Electronic Supplementary Material for PCCP

Supporting Information

A Volcano Curve: Optimizing Methanol Electro-oxidation on Pt-decorated Ru Nanoparticles

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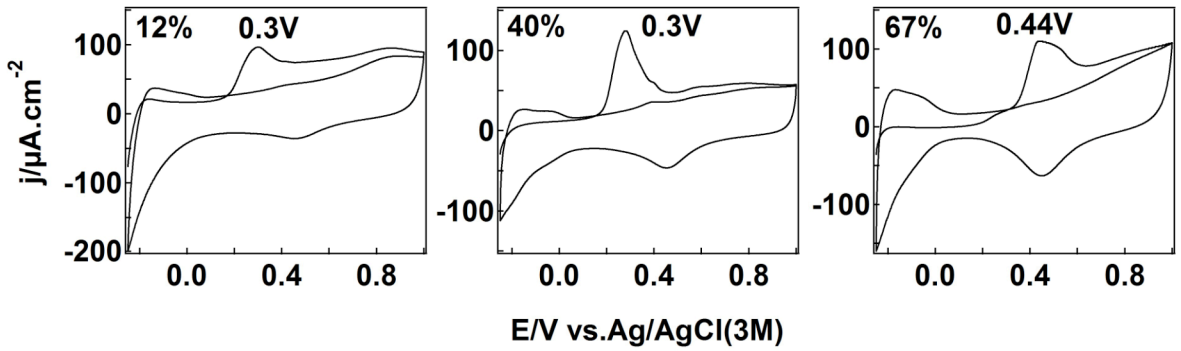

Fig. S1. The CO stripping CVs of the three samples of the second batch.

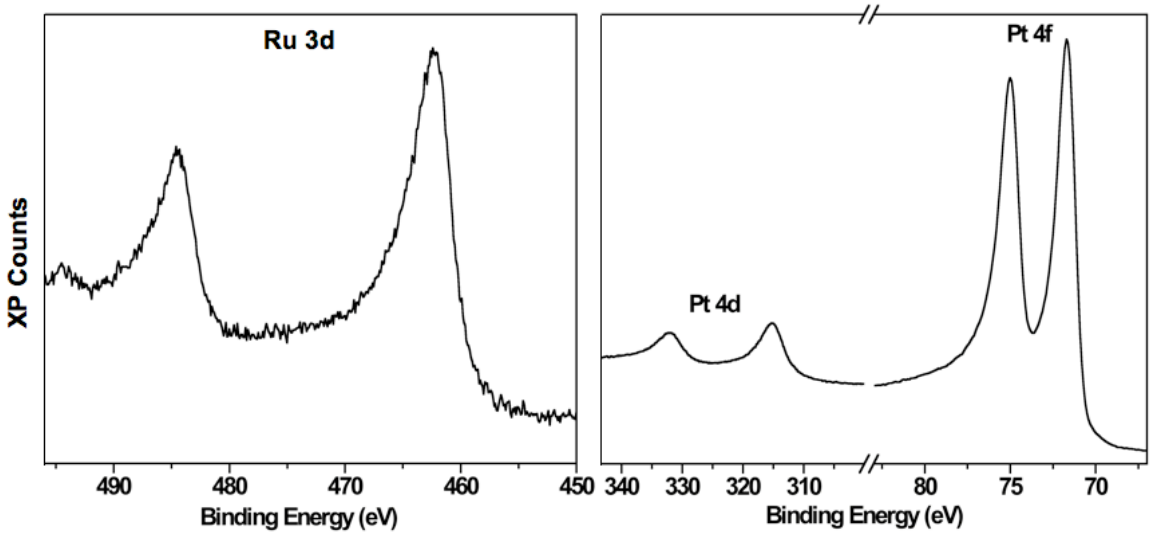

Fig. S2. The Ru (3d) and Pt(4d, 4f) XP spectra of Pt(40)-Ru of the second batch.

