

Electronic Supplementary Information

A green synthesis of “naked” Pt and PtPd catalysts for highly efficient methanol electrooxidation

Baohua Zhang,^a Yiguo Xue,^b Hong Sun,^a Anning Jiang,^a Zhonghao Li^{*a} and

Jingcheng Hao^a

^a Key Laboratory of Colloid and Interface Chemistry, Shandong University, Ministry of Education, Jinan 250100, China. Fax: (+86) 531-88564750; Tel: (+86) 531-88363821.

^b Geotechnical and Structural Engineering Research Center of Shandong University, Jinan 250061, China.

*Corresponding authors: zhonghaoli@sdu.edu.cn.

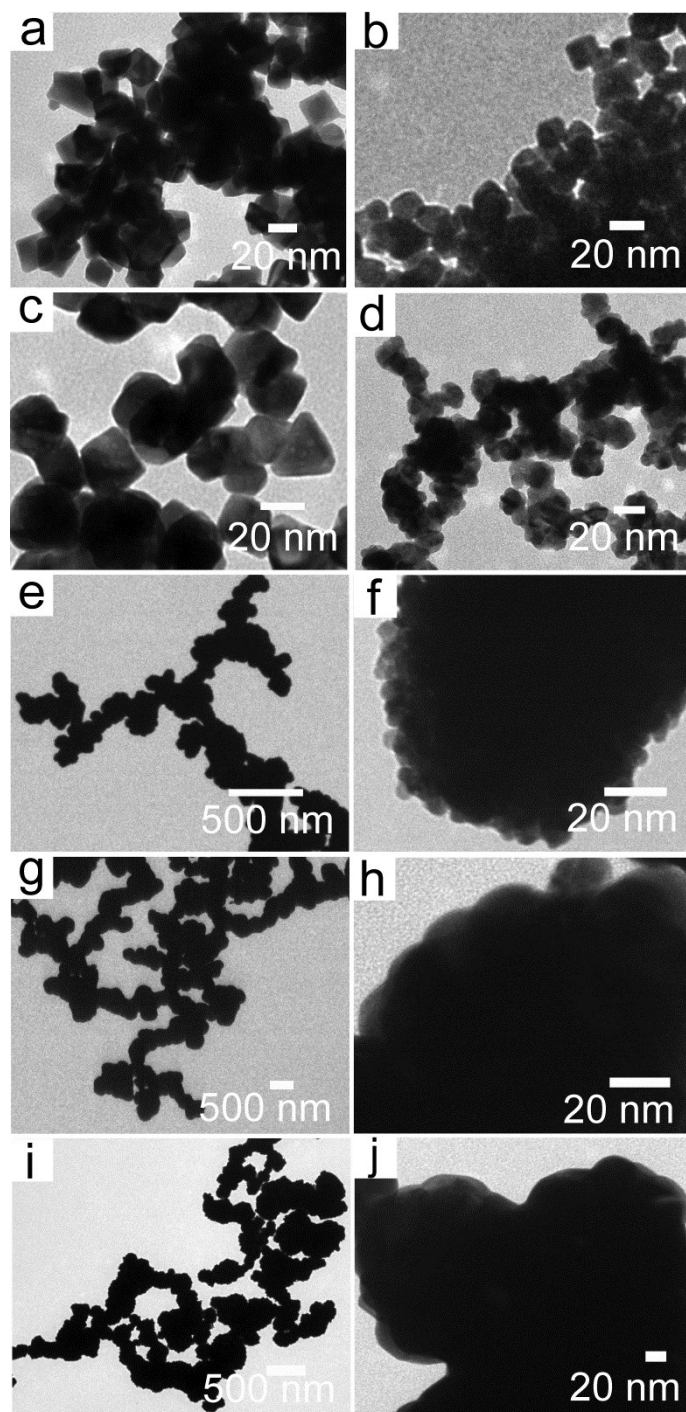


Fig. S1 TEM images of Pt_{0.10}, Pt_{0.52}, Pt_{1.04}, Pt_{4.16}, Pt_{8.33}, Pt_{10.41}, Pt_{14.57} particles synthesized at the acetic acid concentration of 0.10 M (a), 0.52 M (b), 1.04M (c), 4.16 M (d), 8.33M (e, f), 10.41 M (g, h), 14.57 M (i, j).

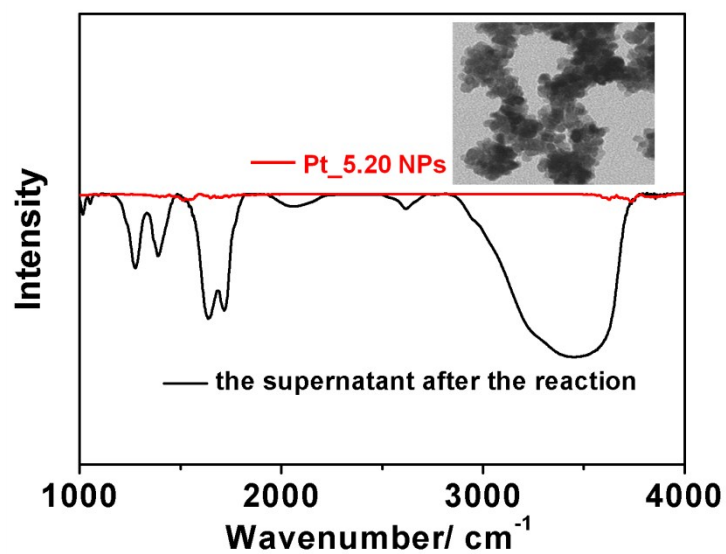


Fig. S2 FTIR spectra of the synthesized Pt NPs and the supernatant after the reaction.

Table S1 The E_{onset} of Pt_{5.20}, Pt₃Pd_{1.5.20} NPs and commercial Pt black at different cycle number.

	Pt _{5.20} ●	Pt ₃ Pd _{1.5.20} ●	Pt Black ●
Number/ cycle	E_{onset} [V]		
1	0.171	0.145	0.173
500	0.168	0.152	0.158
100	0.163	0.163	0.163
1500	0.182	0.151	0.145
2000	0.165	0.168	0.113
2500	0.185	0.175	0.190
3000	0.182	0.166	0.183