

Electronic supplementary information

Effect of ceria morphology on the performance of catalytic combustion of N, N-dimethylformamide over MnO_x/CeO₂ catalysts

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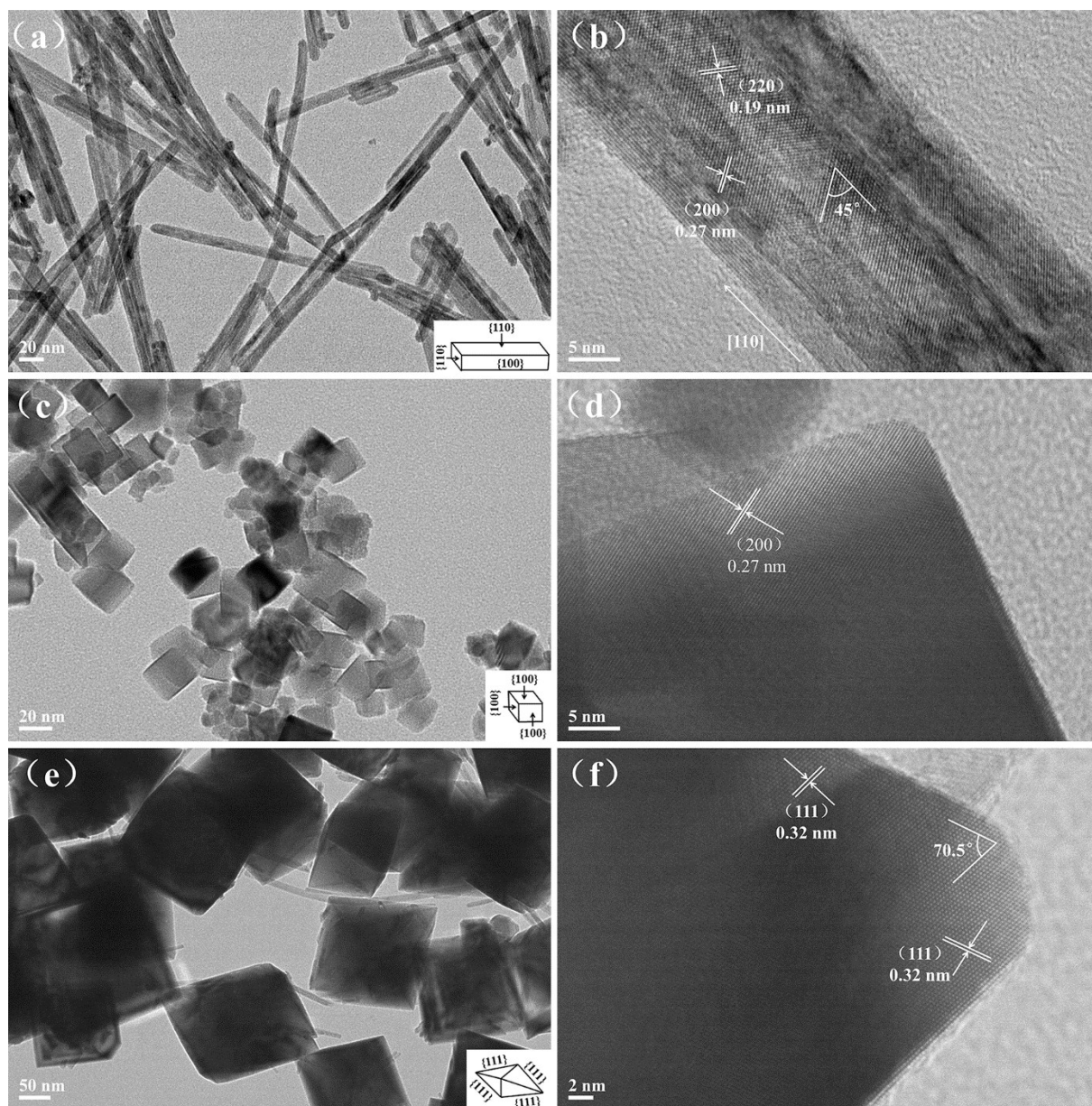


Fig. S1. HRTEM images of CeO_2 : (a, b) CeO_2 -NRs, (c, d) CeO_2 -NCs, (e, f) CeO_2 -NOs.

