Supporting Information for

One-step fabrication of bimetallic PtNi mesoporous nanospheres as an efficient catalyst for oxygen reduction reaction

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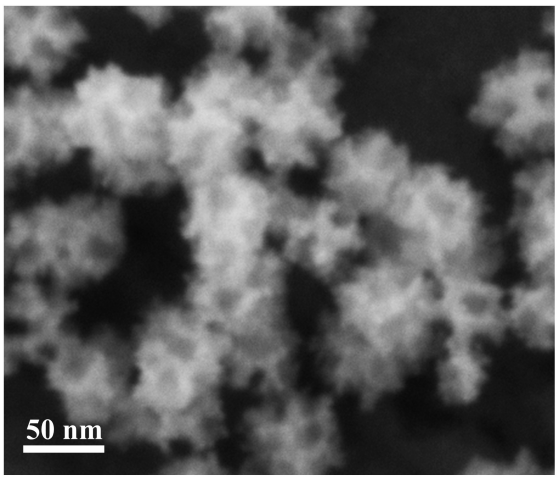

Fig. S1 High magnification SEM image of the PtNi MNs.

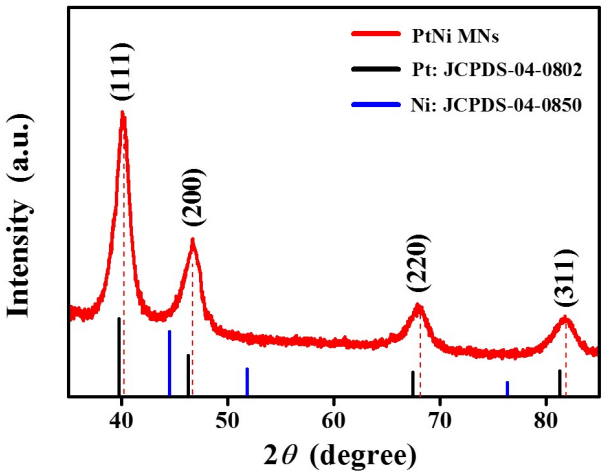

Fig. S2 XRD pattern of the PtNi MNs.

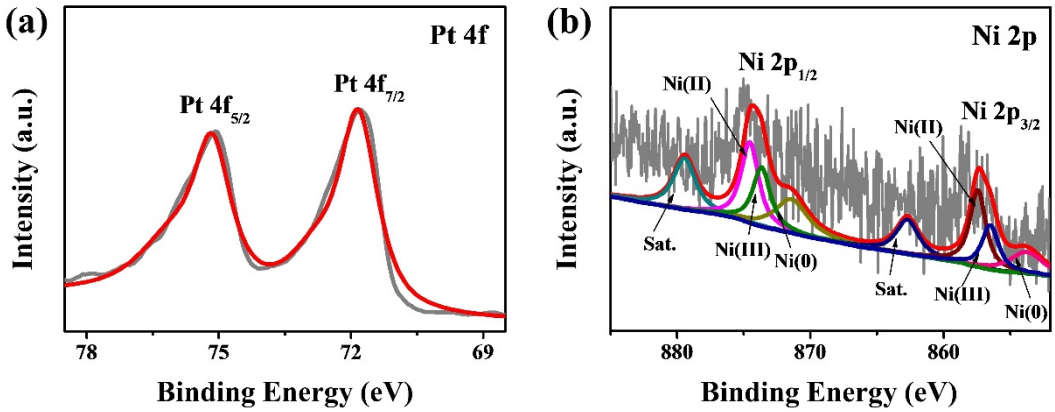

Fig. S3 XPS spectra of the (a) Pt 4f and (b) Ni 2p for the PtNi MNs.

