

Facile synthesis of Mn-doped Fe₂O₃ nanostructures: Enhanced CO catalytic performance induced by manganese doping

Genyuan Zhao, Jing Li, Xiaoran Niu, Ke Tang, Shuping Wang, Wenshuang Zhu, Xueqin Ma Miaoyan Ru* and Yanzhao Yang*

Key Laboratory for Special Functional Aggregate Materials of Education Ministry, School of Chemistry and Chemical Engineering, Shandong University, Jinan 250100, P. R. China. E-mail: yzyang@sdu.edu.cn; Fax: +86 531 88564464; Tel: +86 531 88362988.

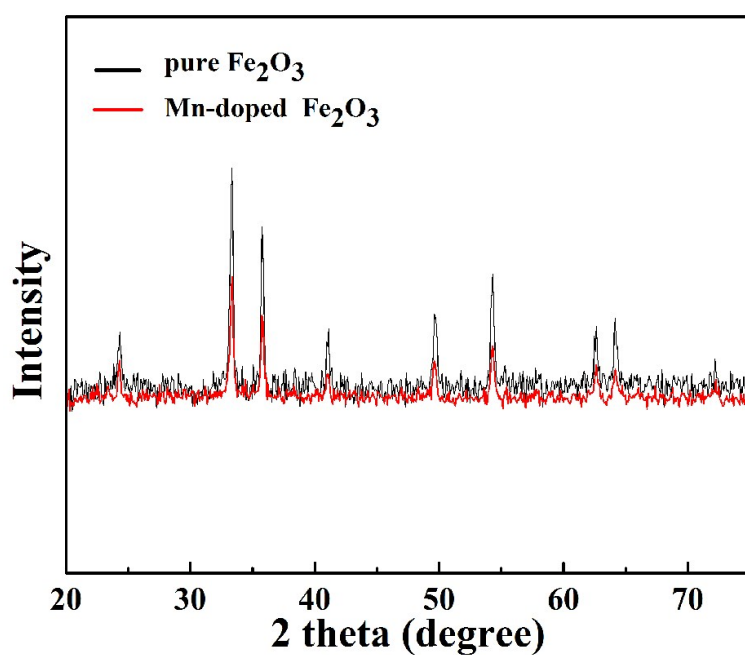


Fig. S1 Half-maximums of the peaks for Mn-doped Fe₂O₃ and Fe₂O₃.

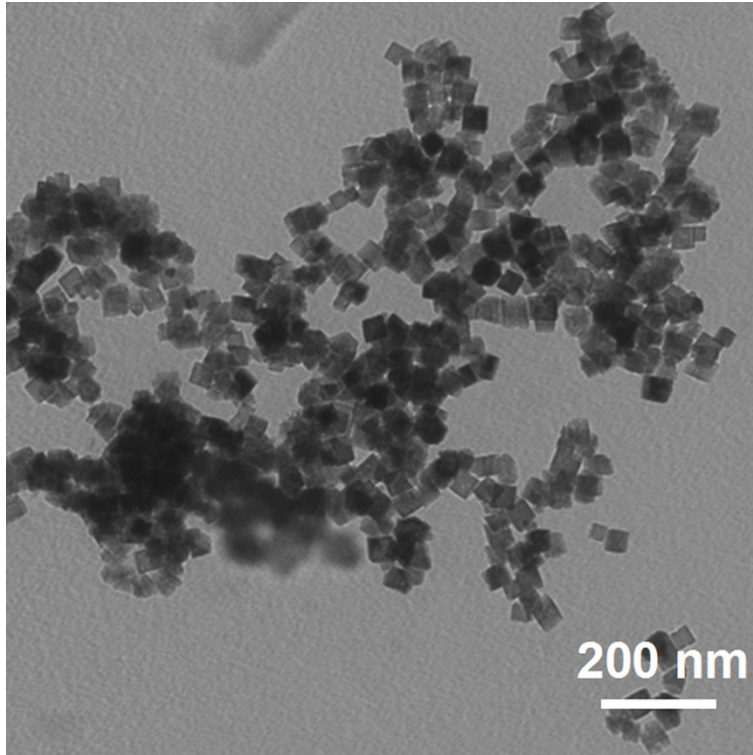


Fig. S2 The TEM images of the products with no $\text{Mn}(\text{NO}_3)_2$ solution was added.

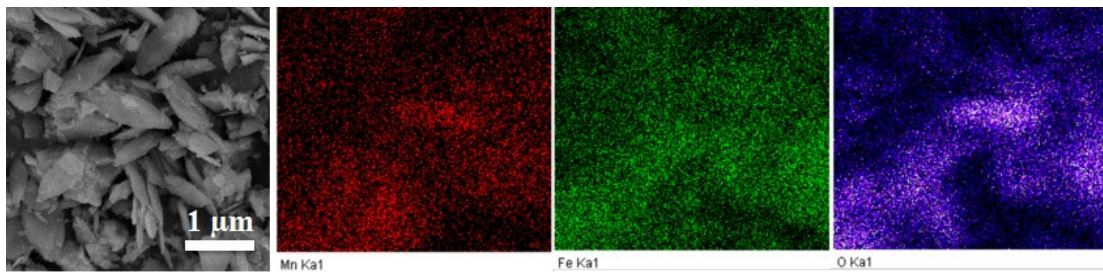


Fig. S3 EDS mapping images of sample: Fe (green), Mn (red) and O (blue).

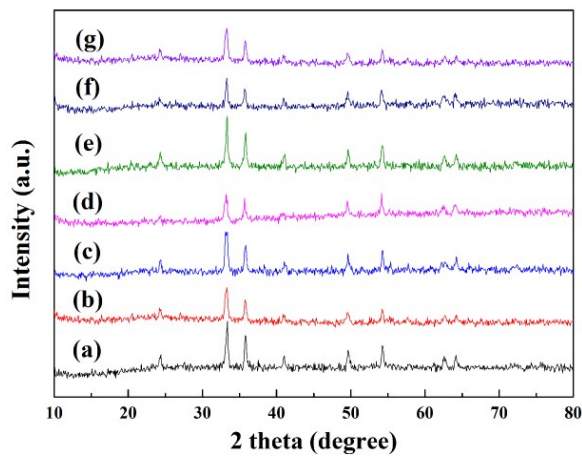


Fig. S4 XRD patterns of Mn-doped Fe_2O_3 obtained with different dosages of PVP: (a) 0 g, (b) 0.02 g, (c) 0.04 g, (d) 0.06 g, (e) 0.08 g, (f) 0.1 g, (g) 0.12 g.

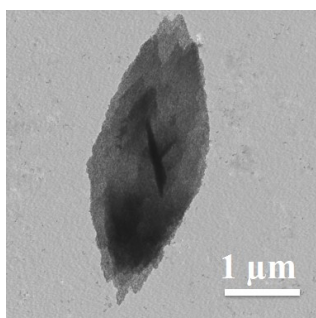


Fig. S5 TEM images of the Mn-doped samples formed by using 0.120 g PVP.