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Supporting Information

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The synergetic mechanism of NO_x and chlorobenzene

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degradation in municipal solid waste incinerators

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16 **SI figure captions**

17 Figure S1. The effect of CB on N₂ selectivity and the effect of SCR gas on CO₂
18 selectivity for 10-h test at 300 °C. Reaction conditions: NO 500 ppm (when used), CB
19 50 ppm (when used), NH₃ 500 ppm (when used), O₂ 10 vol.%, N₂ as the balance gas,
20 GHSV 60,000 mL/(g·h).

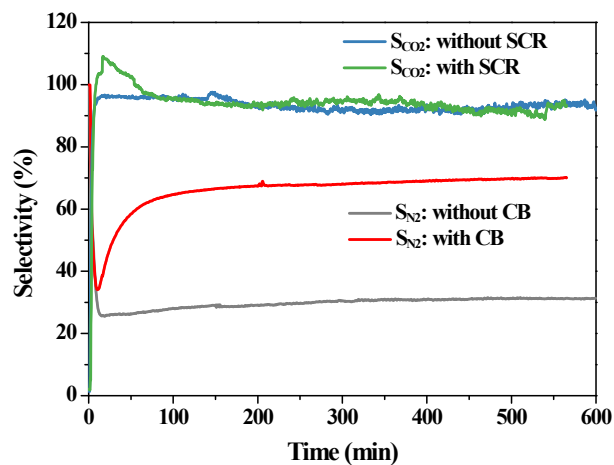
21 Figure S2. The NO_x conversion of CB-SCR of MnO_x-CeO₂ catalyst at 300 °C.
22 Reaction conditions: NO 500 ppm, CB 50 ppm (when used), NH₃ 500 ppm (when used),
23 O₂ 10 vol.%, N₂ as the balance gas, GHSV 60,000 mL/(g·h).

24 Figure S3. The concentrations of CB, CO, CO₂, and N₂O, NO, NO₂ during the SCR-
25 transient reaction with CB at 300 °C. Reaction conditions: NO 500 ppm, CB 50 ppm,
26 NH₃ 500 ppm, O₂ 10 vol.%, N₂ as the balance gas, GHSV 60,000 mL/(g·h).

27 Figure S4. The concentrations of N₂O, NO, NO₂ and CB, CO₂ during the SCR reactions
28 without/with CB and CB oxidation reactions with/without SCR flue gas at 300 °C.
29 Reaction conditions: NO 500 ppm (when used), CB 50 ppm (when used), NH₃ 500 ppm
30 (when used), O₂ 10 vol.%, N₂ as the balance gas, GHSV 60,000 mL/(g·h).

31 Figure S5. XPS spectra: (a) Mn 2p, and (b) Ce 3d of the fresh and used catalysts.

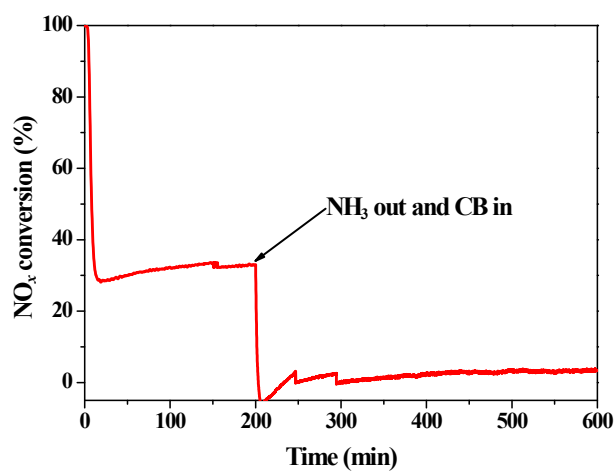
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34 Figure S1. The effect of CB on N_2 selectivity and the effect of SCR gas on CO_2
 35 selectivity for 10-h test at 300 °C. Reaction conditions: NO 500 ppm (when used),
 36 CB 50 ppm (when used), NH_3 500 ppm (when used), O_2 10 vol.%, N_2 as the balance
 37 gas, GHSV 60,000 mL/(g·h).

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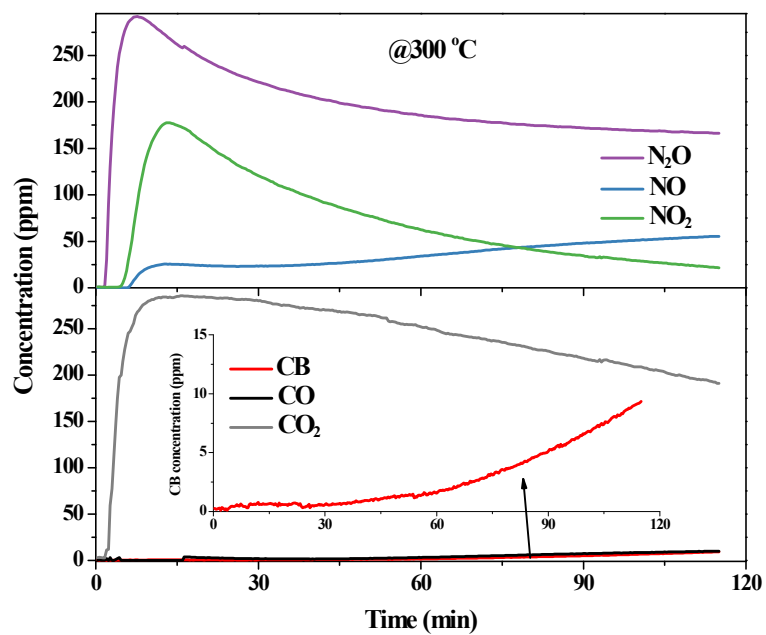
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41 Reaction conditions: NO 500 ppm, CB 50 ppm (when used), NH₃ 500 ppm (when

