Supplementary Information for

Constructing of Pd(PdO)/Co_3O_4@SiO_2 core-shell structure for efficient low-temperature methane combustion

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Supplementary Tables

Table S1 ICP-AES data of the as-synthesized catalysts.

Catalyst	Pd content[a] (wt.%)	Co content[a] (wt.%)
Co_3O_4@SiO_2	-	4.3
Pd(PdO)/SiO_2	0.8	-
Pd(PdO)/Co_3O_4@SiO_2	0.7	5.2

Table S2 Methane combustion performance over Pd-based catalysts.

Sample	Pd content (wt.%)	Co content (wt.%)	Reaction Conditions			$T_{90\%}$ (°C)	Ref.
			CH_4 concentration (vol.%)	O_2 concentration (vol.%)	GHSV ($mL \cdot g^{-1} \cdot h^{-1}$)		
Pd(PdO)/Co_3O_4@ SiO_2	0.7	5.2	1	20	30 000	445	This work
Pd(PdO)/Co_3O_4@ SiO_2 (treated)	0.7	5.2	1	20	30 000	403	This work
Pd/LOC	0.5	-	1	20	16 000	408	1
Pd/ADP-OMA	0.5	-	1	5	50 000	430	2
$Co_{3.5}$Pd/3DOM CeO_2	0.26	0.51	2.5	20	40 000	480	3
5% Pd/Co_3O_4	5	30	1	8	12 000	410	4
Pd/ZrO_2 (900)	0.5	-	1	20	120 000	623	5
7.0 nm Pd/θ-Al_2O_3	0.34	-	0.4	10	300 000	400	6

Reference

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