Supplementary Materials

Effect of Calcination Conditions on Co_3O_4 Catalysts in the Total Oxidation of Toluene and Propane

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Table caption

Table S1. Light-off temperatures at 10, 50 and 90% conversion (T_{10}, T_{50} and T_{90}, respectively) of toluene/propane to CO_2.

Schematic caption

Schematic S1. Reaction temperature program used in catalytic test.

Figure captions

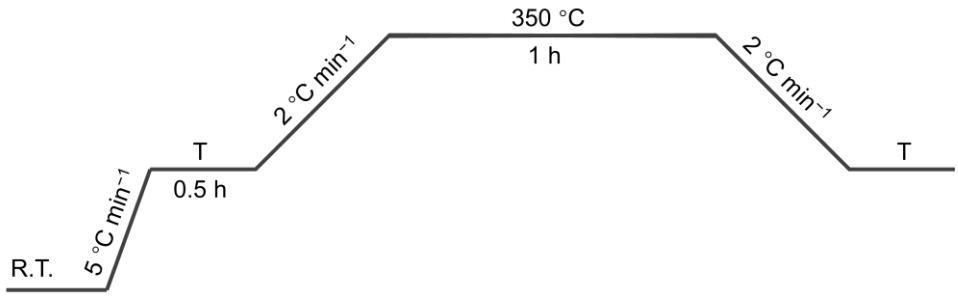
Figure S1. TG weight loss curve of the 80 ºC dried cobalt precursor.

Figure S2. FTIR spectra of the cobalt precursor and the Co_3O_4 catalysts calcined under different conditions.

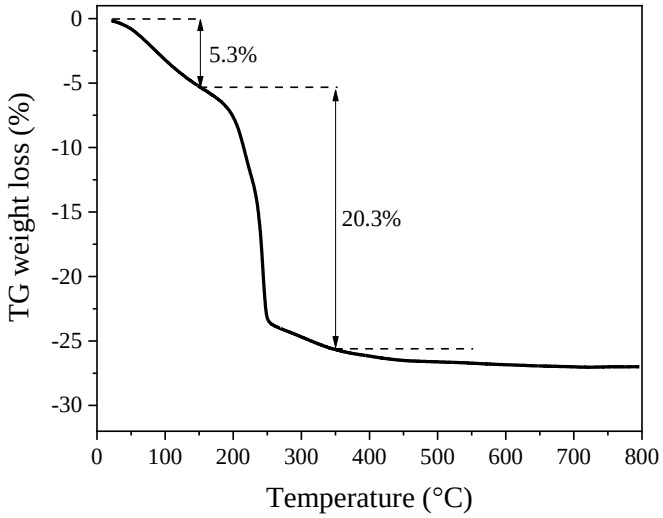
Figure S3. (a) Toluene and (b) propane oxidation rate as a function of temperature over the Co_3O_4 catalysts calcined under different conditions.

Table S1. Light-off temperatures at 10, 50 and 90% conversion (T_{10}, T_{50} and T_{90}, respectively) of toluene/propane to CO_2.

Catalysts	**Toluene oxidation**			**Propane oxidation**		
	T_{10}	**T_{50}**	**T_{90}**	**T_{10}**	**T_{50}**	**T_{90}**
Co-350S	215	230	264	153	185	207
Co-350D	200	230	257	148	180	201
Co-550S	229	238	256	175	214	248
Co-550D	222	234	256	161	197	224



Schematic S1. Reaction temperature program used in catalytic test.



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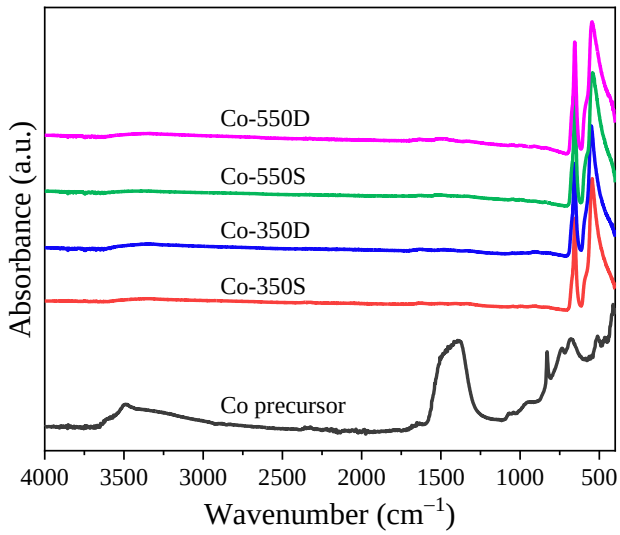

Figure S2. FTIR spectra of the cobalt precursor and the Co_3O_4 catalysts calcined under different conditions.

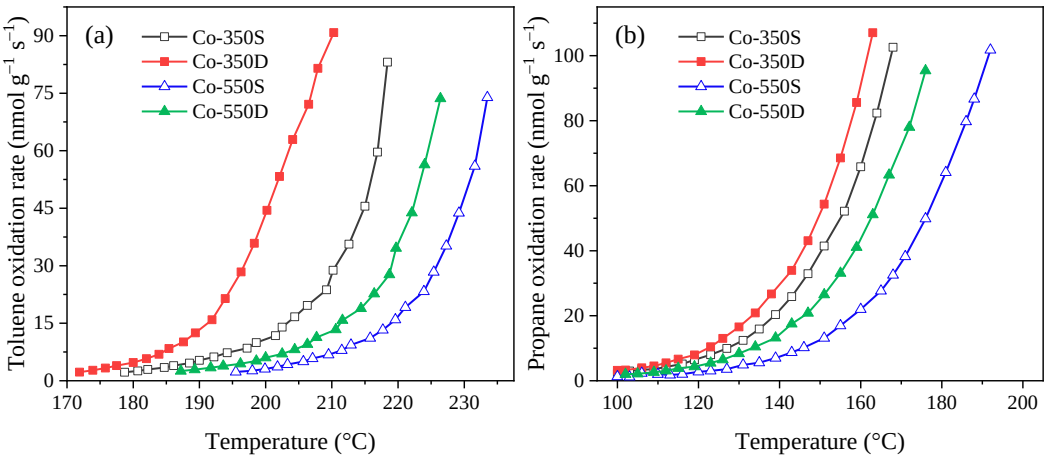

Figure S3. (**a**) Toluene and (**b**) propane oxidation rate as a function of temperature over the Co_3O_4 catalysts calcined under different conditions.