

Supplementary material

Ultrasonic-Assisted Synthesis of Bimetallic PtRu Nanoparticles Supported on Carbon Nanotubes for Effective Methanol Oxidation

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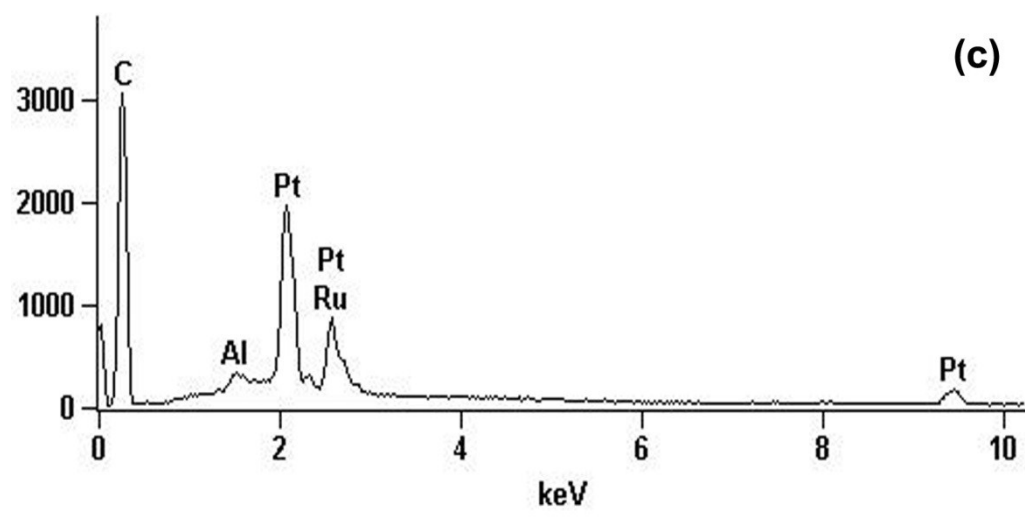
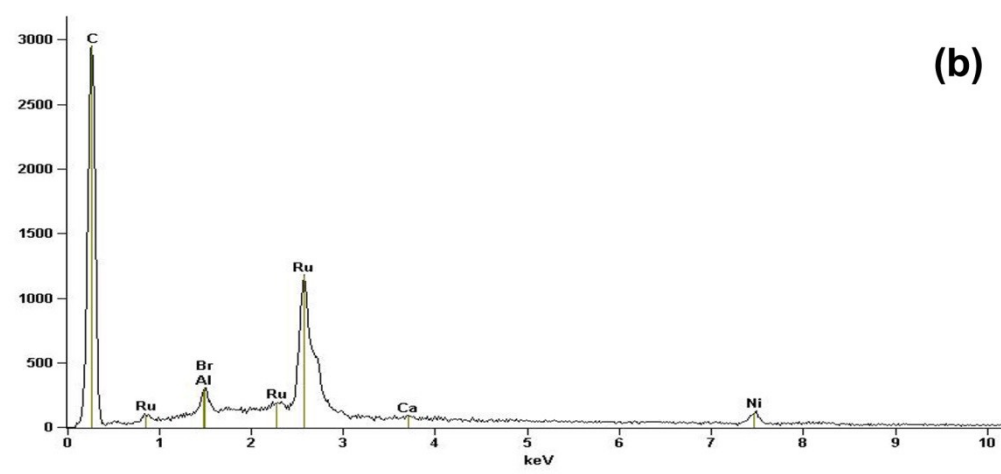
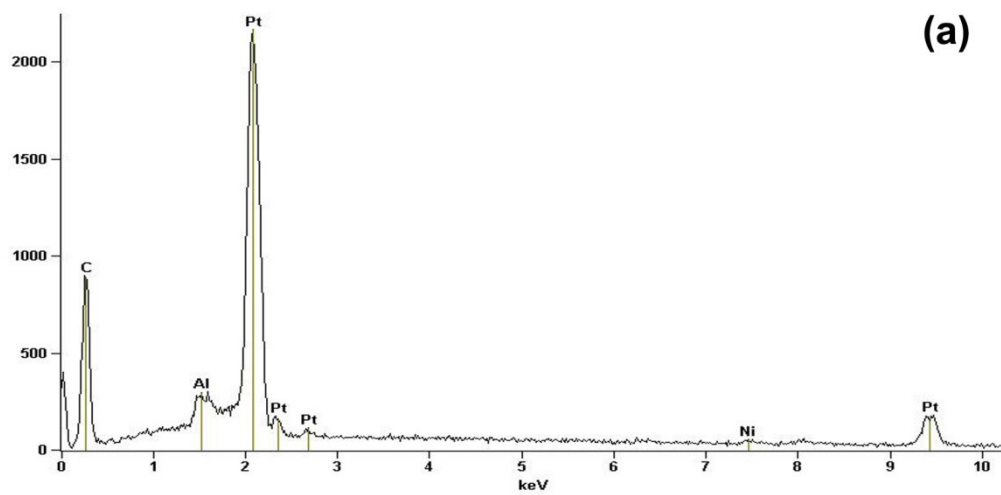


Fig. S1. EDX spectra of Pt/c-MWNTs, Ru/c-MWNTs and PtRu/c-MWNTs.

