Supporting Information

Novel synthesis of a high performance Pt/ZnO/SiC filter for the oxidation of toluene

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Table S1. Calculated mean size of the nanoscale ZnO crystal grain.

(hkl)	2θ (degree)	d (nm)	D (nm)
(100)	32.08	0.279	21
(002)	34.74	0.258	18
(101)	36.56	0.246	28

Table S2. Comparison of the catalytic performance with other products.

Catalyst	Flow rate ($ml \cdot min^{-1}$)	WHSV ($ml \cdot g^{-1} \cdot min^{-1}$)	Concentration of toluene (ppm)	T (°C)	Conversion ratio (%)
Pt/ZnO/SiC (This work)	2900	1208333	300	210	100
Pt/ZnO/SiC (This work)	200	8333	500	173	100
Pt-Pd/MCM-41 [30]	170	-	500	180	100
Pt/8.9Co_3O_4/3DOM Al_2O_3 [31]	16.7	20000	1000	160	100
Pt-CeO_2 [5]	160	48000	1000	180	100
0.27Pt/3DOM 26.9CeO_2–Al_2O_3 [32]	16.7	20000	1000	198	98