

Electronic Supplementary Information (ESI)

Environmentally friendly and facile synthesis of Rh nanoparticles at room temperature by alkaline ethanol solution and their application for ethanol electrooxidation

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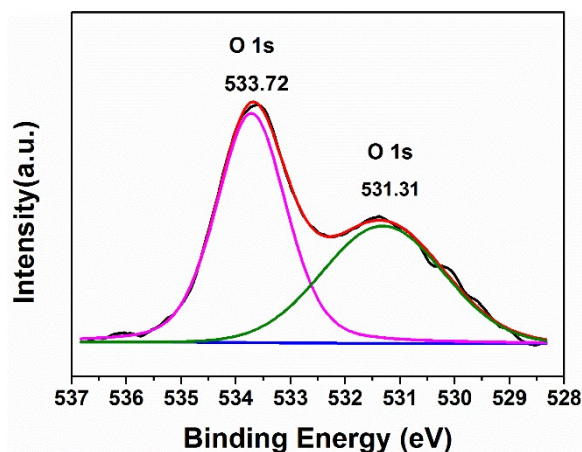


Figure S1. O 1s XPS spectrum of the RhNps. Condition of synthesis: 1 mM RhCl₃, 1 M ethanol and 1 M NaOH at 20 °C.

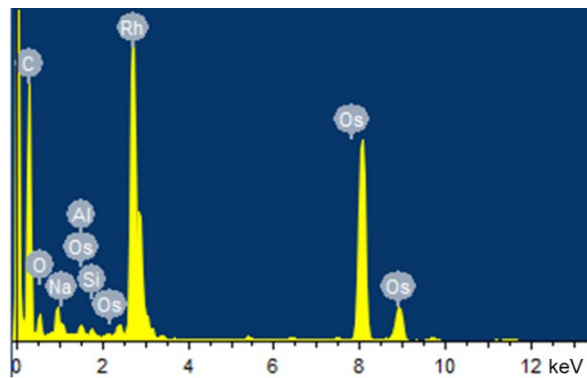


Figure S2. EDX of the RhNps. Condition of synthesis: 1 mM RhCl_3 , 1 M ethanol and 1 M NaOH at 20 °C.

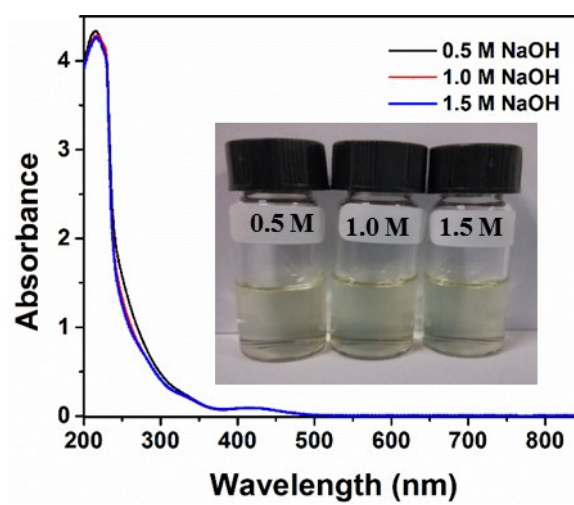


Figure S3. UV-vis spectra of the solution containing 1 mM RhCl_3 , 50 mM PVP, and 0.5, 1.0, 1.5 M NaOH. The inset shows the color of the solution.

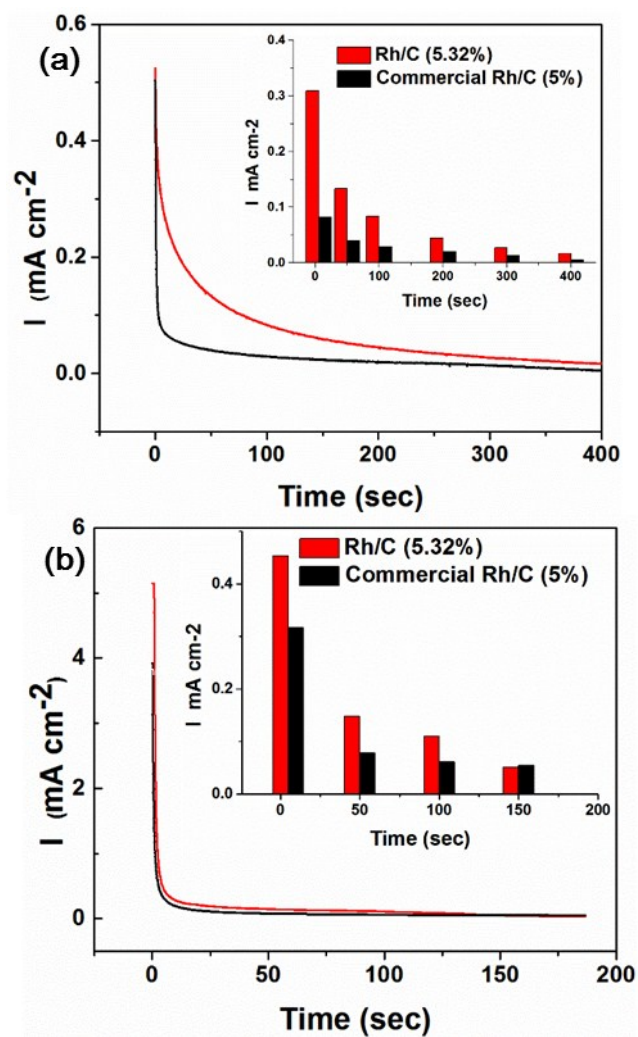


Figure S4. Amperometric I-t curves of as-synthesized and commercial Rh/C in 1 M ethanol and 0.1 M NaOH solution at a constant potential of (a) -0.5 and (b) 0 V.

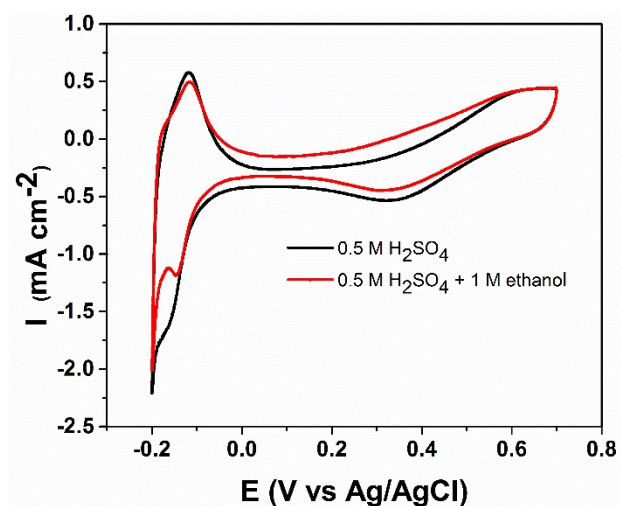


Figure S5. Cyclic voltammograms (CVs) of Rh/C in 0.5 M H₂SO₄ solution with and without 1 M ethanol at 25 °C with a scan rate of 50 mV/s.