

Supporting Information

Ultrathin branched PtFe and PtRuFe nanodendrites with enhanced electrocatalytic activity

Zhao Cai, Yun Kuang, Xiaohan Qi, Peng Wang, Ying Zhang, Zhichao Zhang and Xiaoming Sun*

State Key Laboratory of Chemical Resource Engineering, Beijing University of Chemical Technology, Beijing 100029, P. R. China

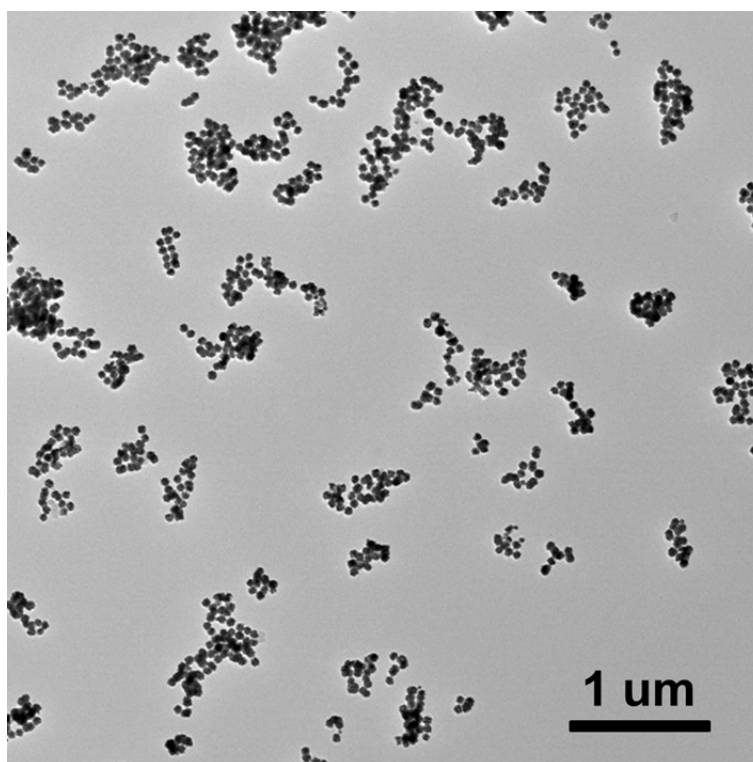


Figure S1. TEM image of PtFe nanodendrites.

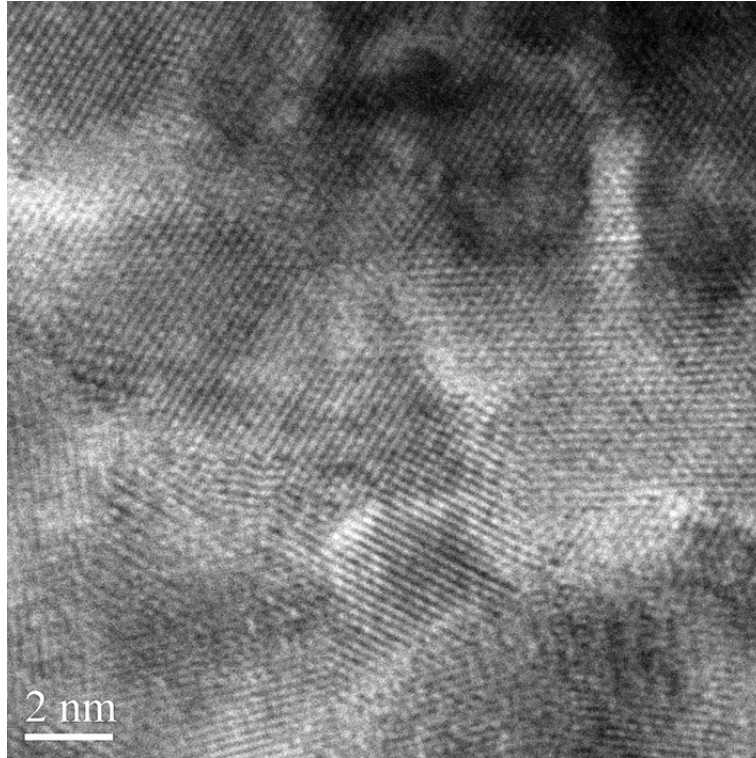


Figure S2. HRTEM image of polycrystalline PtFe nanodendrite and its different lattice orientations.

