Electronic Supplementary Information

Interfacial Reactivity of Ruthenium Nanoparticles Protected by Ferrocenecarboxylates

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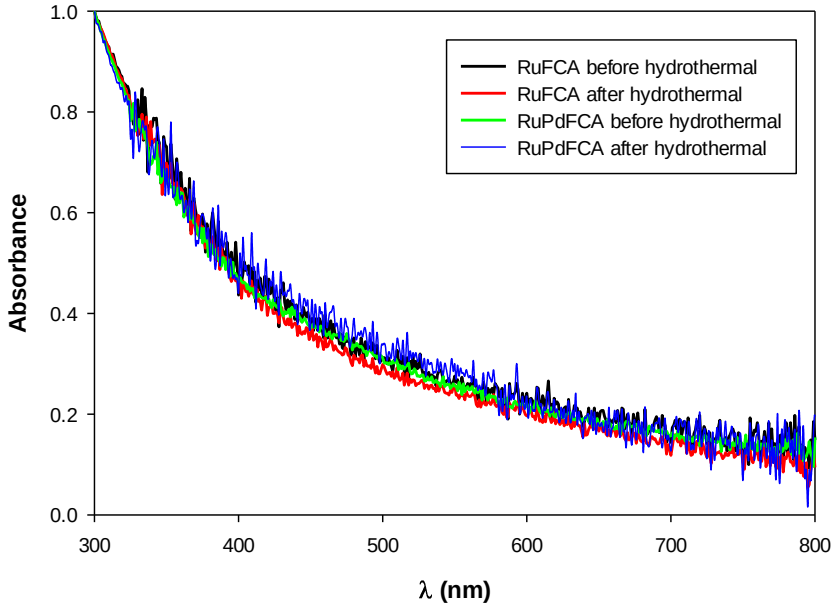

Figure S1. UV-vis absorption spectra of RuFCA nanoparticles and RuPdFCA nanoparticles prepared by galvanic exchange reactions of RuFCA with Pd(II) before and after hydrothermal treatment. The data were normalized to the respective absorbance at 300 nm. The overlap of the spectra signifies little variation of the metal cores in the four nanoparticle samples.

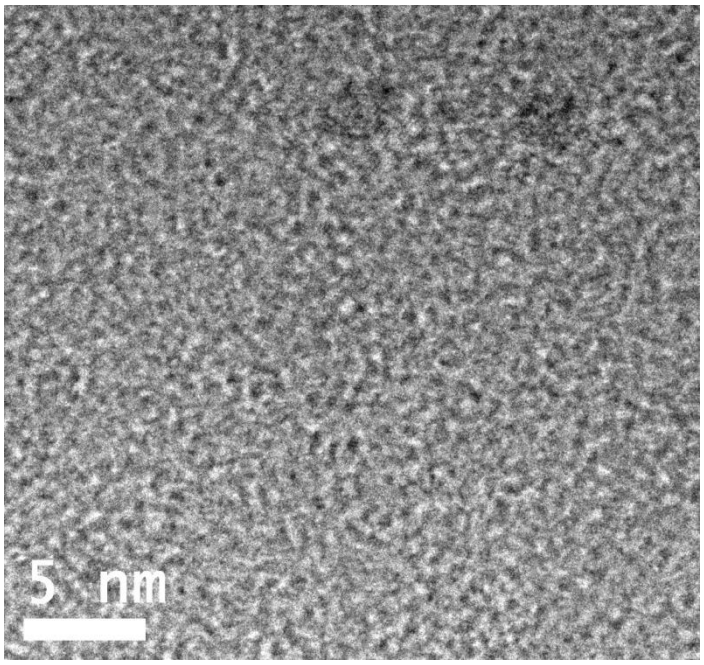

Figure S2. Representative TEM micrograph of RuPdFCA nanoparticles after hydrothermal treatment. The size of the nanoparticles is around 2.5 nm.

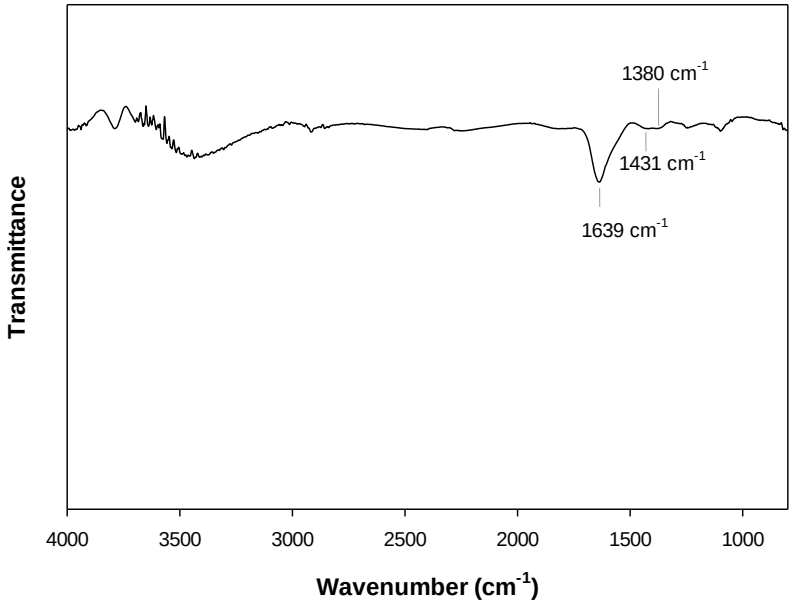

Figure S3. FTIR spectrum of RuPdFCA nanoparticles after hydrothermal treatment.