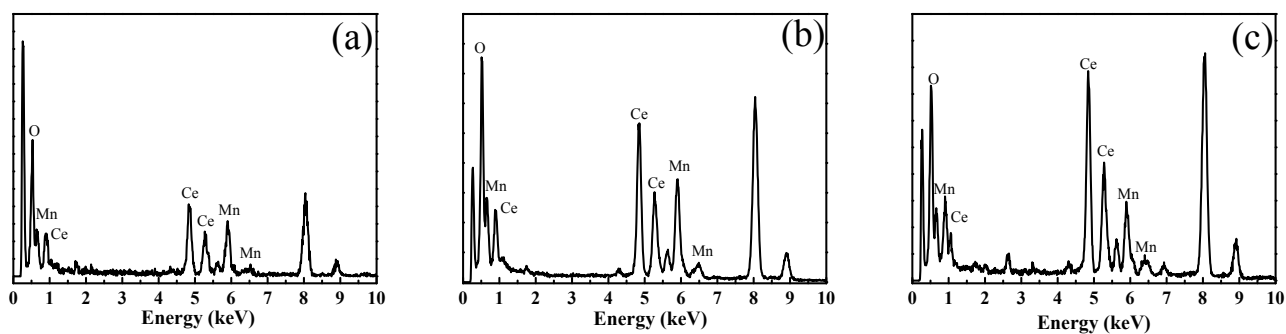


Fig. S2. EDS spectra of $\text{MnO}_x/\text{CeO}_2$: (a) $\text{MnO}_x/\text{CeO}_2$ -NRs, (b) $\text{MnO}_x/\text{CeO}_2$ -NCs, (c) $\text{MnO}_x/\text{CeO}_2$ -NOs.

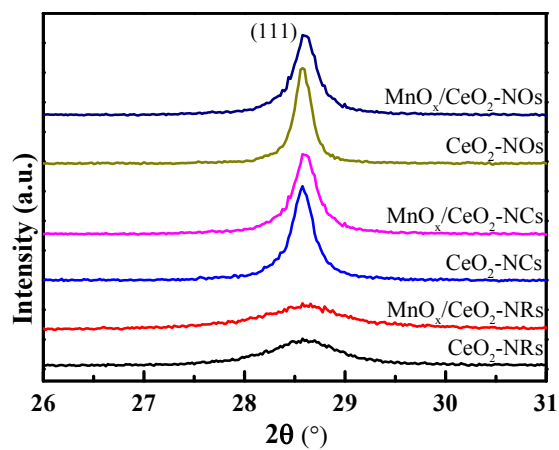


Fig. S3. Partial enlarged XRD patterns of CeO_2 and $\text{MnO}_x/\text{CeO}_2$.

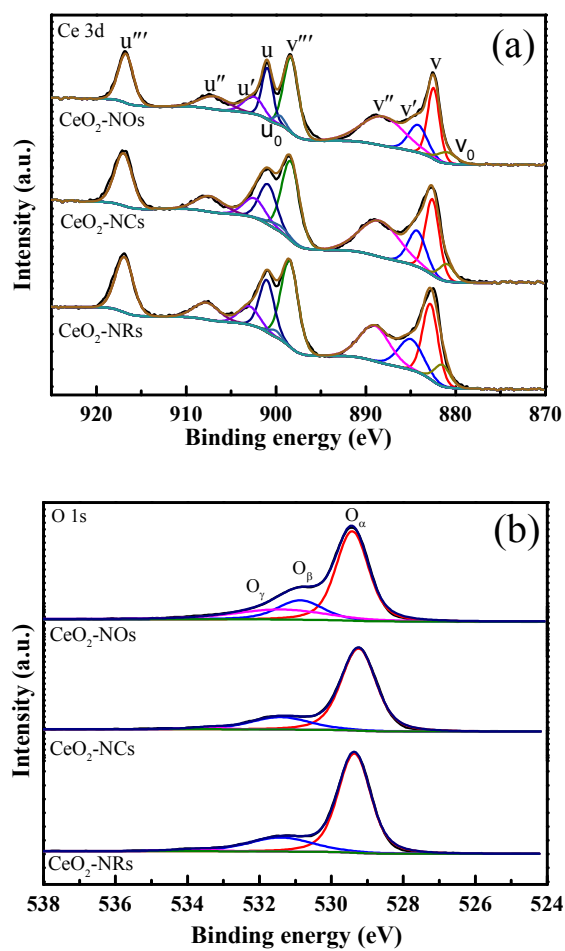


Fig. S4. XPS spectra of (a) $\text{Ce } 3d$ and (b) $\text{O } 1s$ for CeO_2 .

