Electronic Supplementary Information for

Brust-Schiffrin synthesis of catalytic bipodal PdPt nanoparticles with some mechanistic insights

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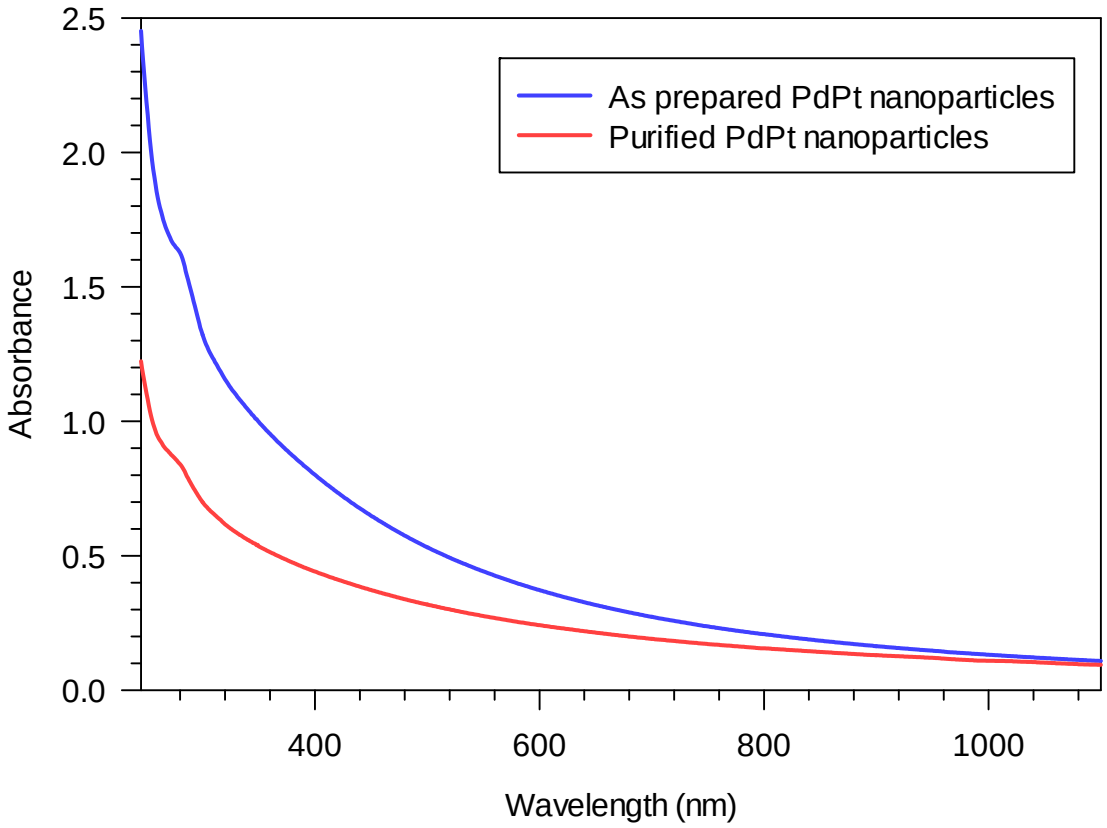

Fig. S1 UV-vis spectra of as-prepared and purified (precipitated-redispersed) PdPt bimetallic nanoparticles.