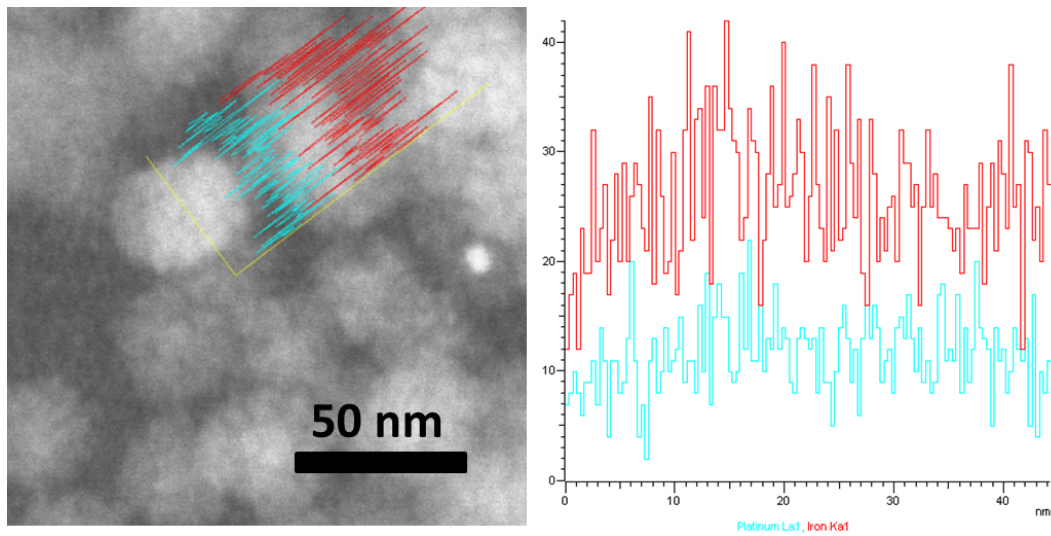


Figure S3. EDX line scanning profiles of PtFe nanodendrites.

