Electronic Supplementary Material (ESI) for RSC Advances.

Solvothermal Synthesis of 1D Nanostructured Mn_2O_3: Effect of Ni^{2+} and Co^{2+} Substitution on the Catalytic Activity of Nanowires

Xiaoran Niu [a], Huiying Wei [a], Ke Tang[a], Wei Liu [a], Genyuan Zhao [a], and Yanzhao Yang* [a]

*a Key Laboratory for Special Functional Aggregate Materials of Education Ministry, School of Chemistry and Chemical Engineering, Shandong University, Jinan, 250100, P. R. China. *Corresponding author: yzhyang@sdu.edu.cn*

Table 1. The surface areas and the compositional data of the as prepared Mn_2O_3 samples.

Samples	Content (/ mol%) M/ (M+Mn)	S_{BET}[a] (m^2g^{-1})	Atom ratio[b] (%) (M/(M+Mn)
Mn_2O_3	0	10.612	0
Ni-doped Mn_2O_3	5	14.781	1.34
Co-doped Mn_2O_3	5	13.875	4.95
Commercial Mn_2O_3	0	5.816	0

M donated Ni or Co.

[a] The surface areas were calculated by the Brunauer–Emmett–Teller (BET) method..

[b] The atom ratio (M/(M+Mn)) data were detected by an inductively coupled plasma spectrometer (ICP-AES).

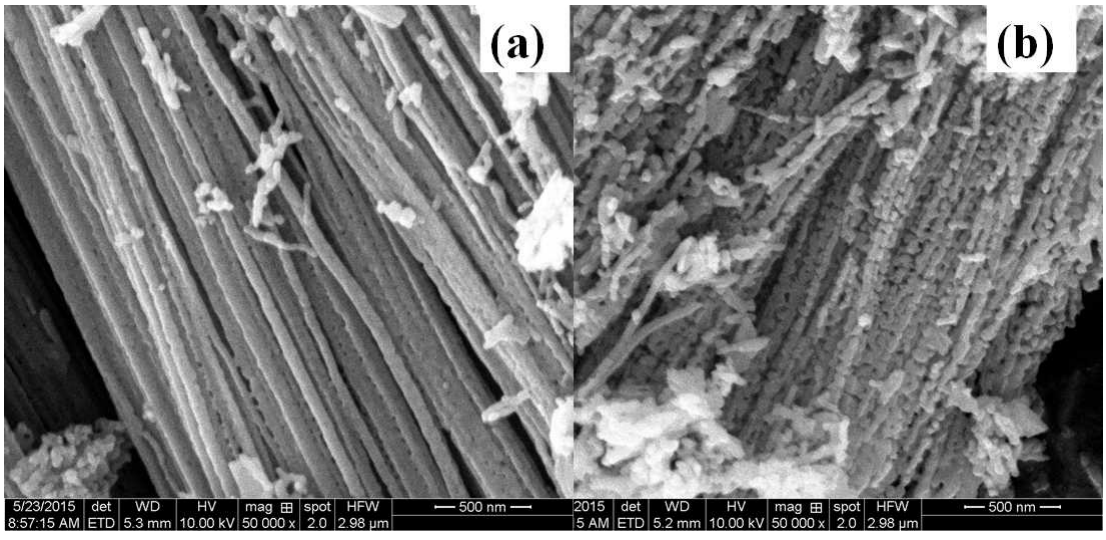

Figure S1. SEM of Ni-doped Mn_2O_3 (a) and Co-doped Mn_2O_3 (b) nanowires after catalysis for 6 times.

