

Supplementary Information

Pt NPs immobilized on core-shell magnetite microparticles: a novel and highly-efficient catalyst for the selective aerobic oxidation of ethanol and glycerol in water

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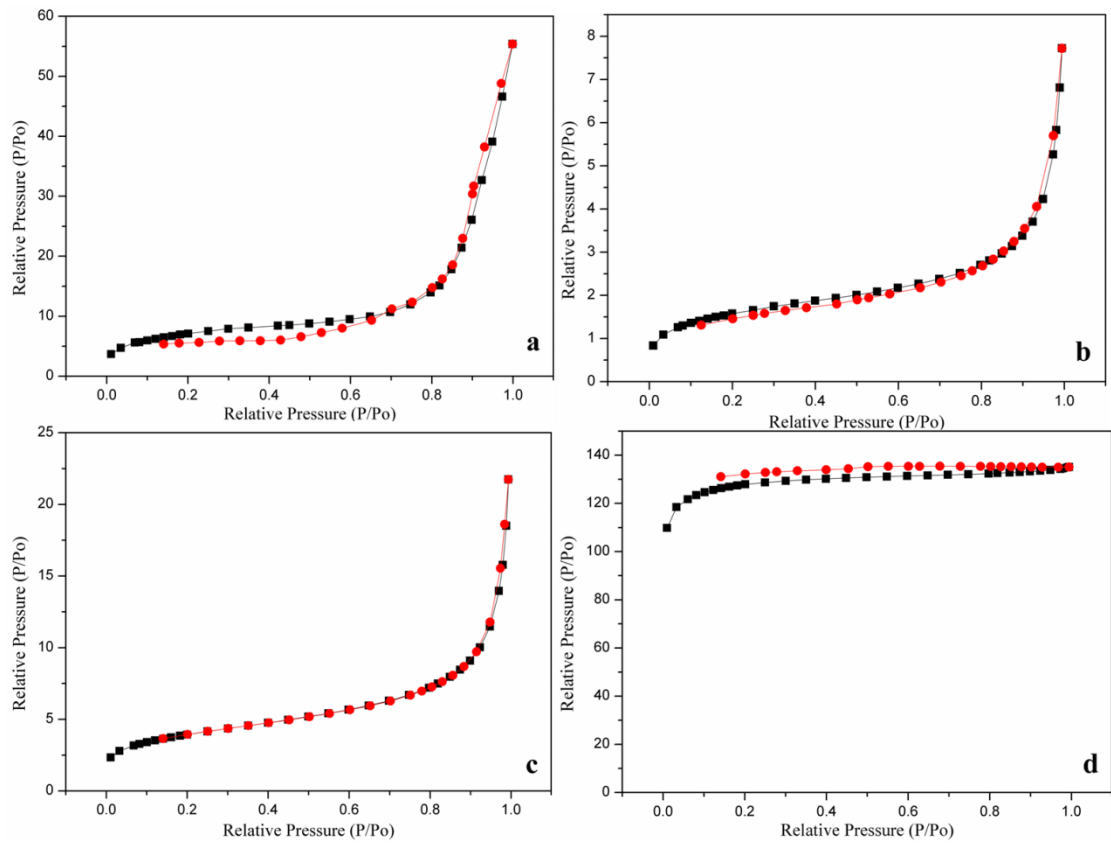


Fig. S1 Nitrogen adsorption–desorption isotherms the catalysts (a), Pt/Fe₃O₄@PPy; (b), Pt/Fe₃O₄@C; (c), Pt/Fe₃O₄@SiO₂; (d), Pt/ C.

Table S1 Analytical, textural, porosity data and catalytic activities of different catalysts^a.

Catalyst	Mass fraction of Pt (%)	BET surface area (m ² g ⁻¹)	Acetic acid yield (%)	Glyceric acid yield (%)
Pt/Fe ₃ O ₄ @PPy	4.52%	24.8449	88	55.4
Pt/Fe ₃ O ₄ @C	2.89%	5.4265	85	53.1
Pt/Fe ₃ O ₄ @SiO ₂	1.17%	13.5121	56	34.5
Pt/C	5%	387.7301	82	47.1

^athe amount of added platinum in the oxidation reactions are the same (i.e. alcohol/platinum = 200 mol/mol)