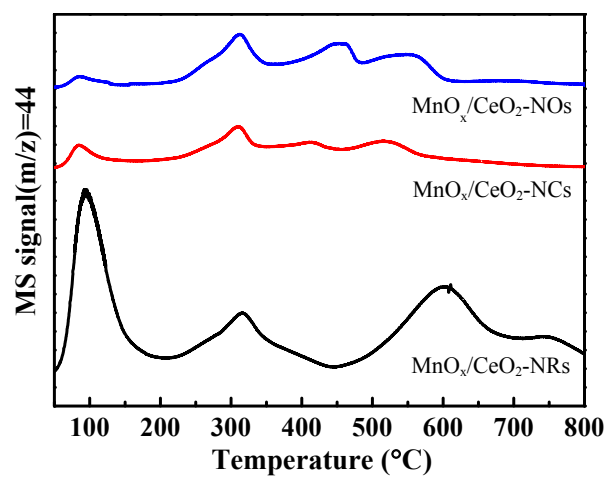


Fig. S5. CO₂-TPD profiles of MnO_x/CeO₂ catalysts.

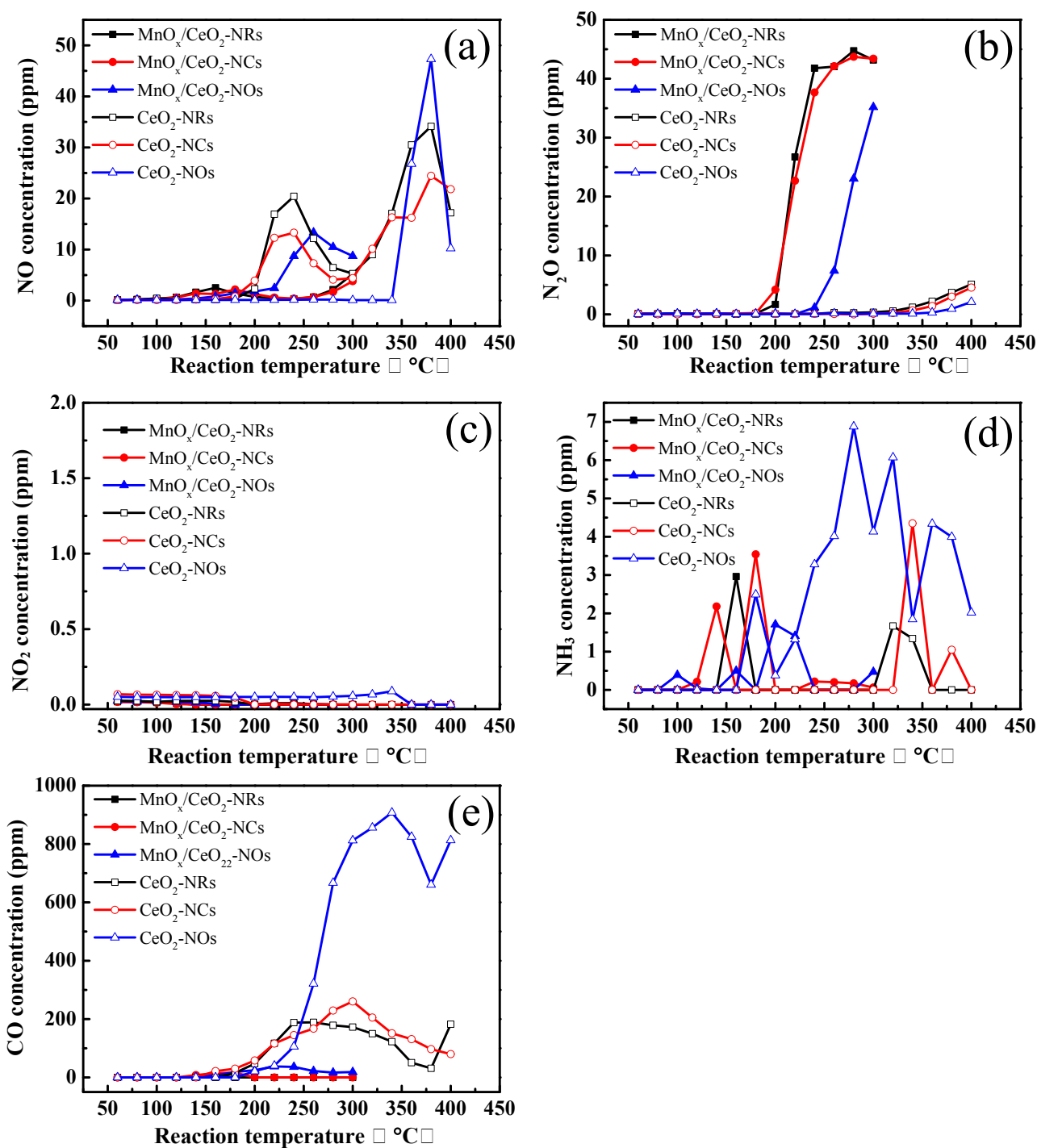


Fig. S6. Catalytic combustion of DMF over CeO₂ and MnO_x/CeO₂: (a) NO concentration; (b) N₂O concentration; (c) NO₂ concentration; (d) NH₃ concentration; (e) CO concentration.