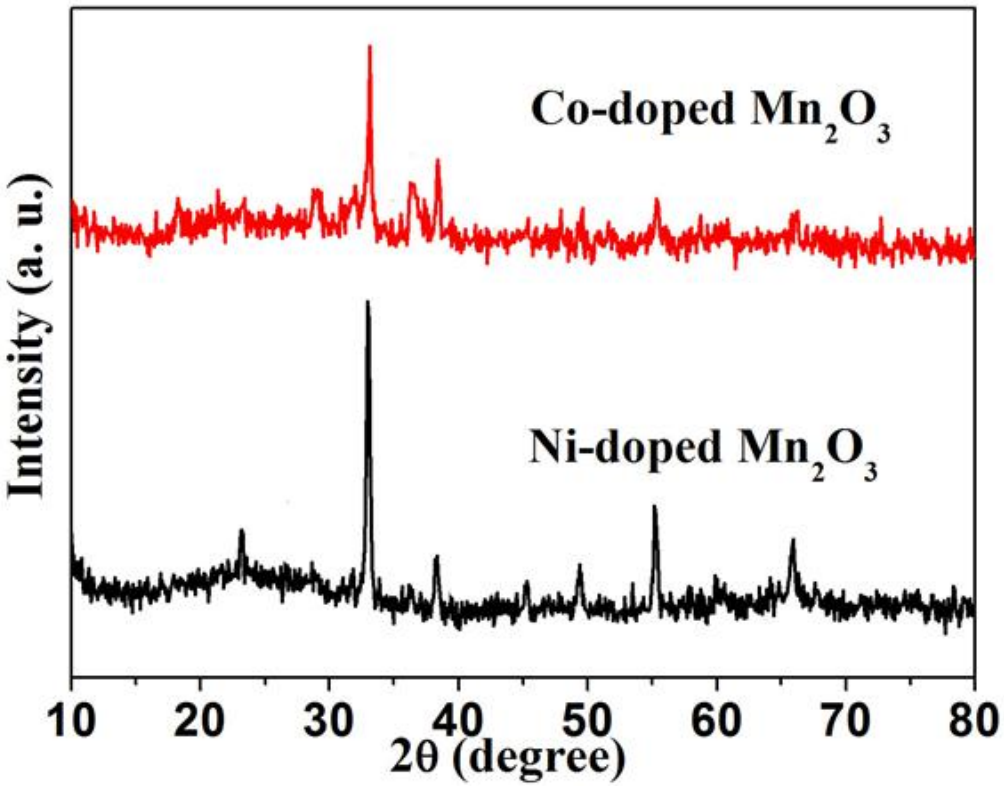

Figure S2. XRD patterns of Ni-doped and Co-doped samples after catalysis for 6 times.

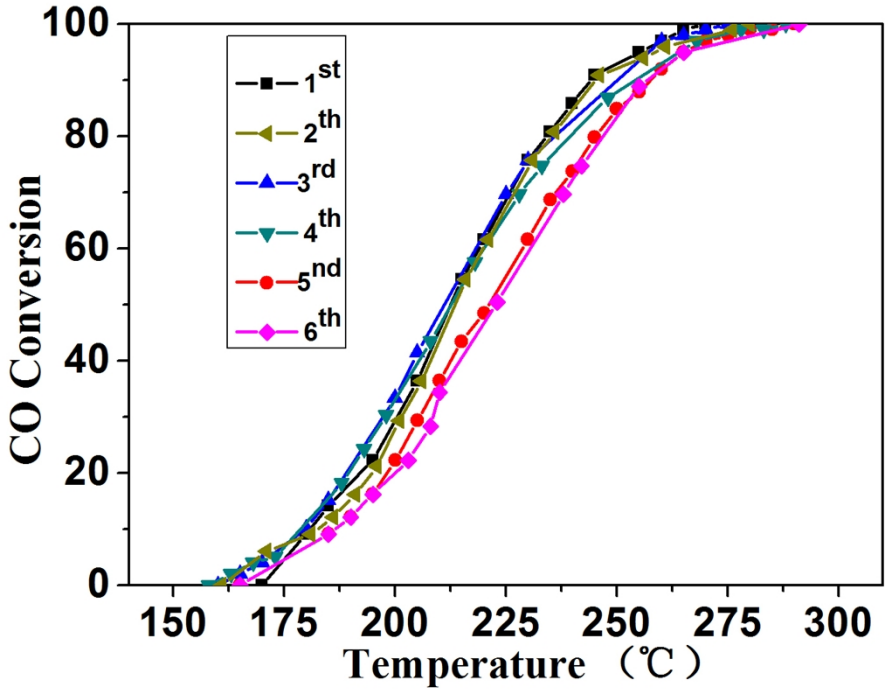

Figure S3 Catalytic performance of pure Mn_2O_3 nanowires in different runs.