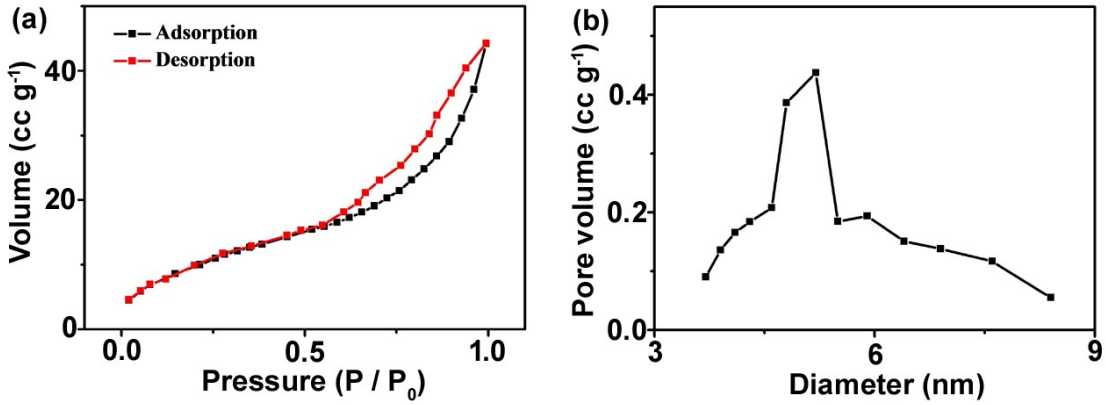

Fig. S4 (a) N_2 adsorption/desorption isotherms and (b) pore-size distributions for the PtNi MNs.

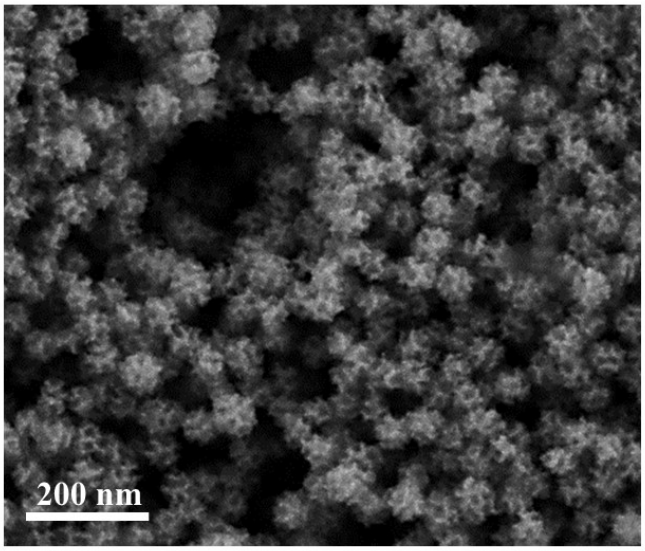

Fig. S5 SEM image of the Pt MNs.

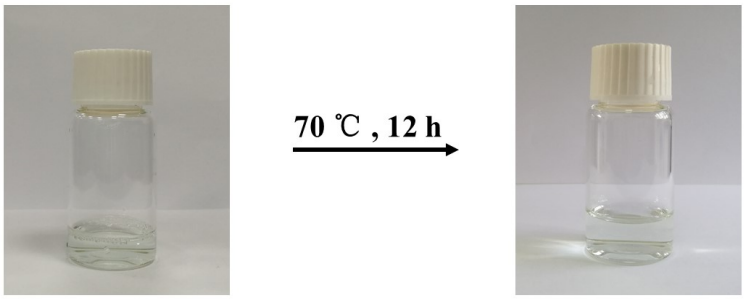

Fig. S6 Photo image showing the reaction condition with only $NiCl_2$ precursor in the absence of H_2PtCl_6 under the identical conditions used for the typical synthesis.

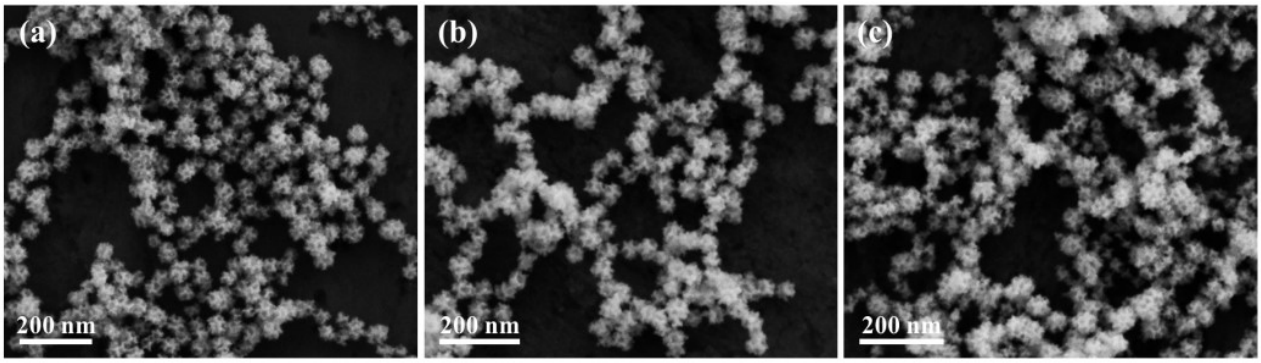

Fig. S7 SEM images of the samples prepared with different molar ratios of $H_2PtCl_6/NiCl_2$: (a) 1.2/0.3; (b) 1.0/0.5; (c) 0.75/0.75.

