## **Electronic Supplementary Information (ESI)**

## Enhancing catalytic performance of cobalt oxide by doping on ceria in the high temperature water—gas shift reaction

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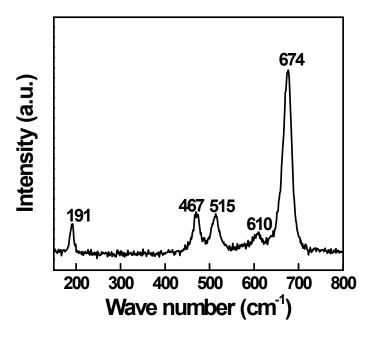


Fig. S1 Raman spectra of Bulk Co<sub>3</sub>O<sub>4</sub>.

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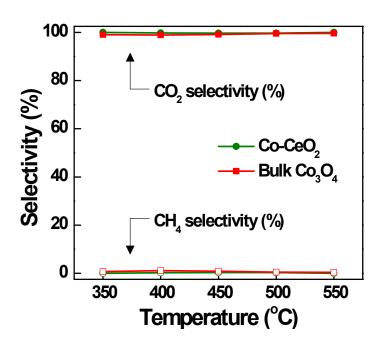


Fig. S2 Selectivity to CO<sub>2</sub> and CH<sub>4</sub> obtained over Co–CeO<sub>2</sub> and Bulk Co<sub>3</sub>O<sub>4</sub> catalyst.

Table S1. Surface area of catalysts before and after reaction

Catalyst —	$S_{ m BET}~({ m m}^2{ m g}^{-1})$	
	Fresh	Used
Co–CeO <sub>2</sub>	122	61 (50%↓)
$\mathrm{Co_3O_4}$	46	10 (78%↓)
$CeO_2$	150	-