

Pt/MnO₂ nanosheets: facile synthesis and highly efficient catalyst for ethylene oxidation at low temperature

*Min Wang,^{a,b} Lingxia Zhang,^{*a} Weimin Huang,^a Yajun Zhou,^{a,b} Han Zhao,^{a,b} Jian Lv,^{a,b} Jianjian Tian^{a,c}, Xiaotian Kan,^{a,b} Jianlin Shi^{*a}*

^a State Key Laboratory of High Performance Ceramics and Superfine Microstructure, Shanghai Institute of Ceramics, Chinese Academy of Sciences, 1295 Dingxi Road, Shanghai 200050, P. R. China

^b University of Chinese Academy of Sciences, 19 Yuquan Road, Beijing 100049, P. R. China

^c School of Materials Science and Engineering, Shanghai University, 99 Shangda Road, Shanghai 200444, P.R. China

Corresponding author. Tel.: +86 21 52412712; Fax: +86 21 52413122.

E-mail address: jlshi@mail.sic.ac.cn (J.L.Shi).

Corresponding author. Tel.: +86 21 52412706; Fax: +86 21 52413122.

E-mail address: zhlingxia@mail.sic.ac.cn (L.X.Zhang).

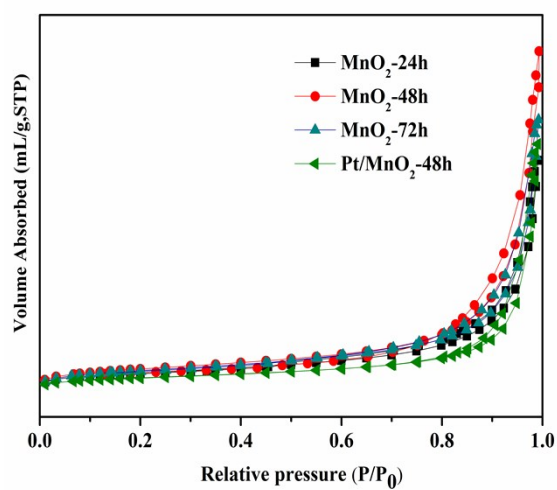


Fig S1. The N₂ adsorption–desorption isotherms of the as-synthesized MnO₂ samples and Pt/MnO₂-48h.

Table S1. Specific surface areas of the as-prepared MnO₂ samples and Pt/MnO₂-48h.

Samples	MnO ₂ -24h	MnO ₂ -48h	MnO ₂ -72h	Pt/MnO ₂ -48h
S _{BET} (m ² . g ⁻¹)	157.5	189.1	175.9	117.9

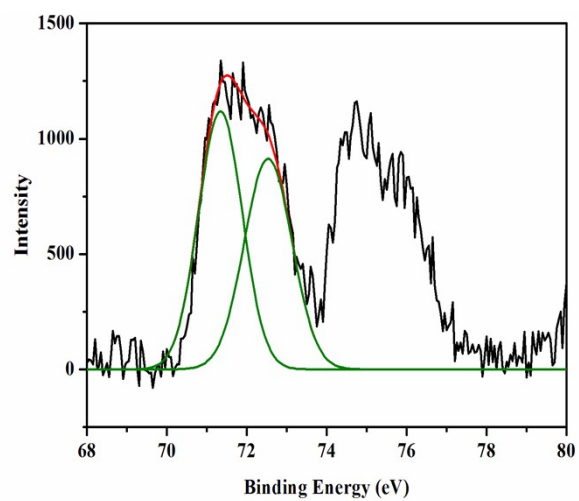


Fig S2. XPS Pt 4f spectrum of Pt/MnO₂-48h.