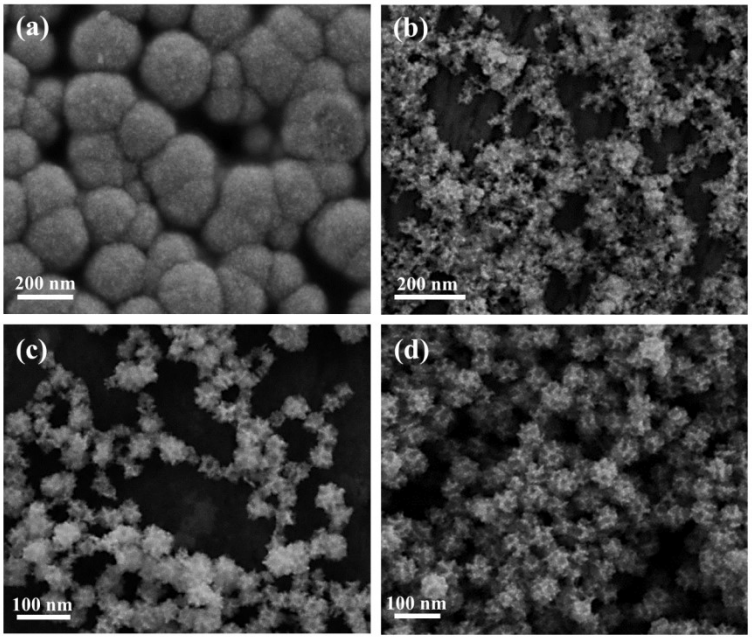

Fig. S8 SEM images of the PtNi samples prepared by adding different F127 amount: (a) 0 mg, (b) 5 mg, (c) 15 mg, (d) 50 mg.

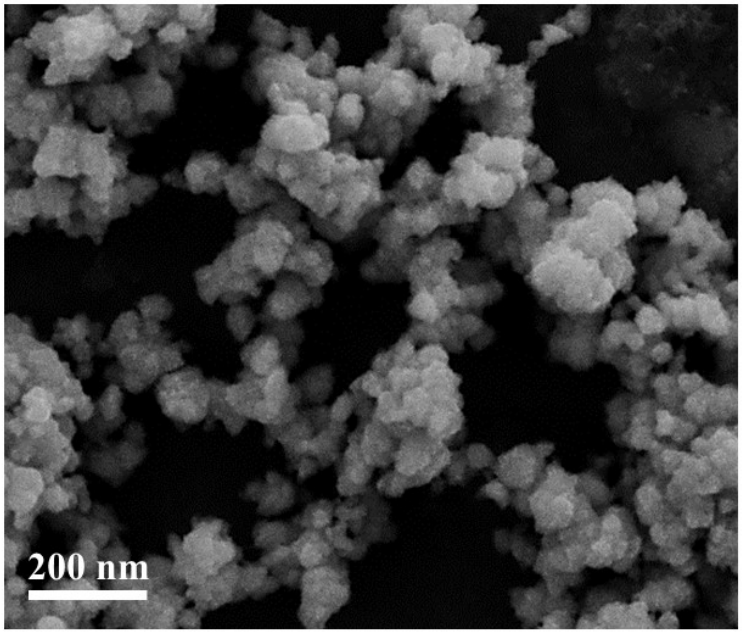

Fig. S9 SEM image of the PtNi sample prepared by replacing F127 with Brij 58.