42 used), O₂ 10 vol.%, N₂ as the balance gas, GHSV 60,000 mL/(g·h).

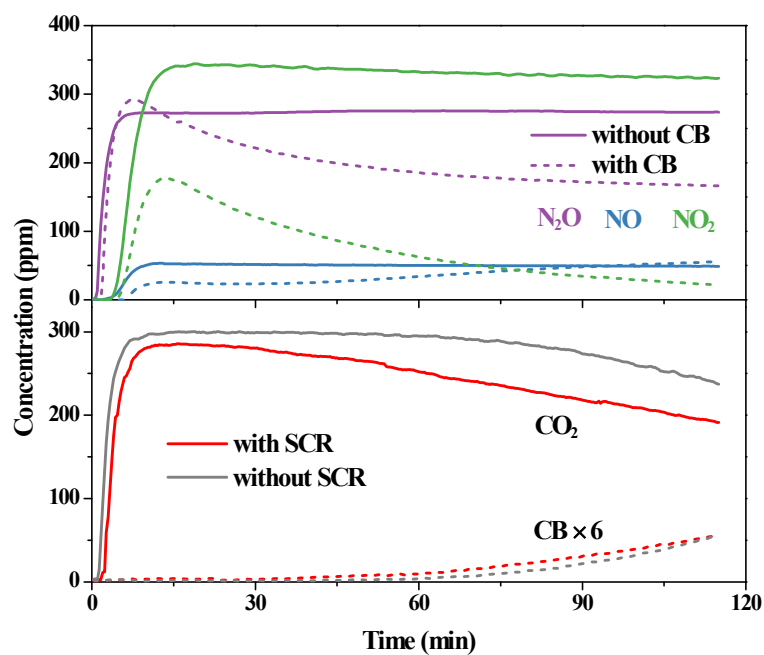
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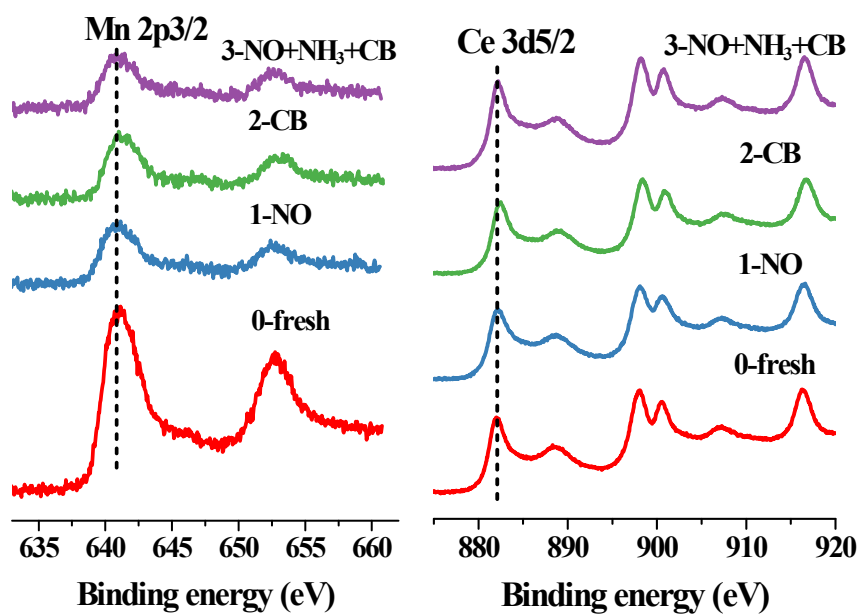
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 46 transient reaction with CB at 300 °C. Reaction conditions: NO 500 ppm, CB 50 ppm,
 47 NH₃ 500 ppm, O₂ 10 vol.%, N₂ as the balance gas, GHSV 60,000 mL/(g·h).

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50 Figure S4. The concentrations of N_2O , NO , NO_2 and CB , CO_2 during the SCR
 51 reactions without/with CB and CB oxidation reactions with/without SCR flue gas at
 52 $300\text{ }^\circ\text{C}$. Reaction conditions: NO 500 ppm (when used), CB 50 ppm (when used),
 53 NH_3 500 ppm (when used), O_2 10 vol.%, N_2 as the balance gas, GHSV 60,000
 54 mL/(g·h).



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57 Figure S5. XPS spectra: (a) Mn 2p, and (b) Ce 3d of the fresh and used catalysts.

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