Electronic Supplementary Material

The modification of titanium in mesoporous silica for co-based Fischer-Tropsch catalysts

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Table S1 H_2-TPR quantitative data of the as-prepared catalysts

Catalyst	Peak temperature/°C			Peak area (g_{Co}^{-1})				Reducibility ratio [b]
	T_I	T_{II}	T_{III}	A_I	A_{II}	A_{III}	A[a]	
Co/SBA-15	263	--	388	1.16	0.00	3.03	4.19	1.00
Co/OMST80	276	315	423	1.34	0.45	0.82	2.61	0.62
Co/OMST60	287	326	443	1.31	0.34	0.63	2.28	0.54
Co/OMST40	299	342	465	1.32	0.47	0.41	2.20	0.52
Co/OMST20	310	368	--[c]	0.60	0.09	--	0.69	0.16
Co/OMST10	309	362	--	0.49	0.24	--	0.73	0.17

[a] $A=A_I+A_{II}+A_{III}$

[b] Calculated by: $A/A_{Co/SBA-15}$

[c] The peak of $CoO \rightarrow Co^0$ on profiles of Co/OMST20 and Co/OMST10 was difficult to split from the peak of $CoTi_xO_y$ species.

Table S2 The dispersion of Co on different catalysts estimated from H_2-TPD

Catalyst	Co/SBA-15	Co/OMST80	Co/OMST60	Co/OMST40	Co/OMST20	Co/OMST10
Co dispersion (%)	8.1	6.2	5.7	5.2	0.6	0.6

[a] Supposing that a cobalt adsorbs an H atom ($Co/H_2 = 2$).