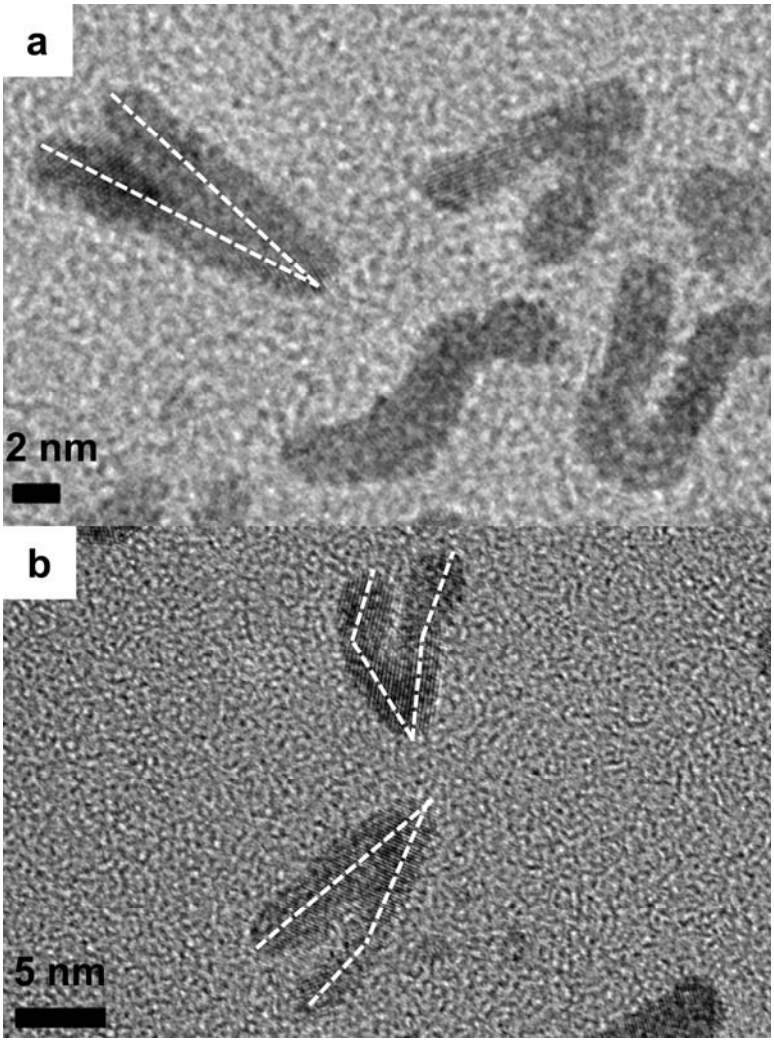

Fig. S2 TEM analysis of PdPt bimetallic nanoparticles prepared in the presence of resorcinarene amine surfactant at 0 ^{o}C.

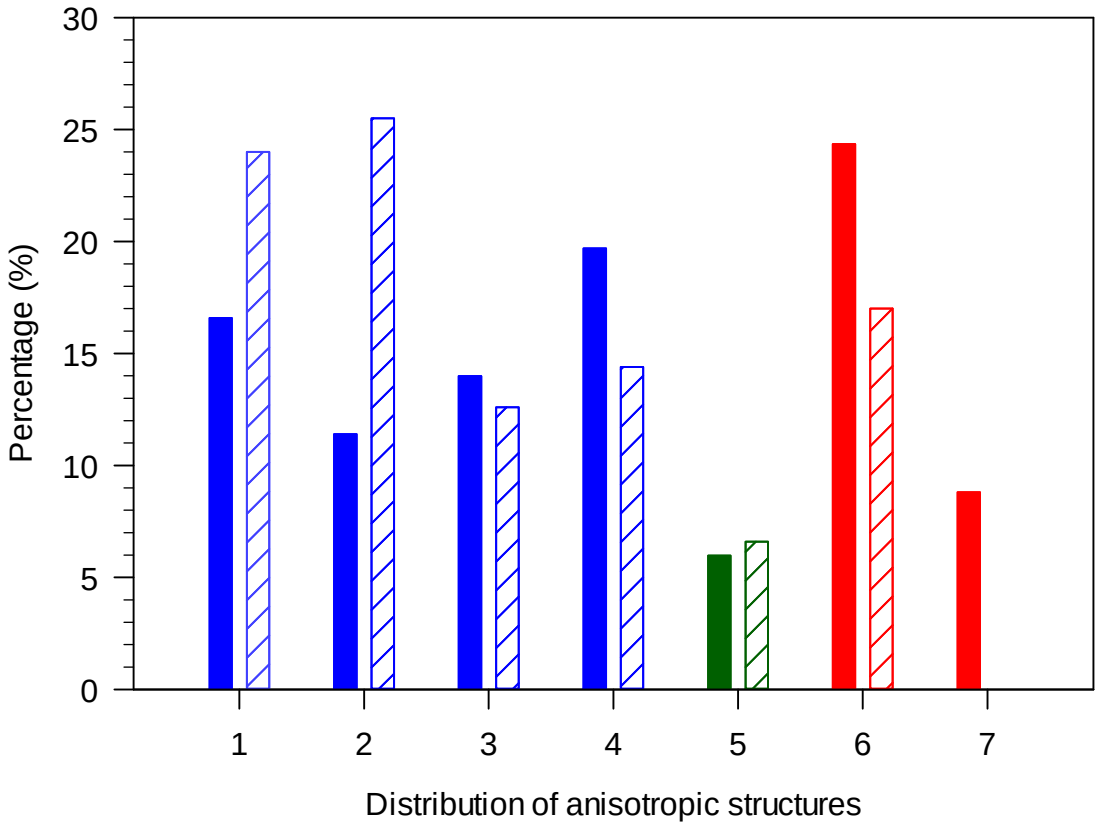

Fig. S3 Histogram of anisotropic nanostructures in as-prepared (solid bars) and purified (patterned bars) PdPt bimetallic nanoparticles prepared at 0 ^{o}C: 1. V, 2. one-arm bent V, 3. both arms bent V, 4. wide open V, 5. U 6. linear and 7. triangular shaped nanoparticles.