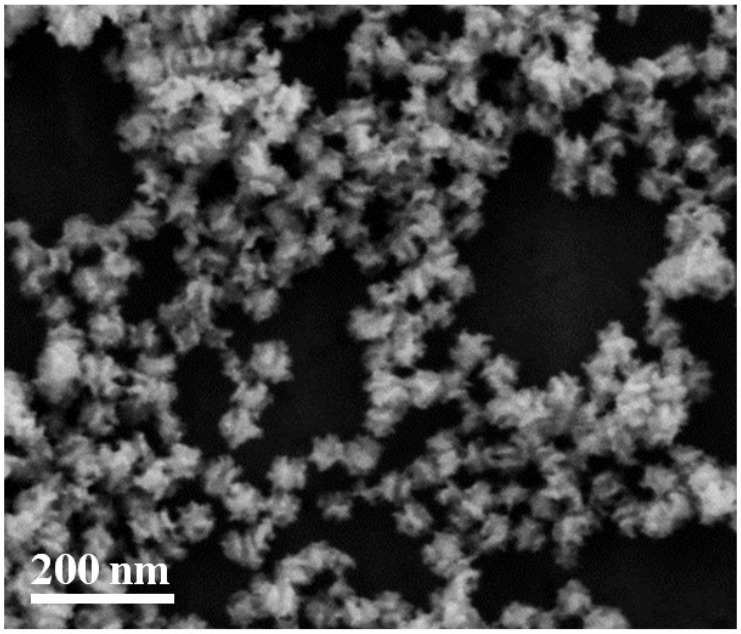

Fig. S10 SEM image of the PtNi NPs prepared at 90 ^{o}C under the identical conditions used for the typical synthesis.

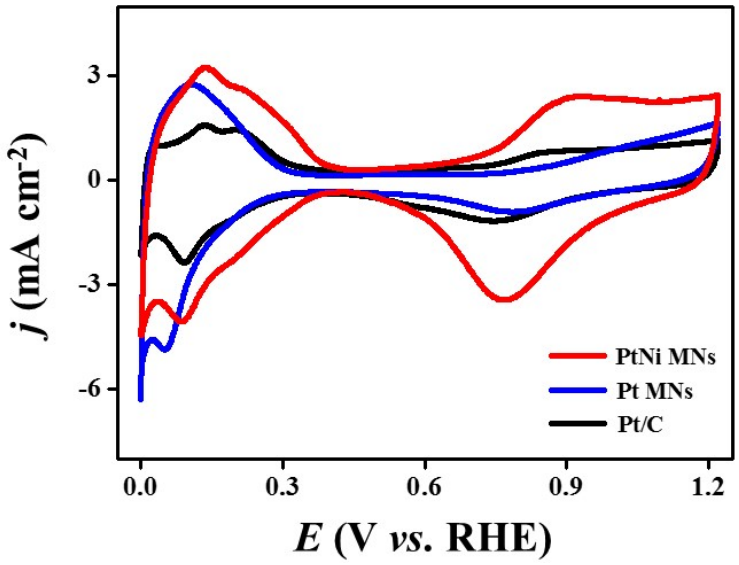

Fig. S11 CV curves of the catalysts recorded in a N_2-saturated 0.1 M $HClO_4$ solution at a sweep rate of 50 mV s^{-1}.

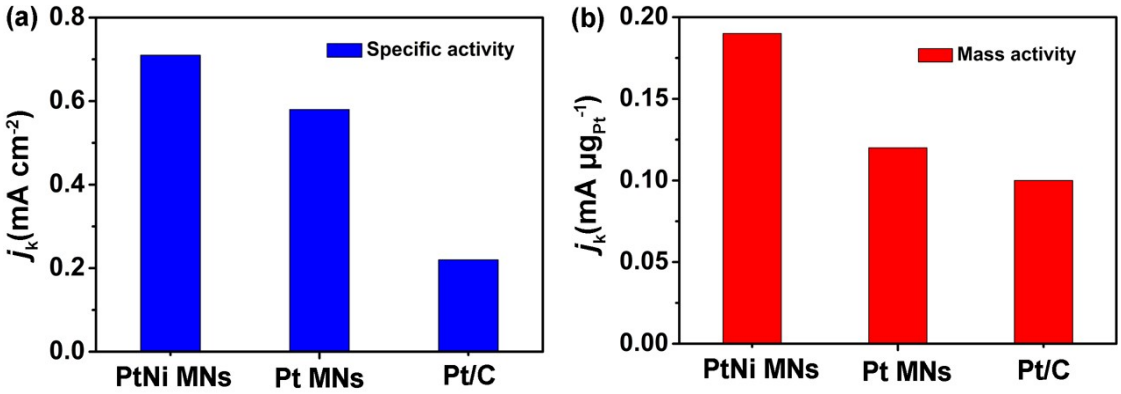

Fig. S12 (a) Specific activities and (b) mass activities of various electrocatalysts.