

Electronic Supplementary Information for Catalysis Science & Technology

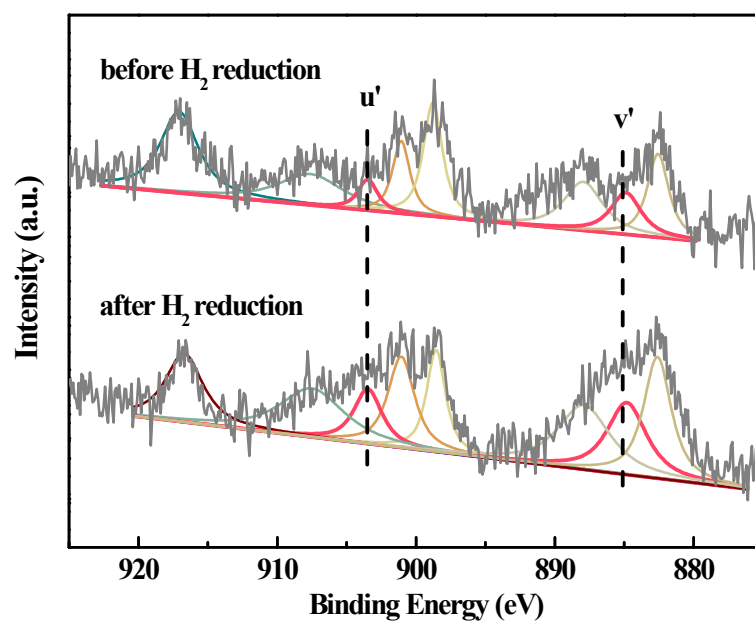
**Study of Synergistic Effect between CuO and CeO<sub>2</sub> over CuO@CeO<sub>2</sub>  
Core-Shell Nanocomposites for NH<sub>3</sub>-SCO**

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**Summary**

This supporting information contains a total of 5 pages, including 4 figures.



**Figure S1** Ce 3d XPS spectra of CuO@CeO<sub>2</sub>-8 catalyst before and after H<sub>2</sub> reduction (10%H<sub>2</sub>-Ar, 400°C, 1h).

