Supporting Information

Nitrogen-doped Carbon with Mesoporous Structure as High Surface Area Catalyst Support for Methanol Oxidation Reaction

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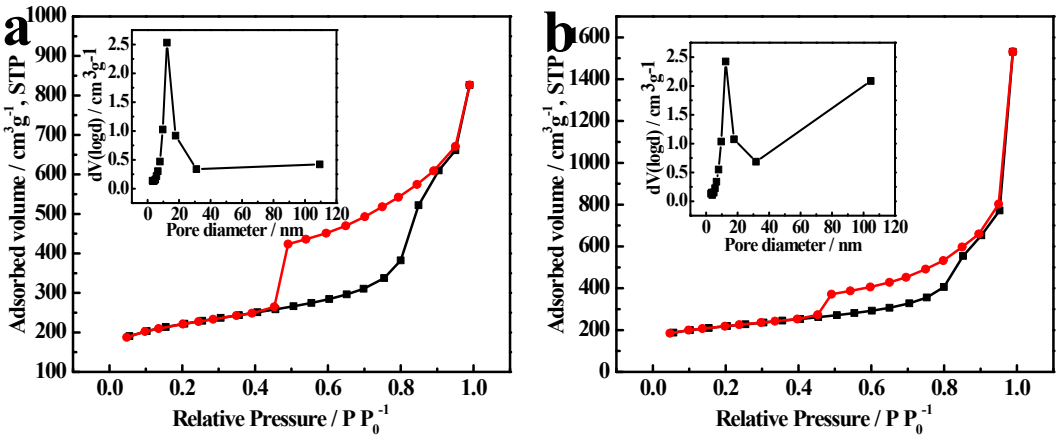

Fig. S1 N_2 adsorption-desorption isotherms and the pore size distribution from the BJH method (inset) of MNC-1/3 (a) and MNC-1/9 (b)

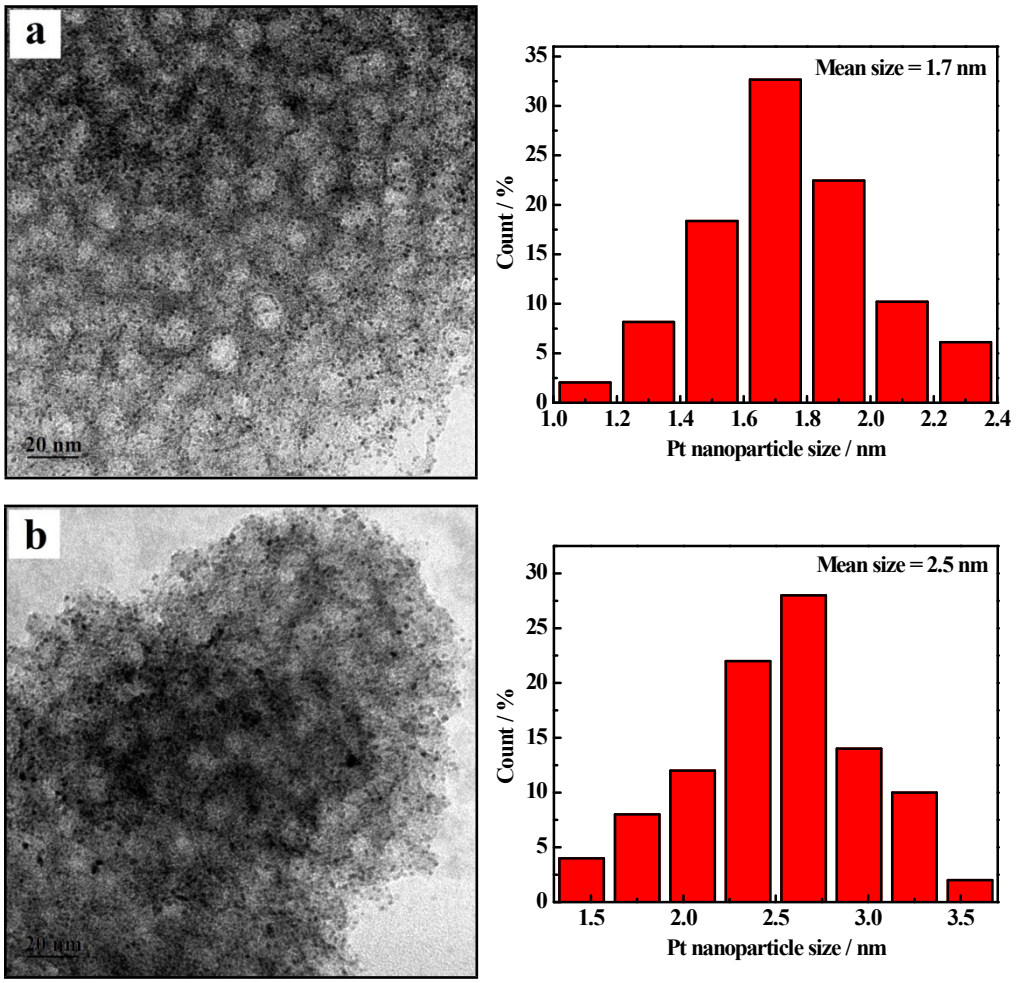

Fig. S2 TEM images and Pt size distribution (statistic number 100) of Pt/MNC-1/3 catalyst (a) and Pt/MNC-1/9 catalyst (b)

