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Supporting material

Self-assembled hydrangea-like Fe_2P-CoP-NDC as efficient carrier material of Pt nanoparticles for methanol oxidation reaction

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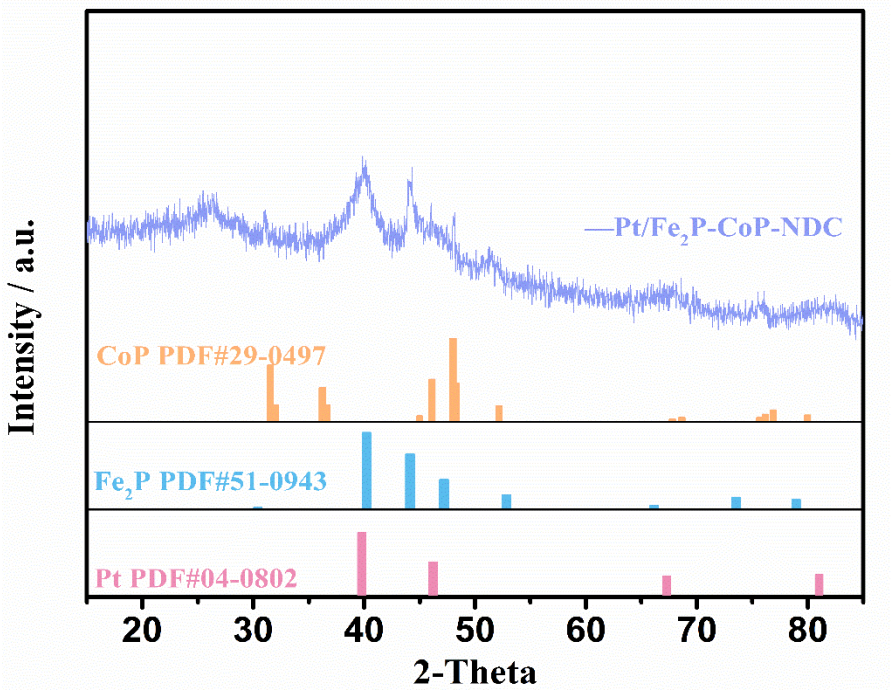

