Supporting Information Available

Ruthenium(Ⅲ) phosphonate complex on polyallylamine functionalized carbon nanotubes multilayer films: self-assembly, direct electrochemistry, and electrocatalysis

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Figures

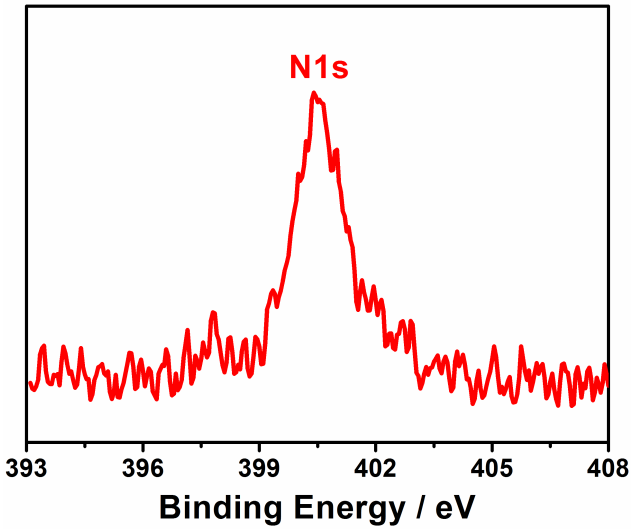

Fig. S1 XPS spectra of PAH-MWCNTs-COOH hybrids in the N1s region.

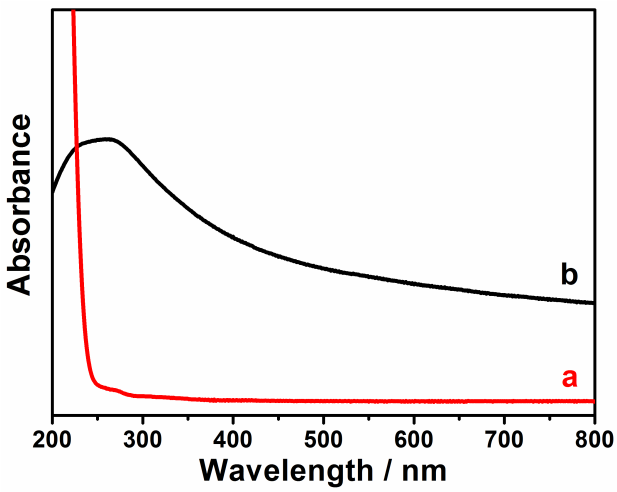

Fig. S2 UV-vis spectra of (a) PAH, and (b) MWCNTs-COOH.

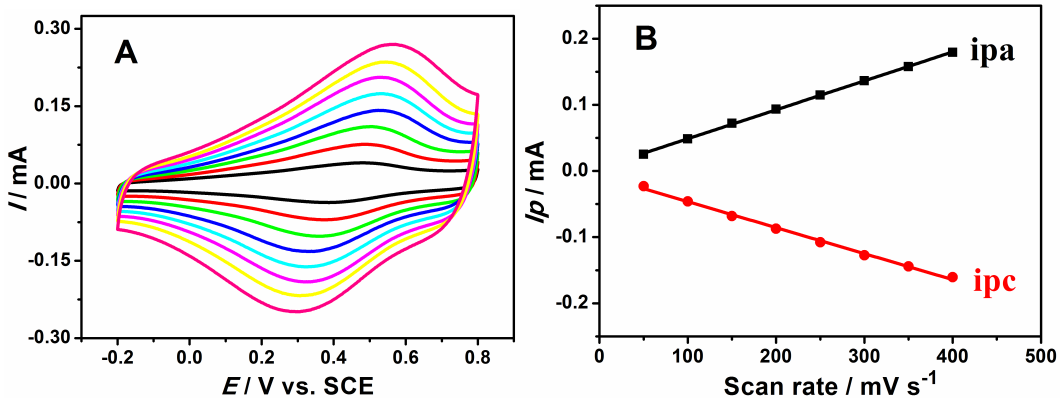

Fig. S3 (A) Cyclic voltammograms of EDTMP-Ru^{III}/{PAH/MWCNTs-COOH}$_8$/GC electrode in the 0.1 M pH 2.0 K_2SO_4-H_2SO_4 solution at different scan rates. (B) Plots of the corresponding cathodic and anodic peak currents vs. scan rates.

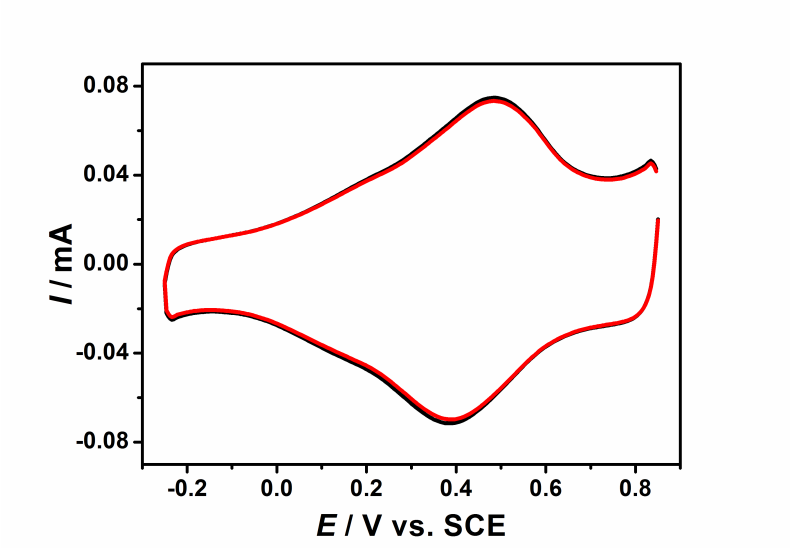

Fig. S4. Cyclic voltammograms of EDTMP-Ru^{III}/{PAH/MWCNTs-COOH}$_8$/GC electrode in a 0.1 M pH 2.0 K_2SO_4-H_2SO_4 solution at 1st cycle (black line) and100th cycles (red line) at a scan rate of 100 mV s^{-1}.

Table S1. Detection limit and linear range of amperometric determination of iodate on typical modified electrodes.

electrode	detection limit/μM	linear range/μM	references
Fe(III)P-MWCNTs/GC	2.5	10-4000	1
V-complex-MWCNTs/GCE	0.35	0.5-500	2
Nano-Au/P3MT/GCE	1.4	5.0-500	3
Catalase-MWCNTs/GC	0.2	1-5000	4
Os-complex/SWCNTs/GC	0.038	1-2500	5
Nano-Pts/CS/GCE	0.86	3-560	6
RuON-GCE	0.9	1.5-518	7
AMMOE	0.5	1-200	8
WO3/PANI	2.7	20-500	9
EDTMP-Ru^{III}/{PAH/MWCNTs-$COOH_8$/GCE	0.03	0.08-230	Proposed method

References

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