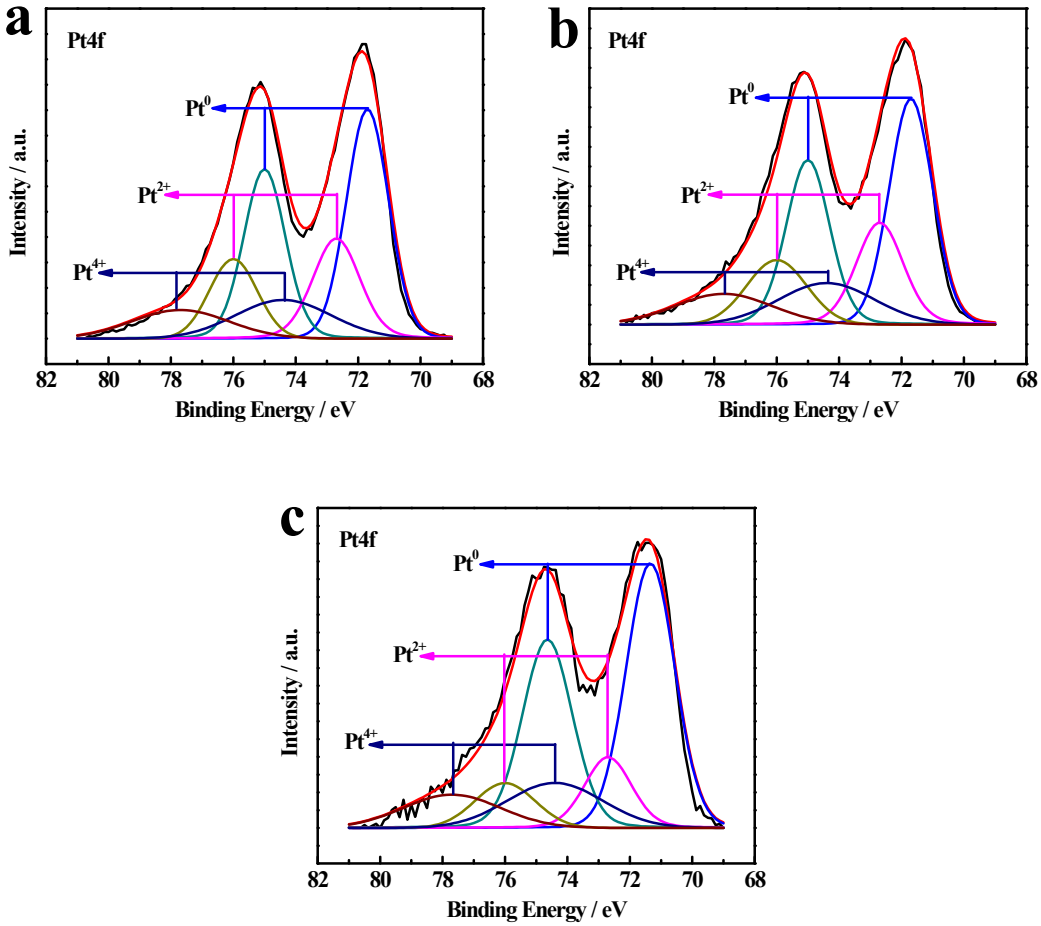

Fig. S3 the high resolution XPS spectra of Pt 4f for Pt/CNx catalyst (a), Pt/MNC-1/3 catalyst (b) and Pt/MNC-1/9 catalyst (c)

Table S1 Surface areas, pore volumes and Pore diameters of CNx and MNC supports

Sample	BET surface area (m^2 g^{-1})	Micropore surface area (m^2 g^{-1})	Mesoporous surface area (m^2 g^{-1})	Pore volume (cm^3 g^{-1})	Pore diameter
CNx	278	278	-	0.1	31.0
MNC-1/3	713	387	326	1.0	12.3
MNC-1/6	728	361	367	1.3	12.5
MNC-1/9	714	331	383	2.2	12.4

Table S2 the distribution proportion of different types Pt of Pt4f

Sample	Pt species	Binding energy/eV	Relative ratio/%
Pt/CNx	Pt^0	71.9	51.56
	Pt^{2+}	72.7	28.45
	Pt^{4+}	74.4	20.00
Pt/MNC-1/3	Pt^0	71.8	51.40
	Pt^{2+}	72.7	27.54
	Pt^{4+}	74.4	21.07
Pt/MNC-1/6	Pt^0	71.7	52.90
	Pt^{2+}	72.7	23.61
	Pt^{4+}	74.4	23.48
Pt/MNC-1/9	Pt^0	71.3	60.41
	Pt^{2+}	72.7	16.82
	Pt^{4+}	74.4	22.78