Fig. S1 XRD pattern of hydrangea-like Pt/Fe_2P-CoP-NDC catalyst

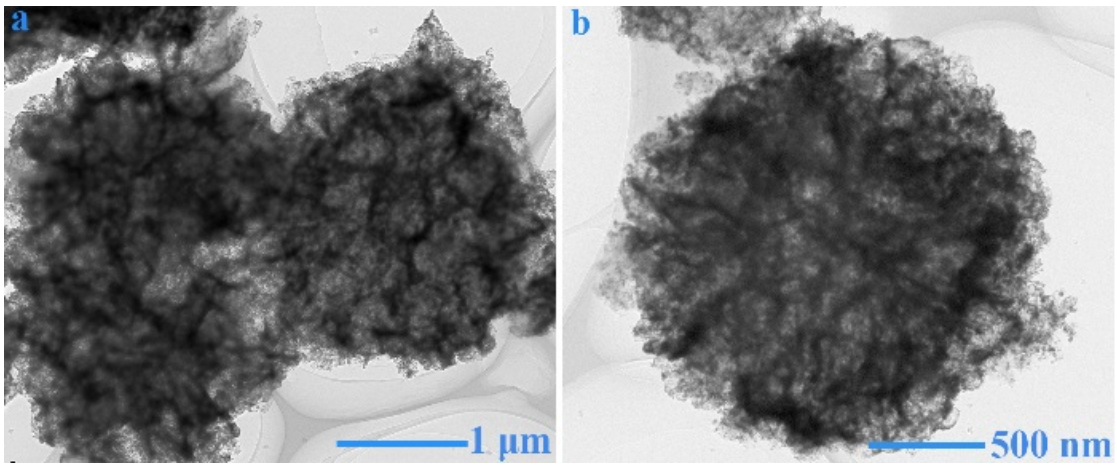

Fig. S2 TEM images of hydrangea-like Pt/Fe_2P-CoP-NDC catalyst

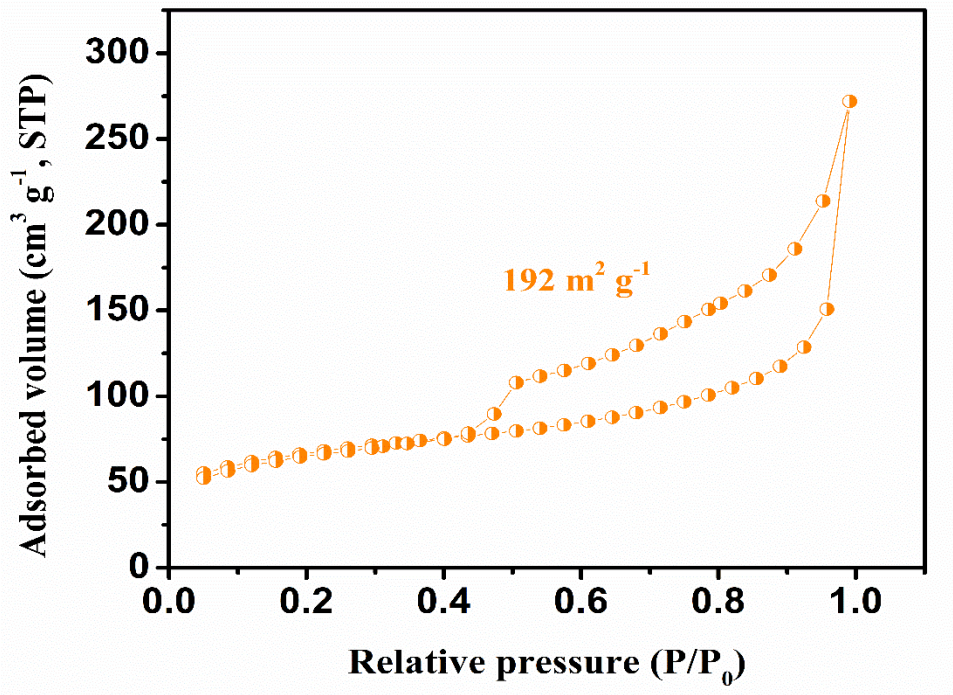

Fig. S3 Nitrogen adsorption/desorption isotherms curve of Fe_2P-CoP-NDC carrier material

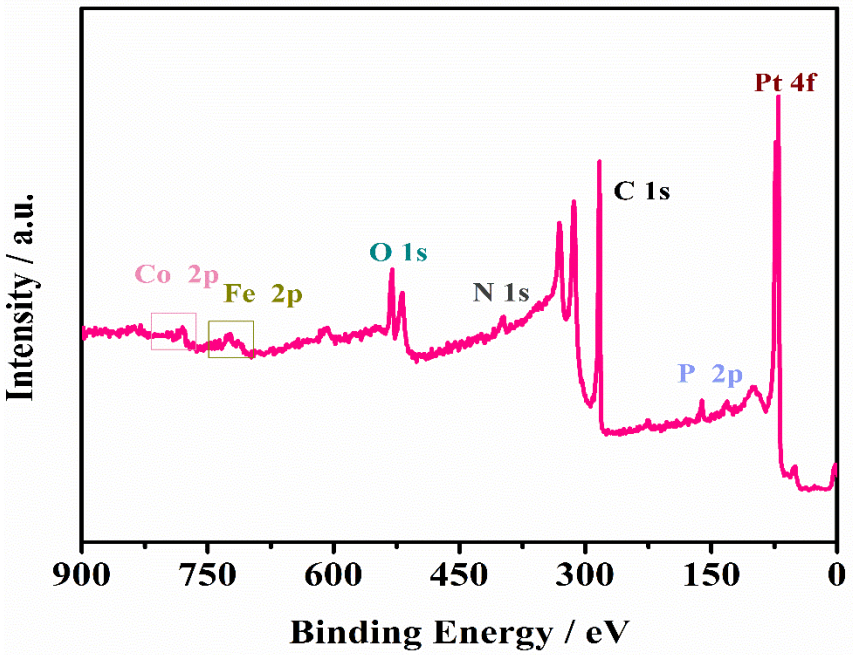

Fig. S4 XPS spectrum of hydrangea-like Pt/Fe_2P-CoP-NDC catalyst

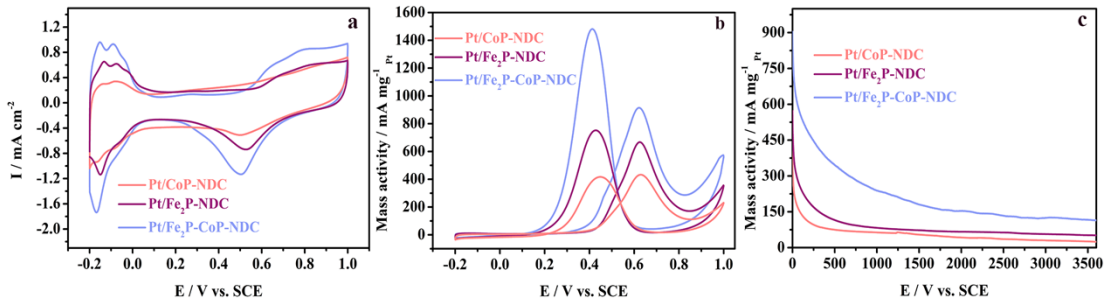

Fig. S5 CV curves (a), mass activity (b) and chronoamperometric curves (c) of Pt/CoP-NDC, Pt/Fe_2P-NDC and Pt/Fe_2P-CoP-NDC catalysts.

Table S1 The exact amount of Pt in the Pt/Fe_2P-CoP-NDC and commercial Pt/C catalysts obtained by ICP-OES.

Samples	Pt amount / wt%
Pt/Fe_2P-CoP-NDC	19.54
Commercial Pt/C	20

Table S2 Relative content of three types Pt for Pt/Fe_2P-CoP-NDC catalyst.

Samples	Pt^0		Pt^{2+}		Pt^{4+}	
	Binding energy / eV	Ratio %	Binding energy / eV	Ratio %	Binding energy / eV	Ratio %
Pt/Fe_2P-CoP-NDC	71.48 74.88	60.15	72.58 76.08	25.06	73.77 77.78	14.79