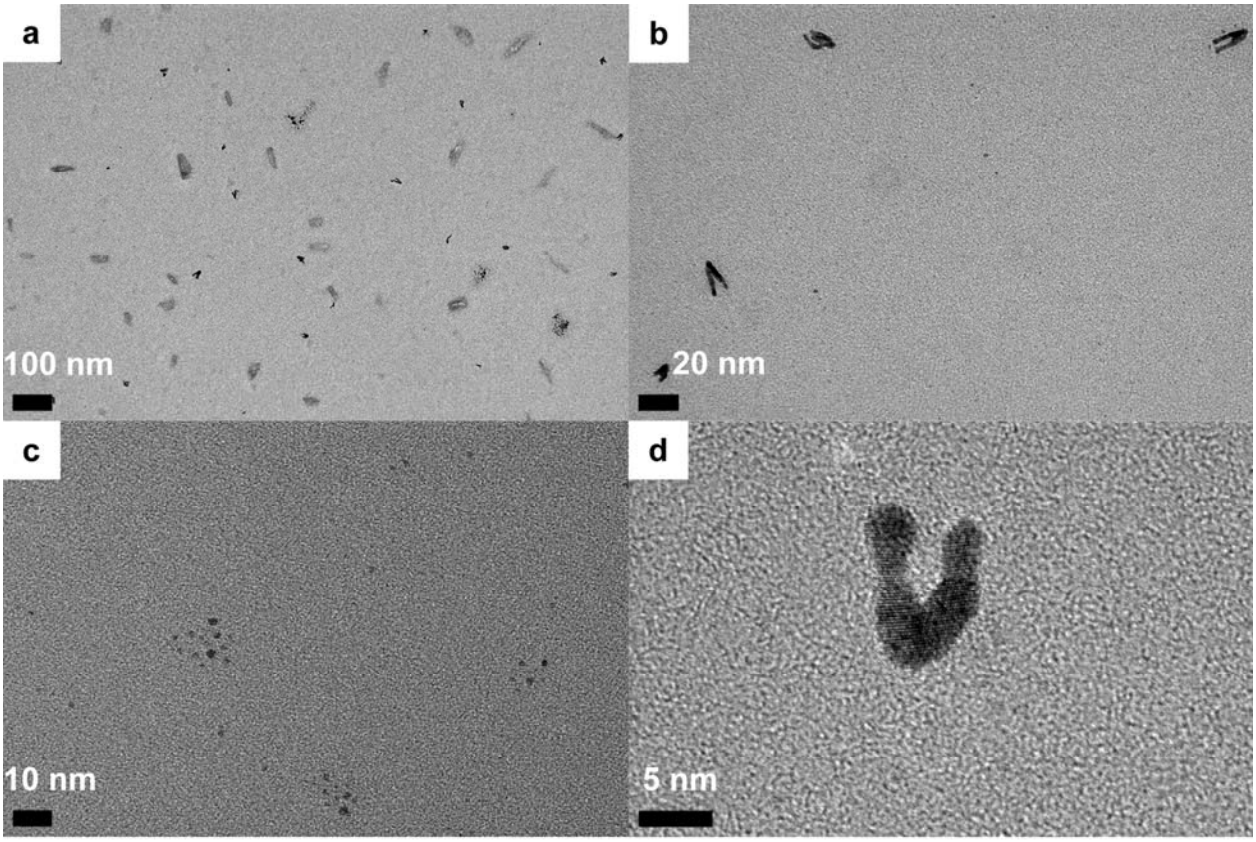

Fig. S4 TEM images of as-prepared PdPt bimetallic nanoparticles in the presence of resorcinarene surfactant at 0 ^{o}C.

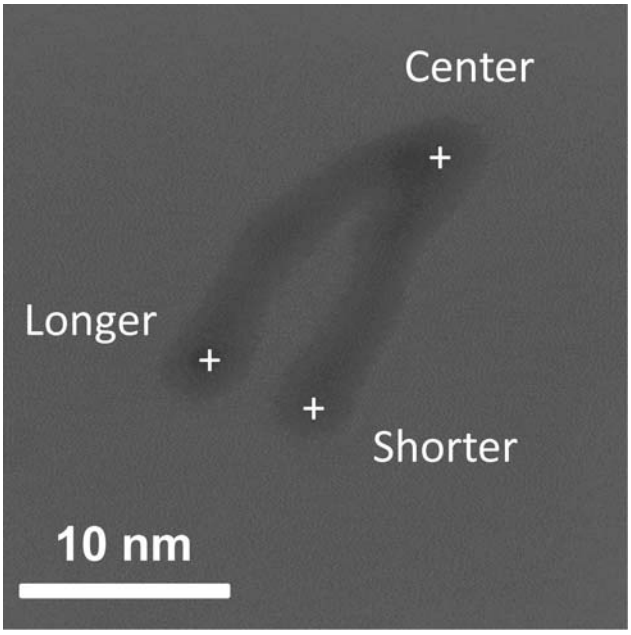

Fig. S5 Typical locations in anisotropic nanoparticles where STEM spot analysis was done.

