

Supporting Information

Manuscript title: Highly dispersed Pt catalyst supported on nanoporous carbon derived from waste PET bottles for reductive alkylation

Table S1. Oxygen-containing functional groups on various NPCs supported Pt catalysts^a

Samples	Carboxyl/ mmolg ⁻¹	Lactone/ mmolg ⁻¹	Hydroxyl / mmolg ⁻¹	Total acid / mmolg ⁻¹
Pt/NPC15(1/1)-CPA	0.016	0.031	0.062	0.109
Pt/O@NPC15(1/1)-PTA	0.743	0.075	0.720	1.538
Pt/NPC50(1/1)-CPA	0.022	0.018	0.048	0.088
Pt/O@NPC50(1/1)-PTA	0.655	0.102	0.530	1.287
Pt/NPC100(1/1)-CPA	0.008	0.044	0.083	0.135
Pt/O@NPC100(1/1)-PTA	0.681	0.093	0.662	1.436
Pt/O@PVA-NPC50(1/1)-PTA	0.863	0.117	0.442	1.422

^a The quantification of the oxygen-containing functional groups on catalysts was carried out by Boehm Titration.

Fig. S1. Nitrogen adsorption isotherm of the NPCs.

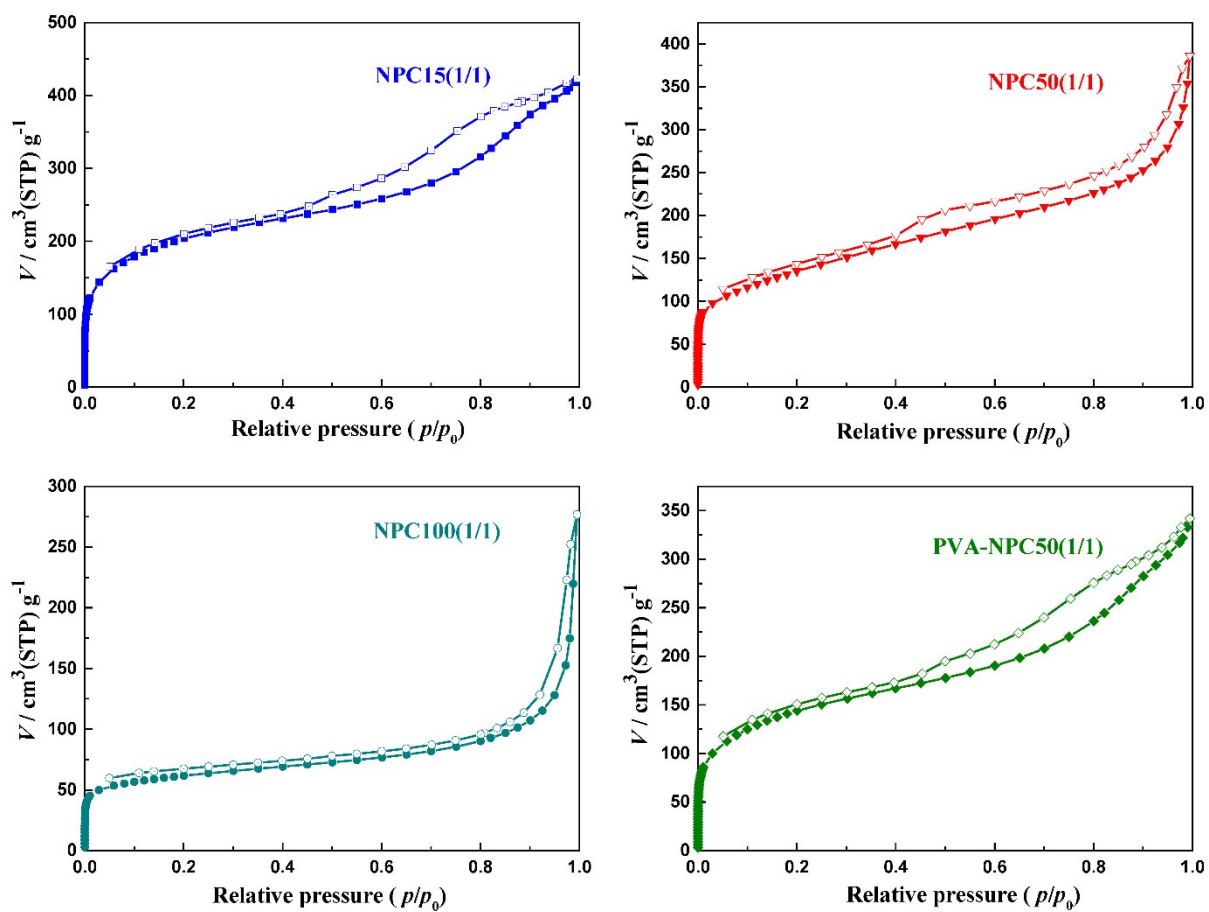
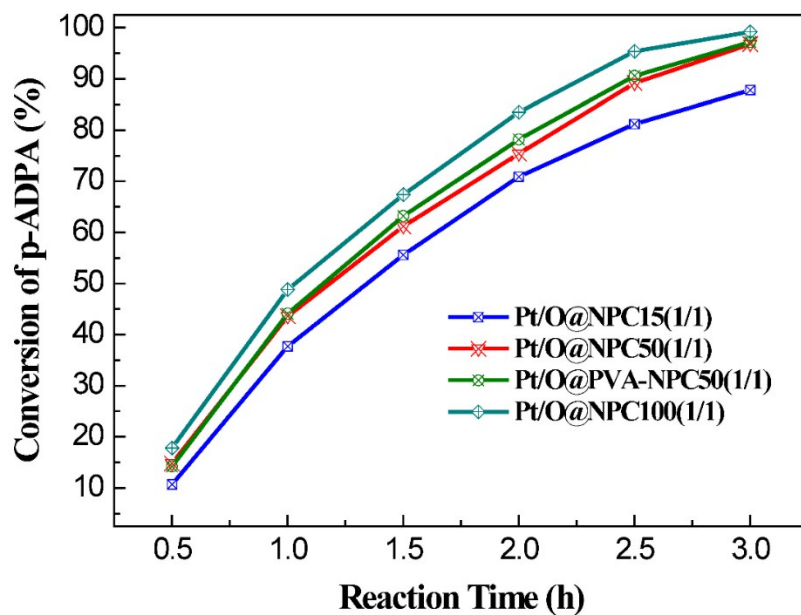


Fig. S2. Time vs. Conversion of p-ADPA over the Pt/NPCs^a



^a Reaction conditions: p-ADPA = 50 g, MIAK = 120 g, catalyst = 0.5 g, T = 80 °C, P = 2.5 MPa (pure H₂), reaction time = 3 h, stirring speed = 750 r/min.