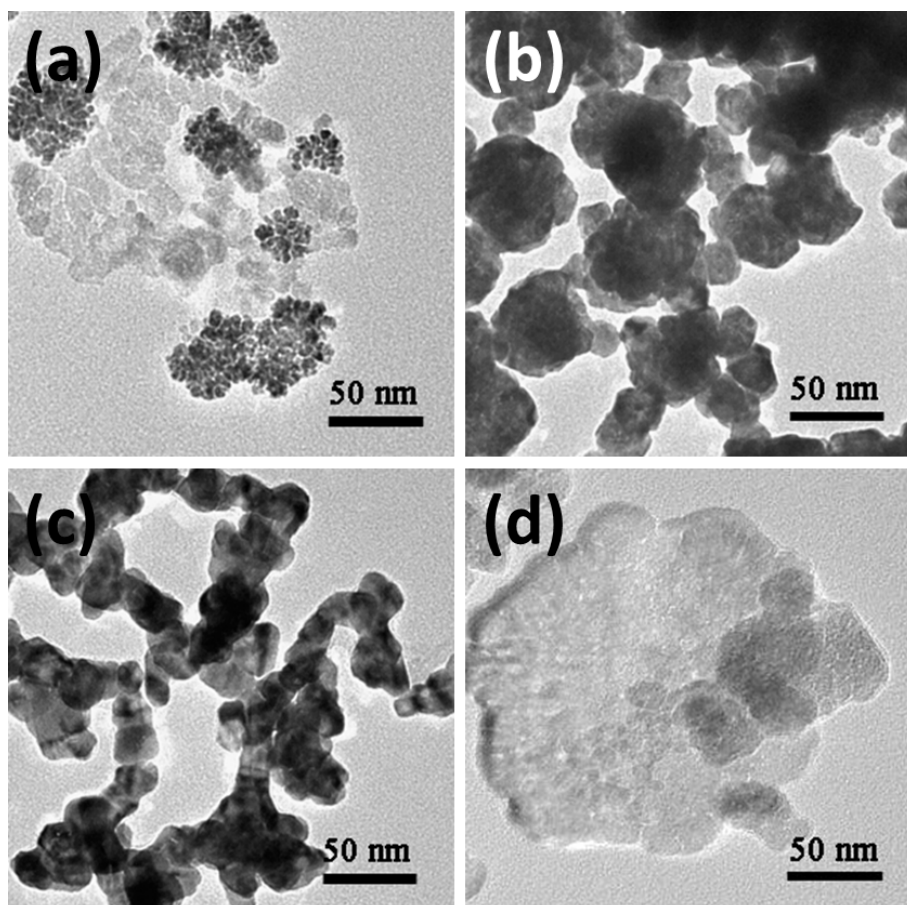


Figure S4. TEM images of morphology evolution for PtFe nanodendrites with different Pt/Fe precursor molar ratios: (a) 1:3, (b) 3:1, (c) 4:0, and (d) 0:4.

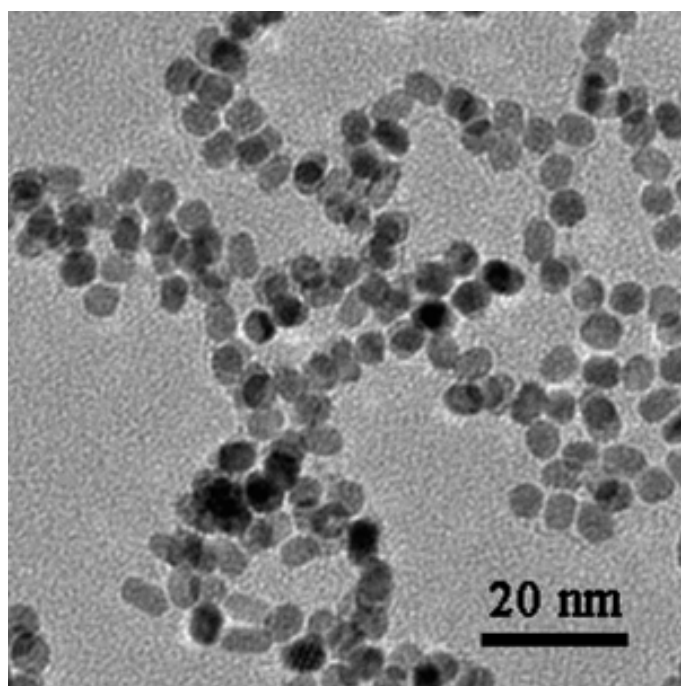


Figure S5. Influence of Pt precursor species on the formation of PtFe nanodendrites: Changing $\text{Pt}(\text{acac})_2$ to K_2PtCl_4 .

