Supporting Information

The synergetic mechanism of NO_x and chlorobenzene degradation in municipal solid waste incinerators

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SI figure captions

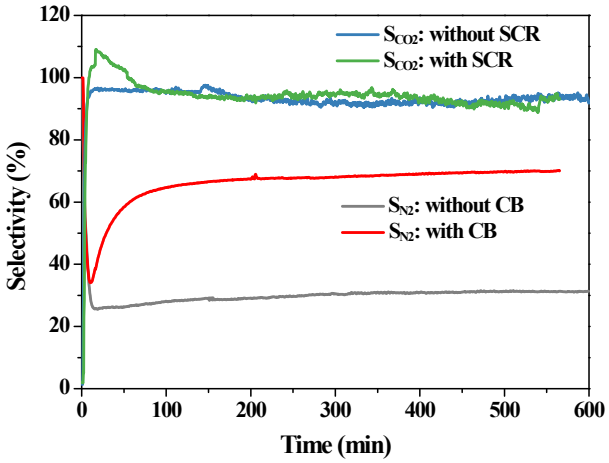
Figure S1. The effect of CB on N_2 selectivity and the effect of SCR gas on CO_2 selectivity for 10-h test at 300 °C. Reaction conditions: NO 500 ppm (when used), CB 50 ppm (when used), NH_3 500 ppm (when used), O_2 10 vol.%, N_2 as the balance gas, GHSV 60,000 mL/(g·h).

Figure S2. The NO_x conversion of CB-SCR of MnO_x-CeO_2 catalyst at 300 °C. Reaction conditions: NO 500 ppm, CB 50 ppm (when used), NH_3 500 ppm (when used), O_2 10 vol.%, N_2 as the balance gas, GHSV 60,000 mL/(g·h).

Figure S3. The concentrations of CB, CO, CO_2, and N_2O, NO, NO_2 during the SCR-transient reaction with CB at 300 °C. Reaction conditions: NO 500 ppm, CB 50 ppm, NH_3 500 ppm, O_2 10 vol.%, N_2 as the balance gas, GHSV 60,000 mL/(g·h).

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

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



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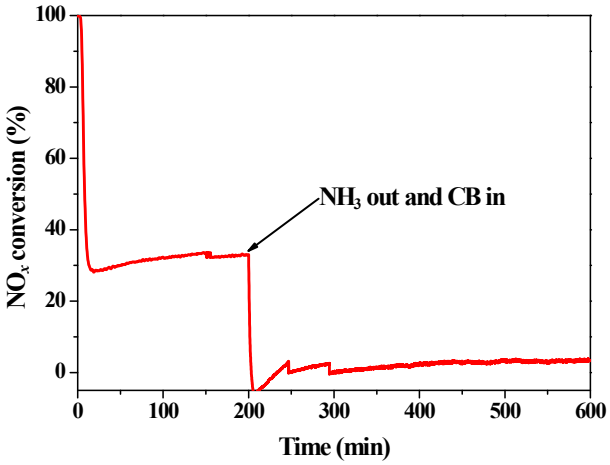

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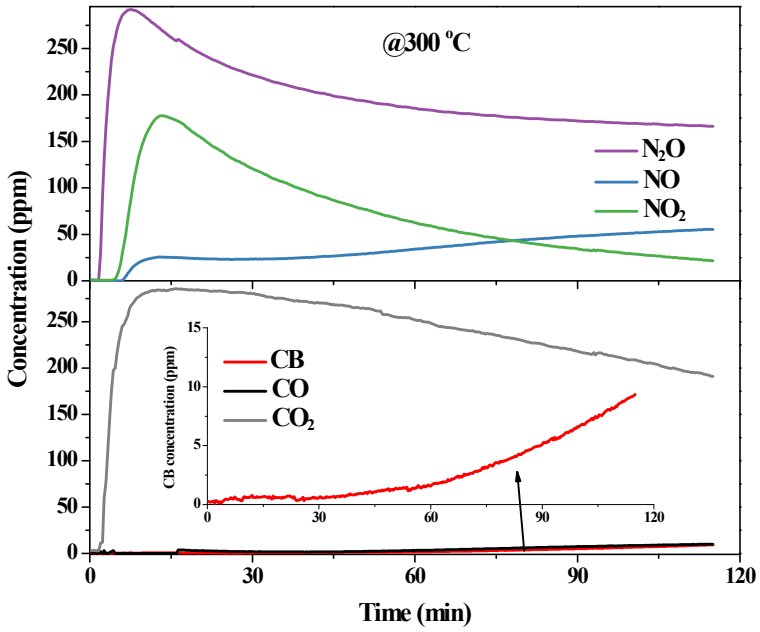