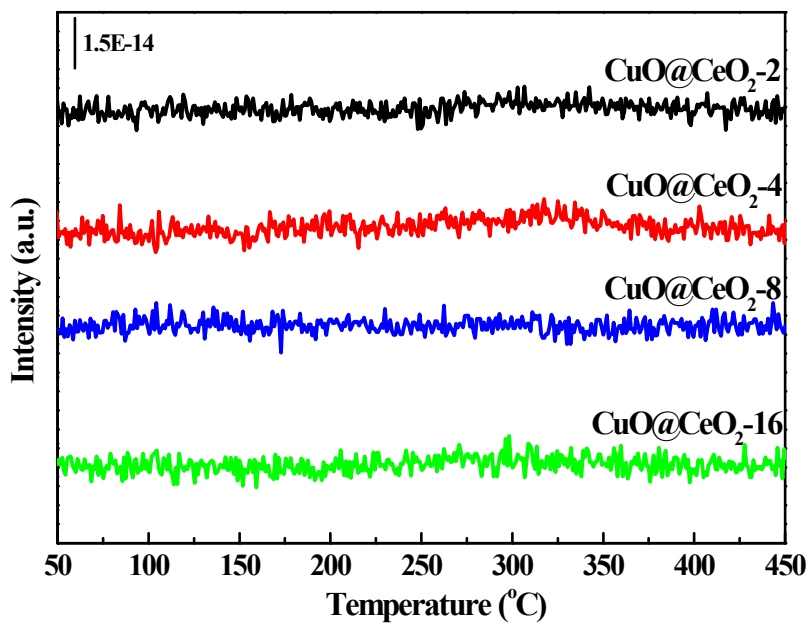
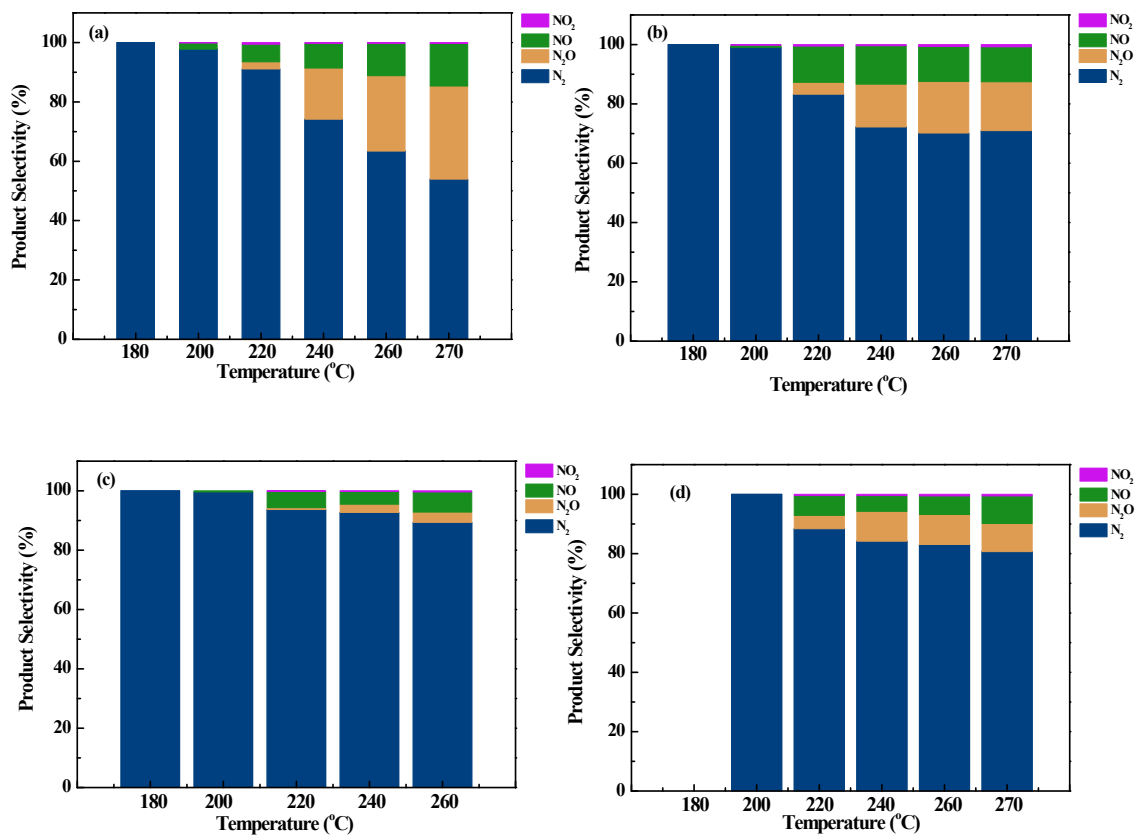
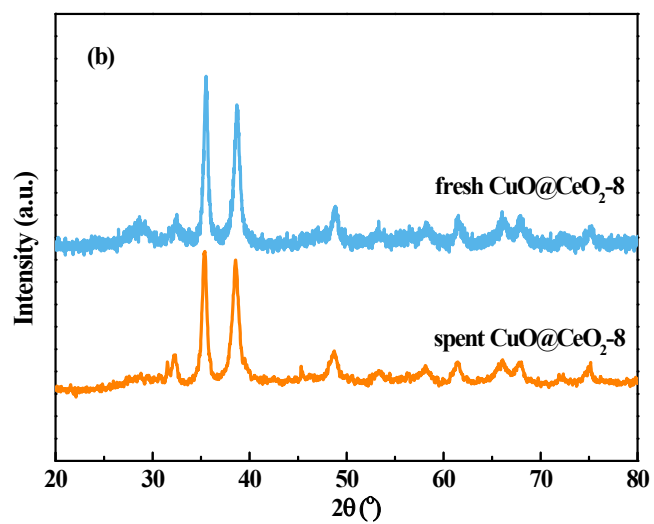
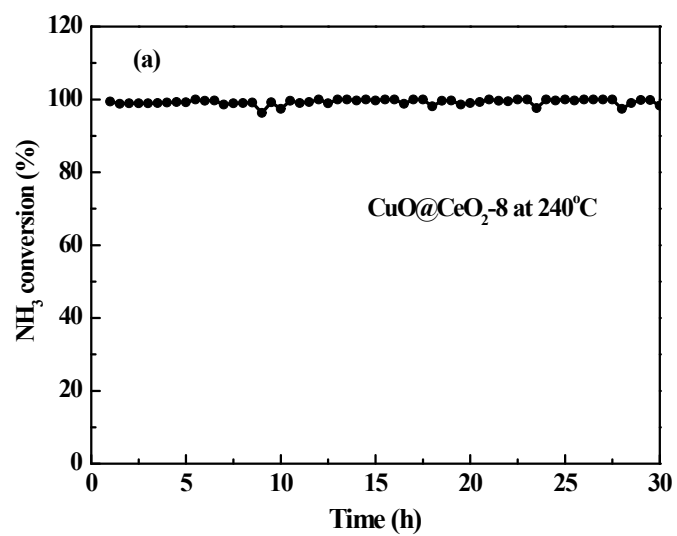


Figure S2 Production of NO<sub>2</sub> (m/e=46) over CuO@CeO<sub>2</sub>-X.



**Figure S3** Selectivity of  $N_2$  and  $NO_x$  over  $CuO@CeO_2-X$  at each temperature point. (a)

$CuO@CeO_2-2$ , (b)  $CuO@CeO_2-4$ , (c)  $CuO@CeO_2-8$ , (d)  $CuO@CeO_2-16$ .



**Figure S4** Stability test of CuO@CeO<sub>2</sub>-8 (a) and crystalline comparison of fresh and spent CuO@CeO<sub>2</sub>-8 (b).