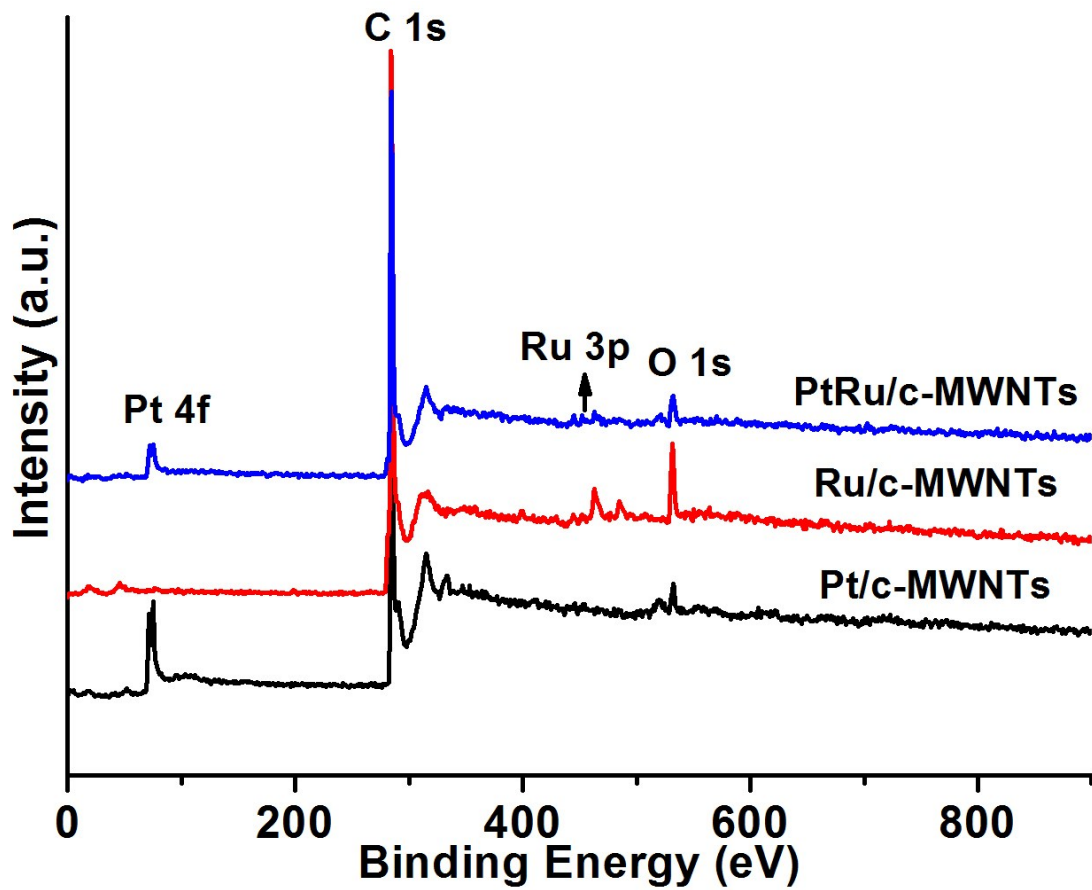


Fig. S2. XPS spectra of Pt/c-MWNTs, Ru/c-MWNTs and PtRu/c-MWNTs.

Electrochemical Characterization of PtRu/c-MWNTs catalyst.

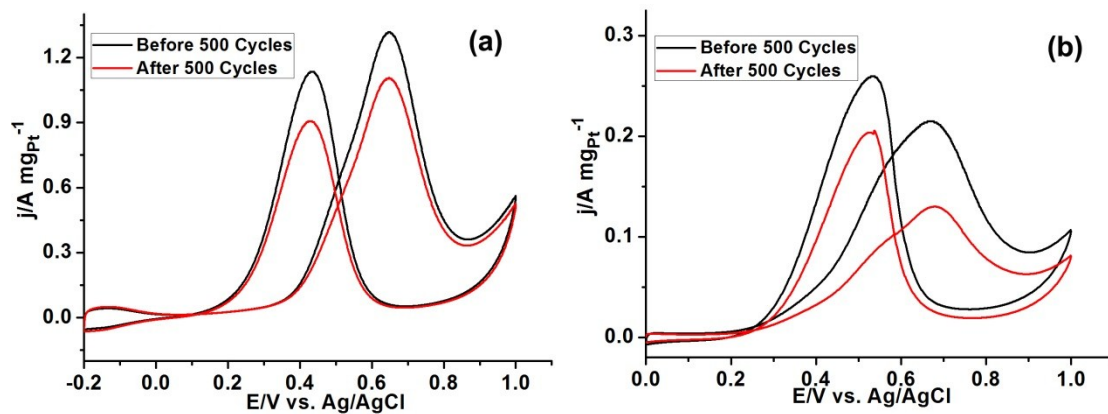


Fig. S3. CVs and of the (a) PtRu/c-MWNTs and (b) commercial Pt/C (20 wt.%) catalysts before and after 500 cycles (vs Ag/AgCl).