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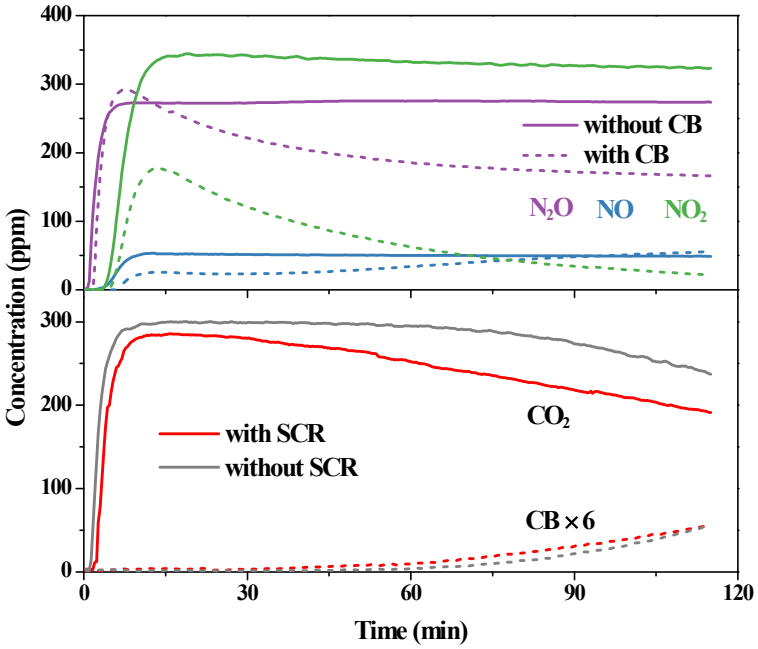

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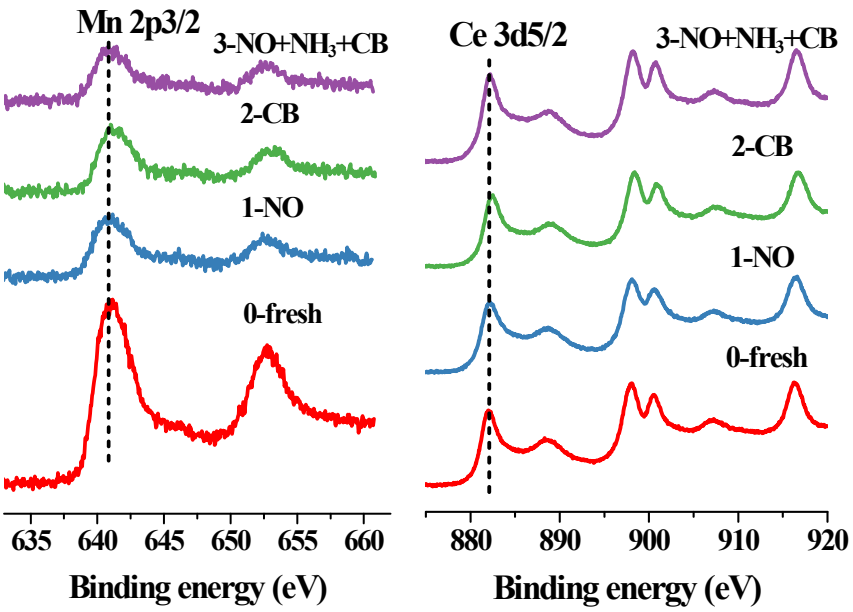

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