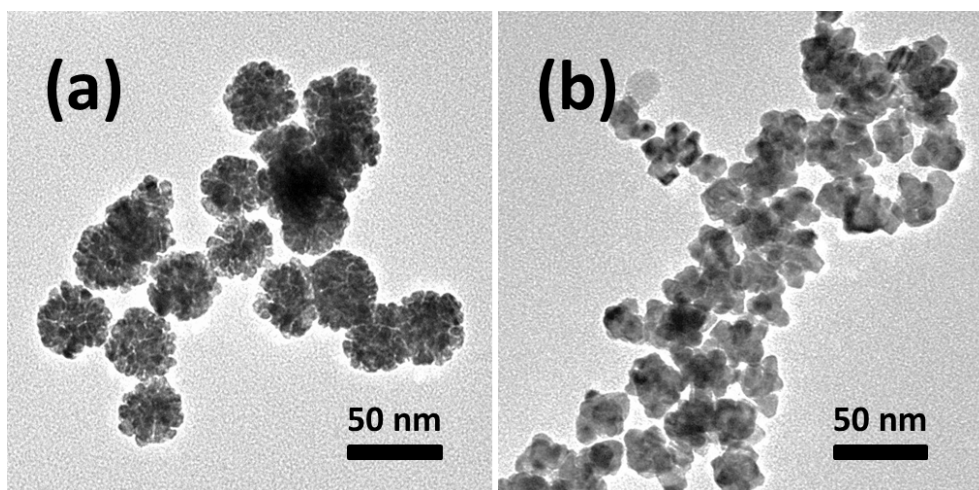


Figure S6. TEM images of the PtFe nanodendrites synthesized (a) with KCl and (b) without KI.

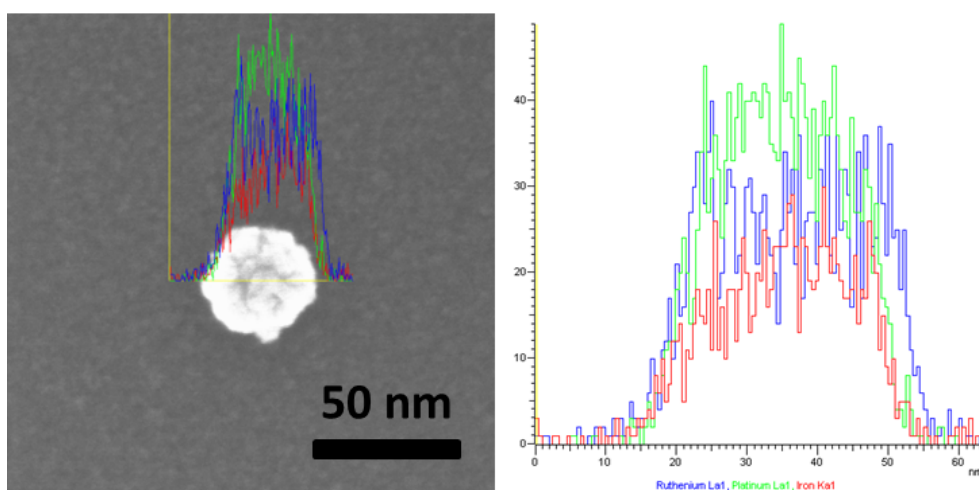


Figure S7. EDX line scanning profiles of PtRuFe nanodendrites.

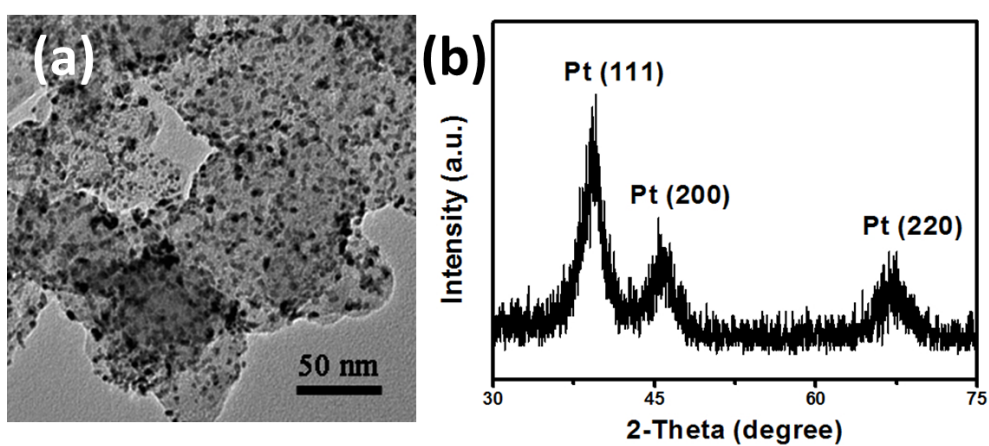


Figure S8. (a) TEM image and (b) XRD pattern of the commercial Pt/C (40 wt.% Pt, Alfa) electrocatalysts.

