Supporting Information

CeO₂ hollow nanospheres synthesized by a one pot template-free hydrothermal method and their application as catalyst support



Fig. S1 N₂ adsorption-desorption isotherms and (b) BJH pore size distribution plots of commercial bulk CeO₂.



Fig. S2 TEM images of CeO₂ with different solvent: (a) propane-1,2,3-triol, (b)glycol.



Fig. S3 The EDX Spectrum of the as-prepared hollow Au/CeO $_2$ composite by FESEM and top inset: EDX mapping analysis of the Au, Ce and O.

samples	BET surface area (m ² /g)	Pore diameter (nm)	Pore volume (cm ³ /g)
CeO ₂ hollow nanospheres	166.72	4.89	0.16
Au/CeO ₂ (hollow nanospheres)	160.14	5.12	0.18
commercial bulk CeO ₂	50.23	15.26	0.20
Au/CeO ₂ (commercial powders)	41.52	17.09	0.23

Table S1 Characteristics of BET of the samples.



Fig. S4 The TEM of the as-prepared commercial Au/CeO $_2$ composite.