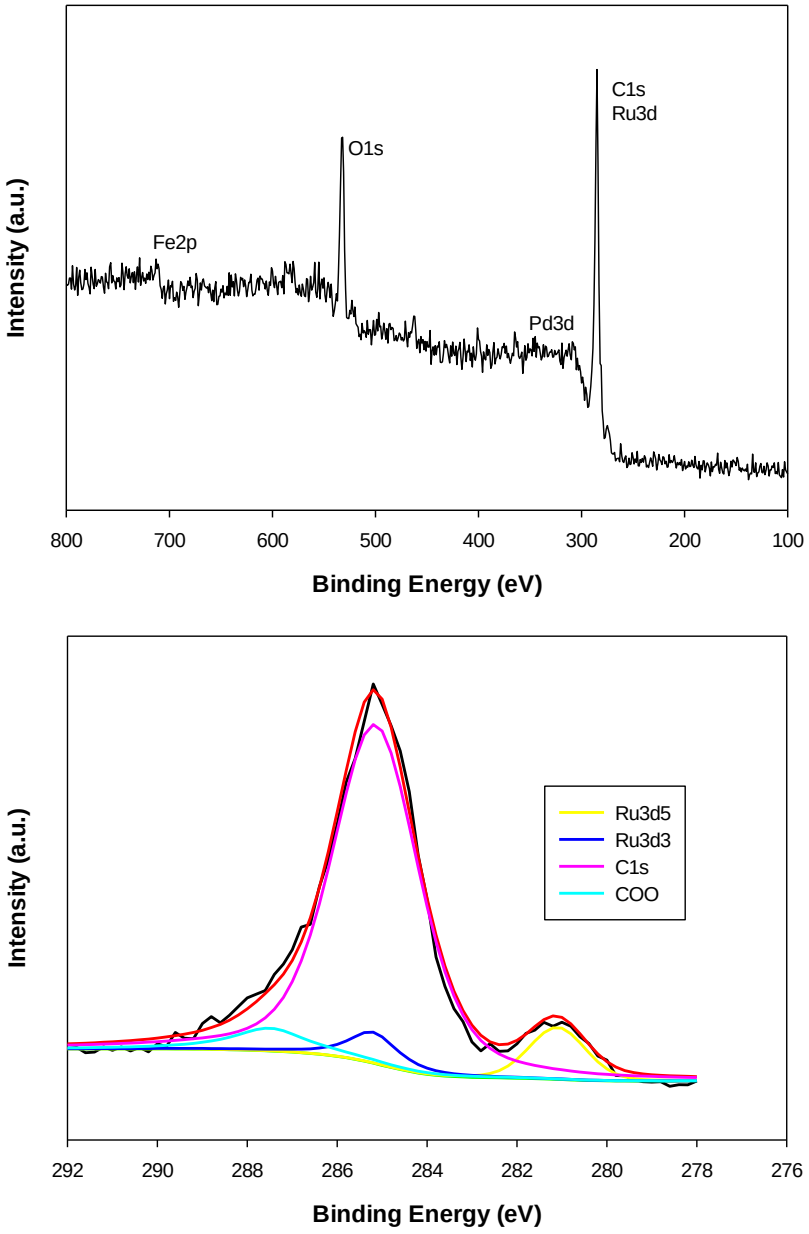

Figure S4. (top) XPS survey spectrum of RuPdFCA nanoparticles after hydrothermal treatment. (bottom) High-resolution scan of the C1s and Ru3d electrons where the black curve is the experimental data and color curves are the deconvolution fits.

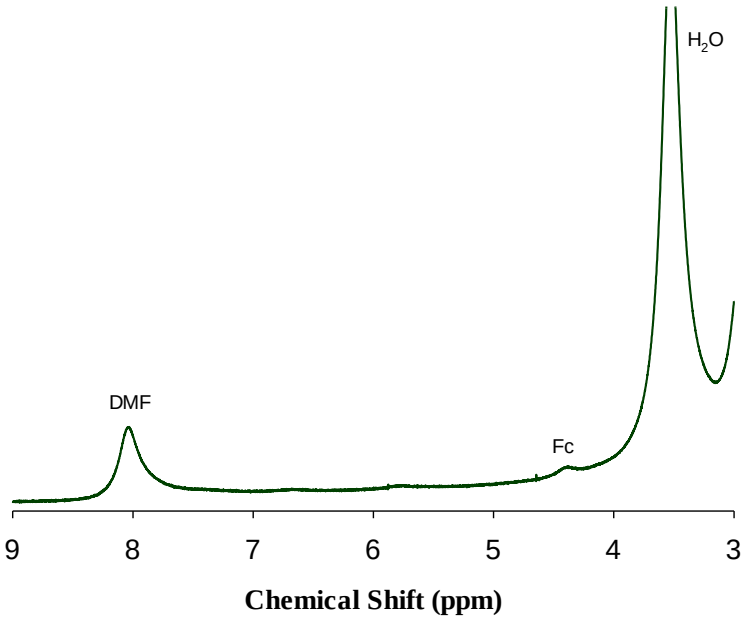

Figure S5. ^{1}H NMR of hydrothermally treated RuPdFCA nanoparticles in deuterated DMF.