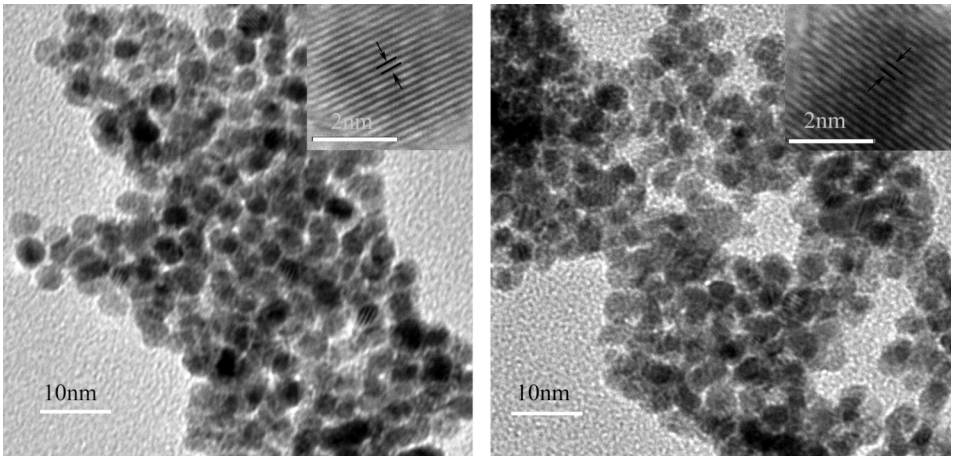

Fig. S3. The respective TEM images of Pt(12)-Ru(Left) and Pt(40)-Ru(Right). The insets are the corresponding HRTEMs where the distance between two adjacent atomic layers is 0.21 nm.

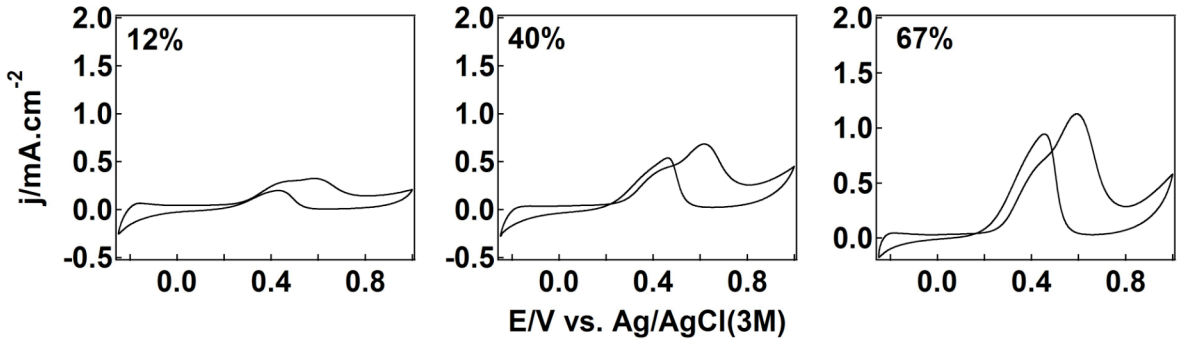

Fig. S4. The MeOH electro-oxidation CVs of the 3 2nd-Batch samples

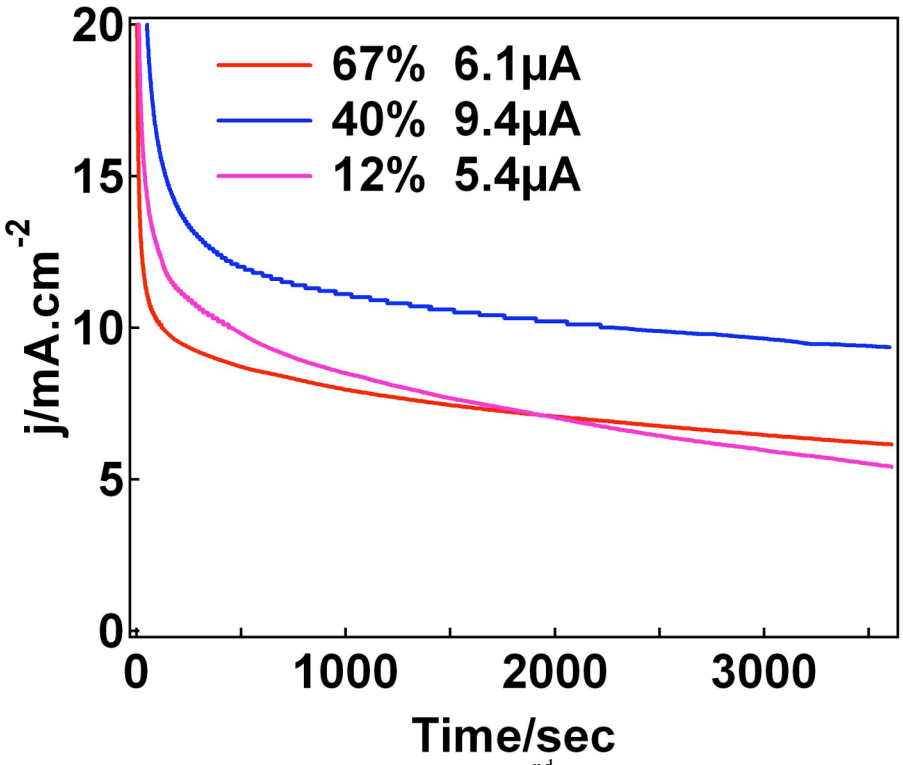

Fig. S5. The CA of MeOH electro-oxidation of the 3 2nd-Batch samples with the current values at 60 min.