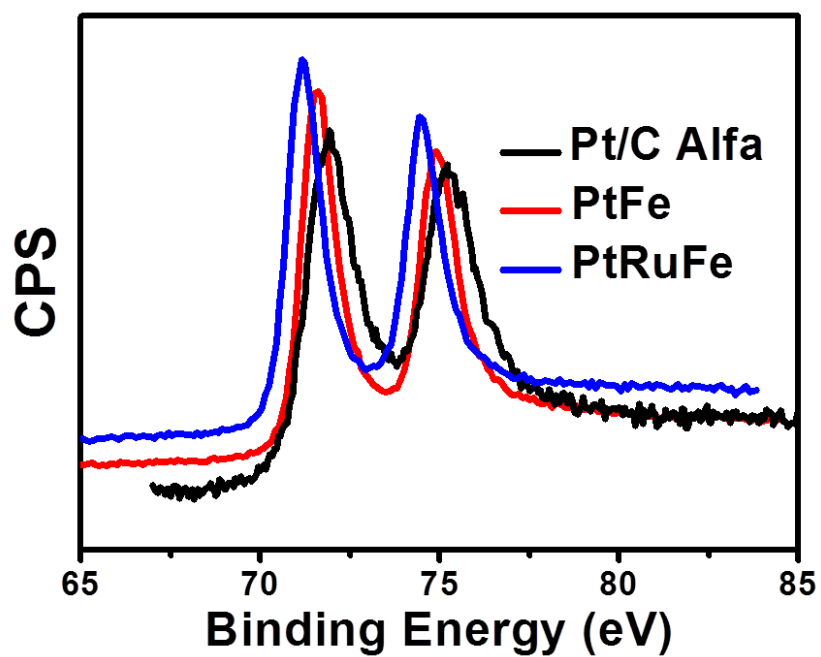


Figure S9. XPS data of PtFe and PtRuFe nanodendrites.

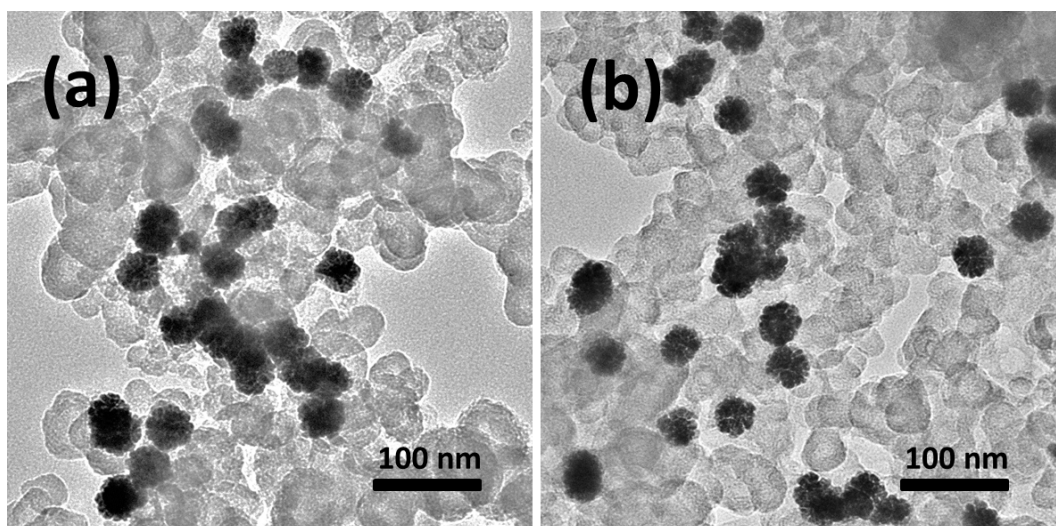


Figure S10. Representative TEM image of the PtRuFe nanodendrites (a) before and (b) after 1000 s CA measurement.