Electronic Supplementary Material (ESI) for RSC Advances.

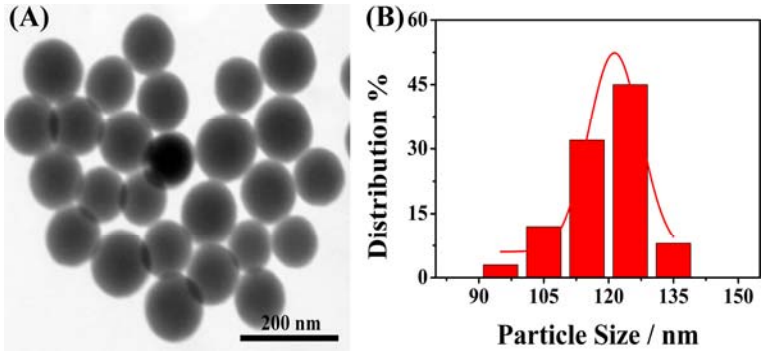

Fig. S1 (A) TEM image and (B) particle size distribution histogram of the SiO_2 spheres.

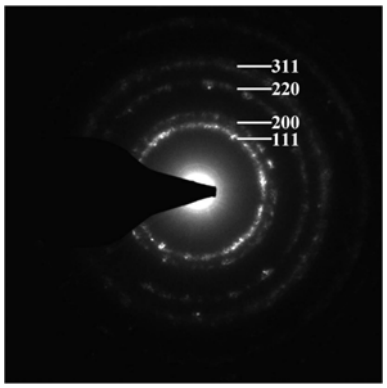

Fig. S2 Selected area electron diffraction (SAED) pattern of AuPt-HNSs.

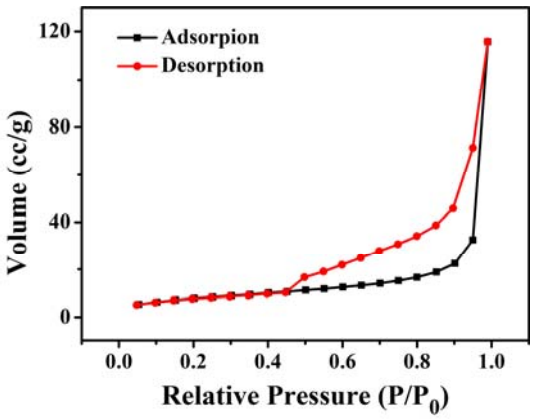

Fig. S3 Nitrogen adsorption-desorption isotherms of AuPt-HNSs.

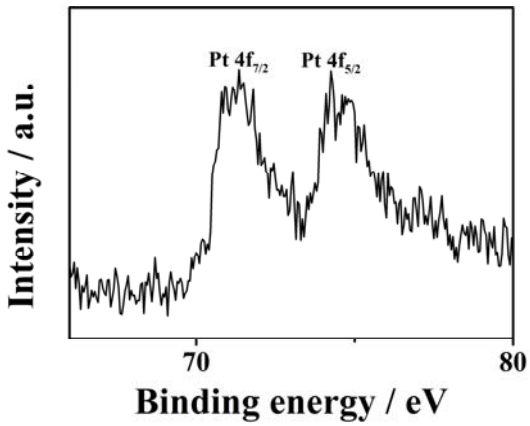

Fig. S4 Pt 4*f* XPS spectra of commercial Pt/C catalyst.

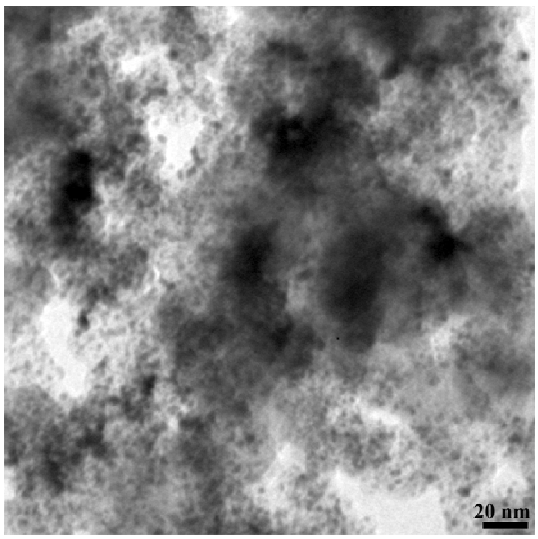

Fig. S5 TEM image of commercial Pt/C catalyst.

