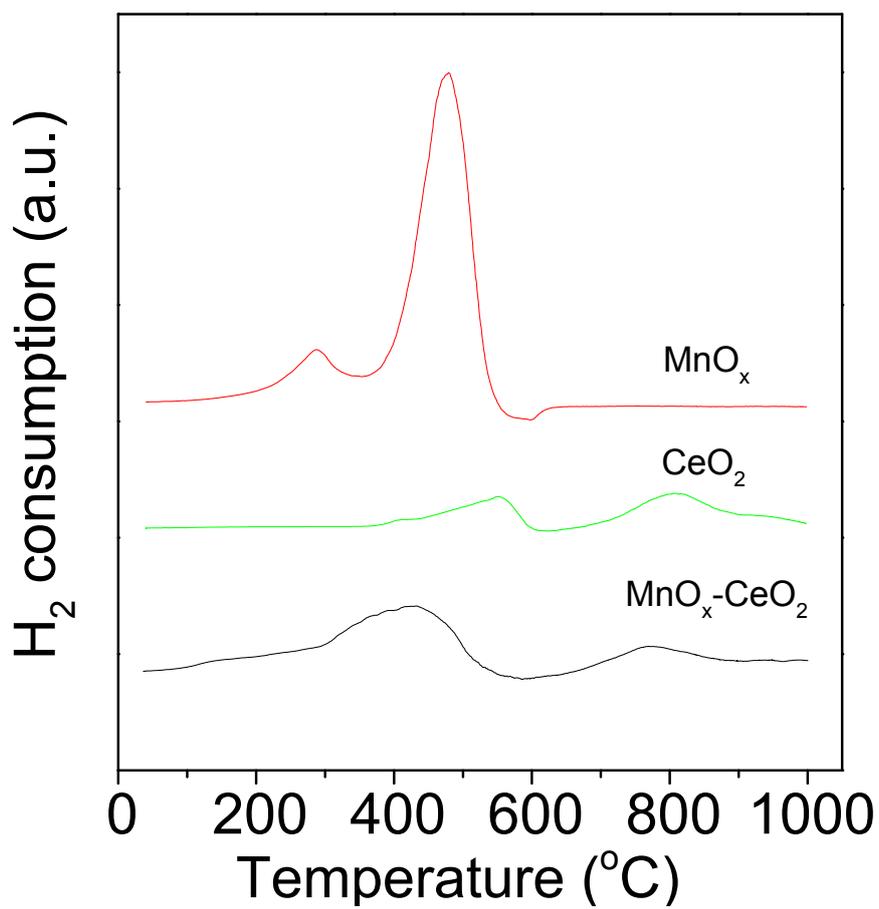


Figure S1. H₂-TPR curves of MnO_x, CeO₂, and MnO_x-CeO₂.

Table S1. Stability test of 4-MnCe/SM for soot combustion for three test cycles.

Test cycles ^a	T_{10} (°C)	T_{50} (°C)	T_{90} (°C)	S_{CO_2} (%)
1	287	382	431	100
2	287	384	434	100
3	289	383	434	100

^aReaction gas, 1000 ppm NO/10% O₂/Ar, 50 mL min⁻¹.

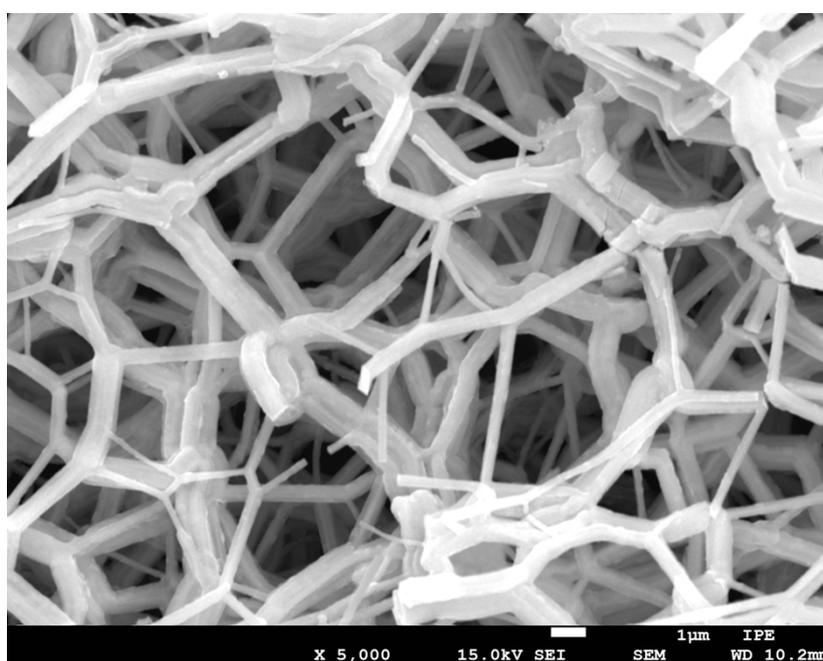


Figure S2. SEM image of 4-MnCe/SM after soot-TPO reaction for three cycles.