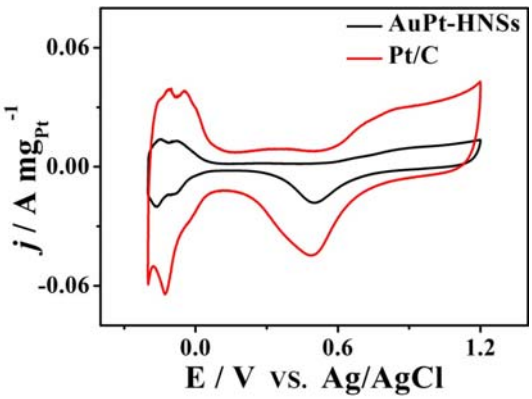

Fig. S6 CV curves of AuPt-HNSs and Pt/C in N_2 saturated 0.5 M H_2SO_4 solution at a scan rate of 50 mV s^{-1}.

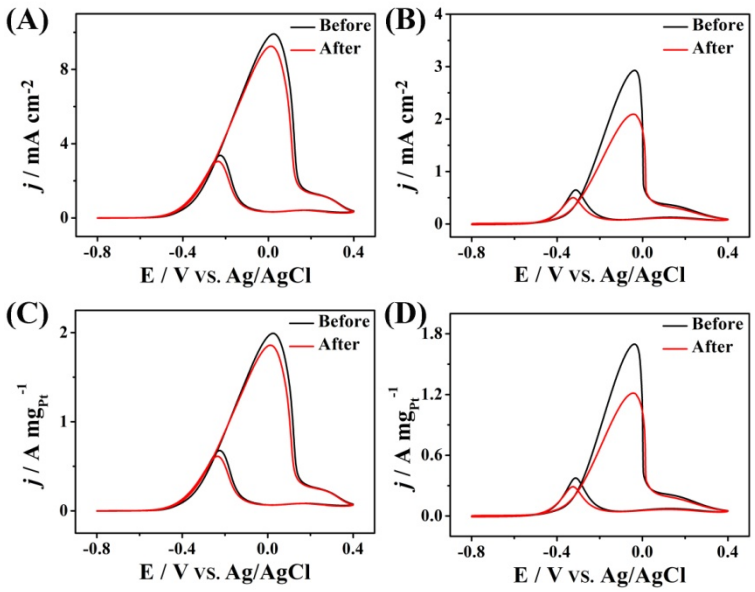

Fig. S7 CV curves of AuPt-HNSs (A, C) and Pt/C (B, D) in 0.5 M NaOH + 0.5 M EG solution before and after stability test.

Table S1 Mass activity of AuPt-HNSs and other reported catalysts for EG oxidation

Catalyst	Mass activity ($A\ mg^{-1}$)	Scan rate ($mV\ s^{-1}$)	Electrolyte	References
AuPt-HNSs	1.99	50	0.5 M NaOH + 0.5 M EG	This work
$Pt_{77}Cu_{54}Co_{23}$ HDNPs	1.8	50	0.5 M NaOH + 0.5 M EG	1
PtNTs	1.484	50	0.5 M NaOH + 0.5 M EG	2
$Pd_{55}Pt_{30}$ NNWs	3.38	50	0.5 M KOH + 0.5 M EG	3
PdPt NDs	1.638	50	1.0 M KOH + 0.5 M EG	4
PtPdCo nanoparticles	1.546	50	1.0 M KOH + 0.5 M EG	5
PtPd nanoparticles	1.181	50	1.0 M KOH + 0.5 M EG	5
PtPd multipods	0.875	50	1.0 M KOH + 1.0 M EG	6
Pd/WC-Mo_2C	0.6	50	0.5 M KOH + 0.5 M EG	7
Pd/RGO	0.0337	50	0.5 M KOH + 0.5 M EG	8

Reference

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