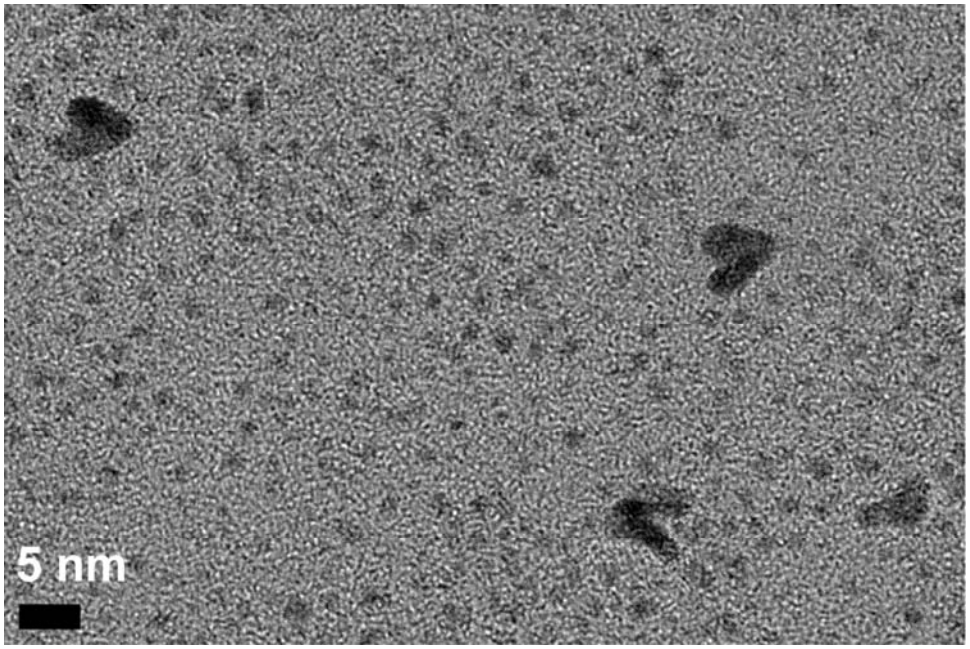

Fig. S6 TEM image of as-prepared PdPt bimetallic nanoparticles prepared at 0 ^{o}C after 5 min of reaction.

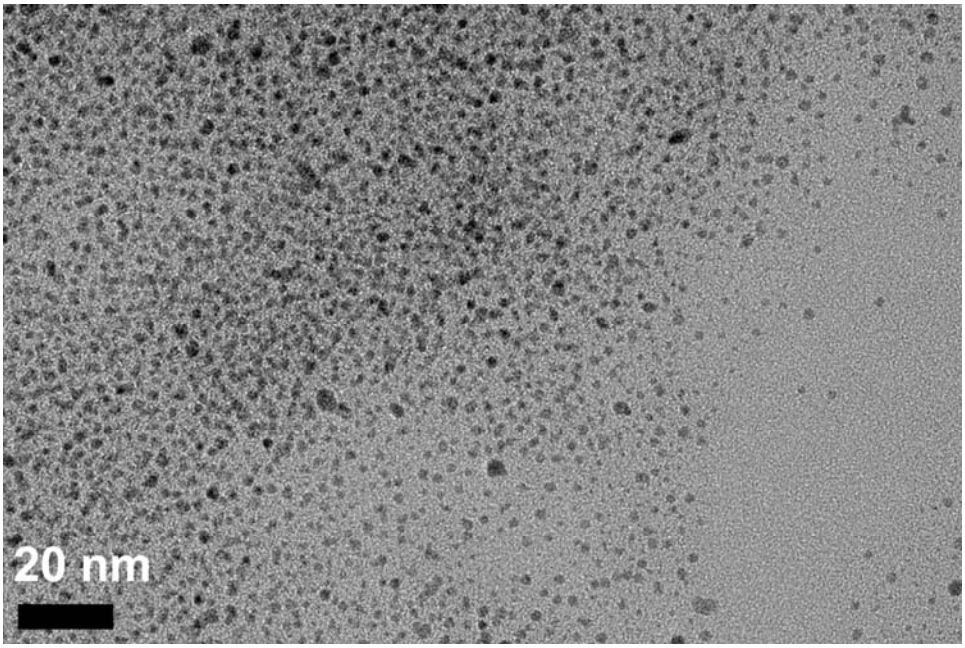

Fig. S7 TEM image of as-prepared PdPt bimetallic nanoparticles formed with Pd nanoparticle seeds at 0 ^{o}C.

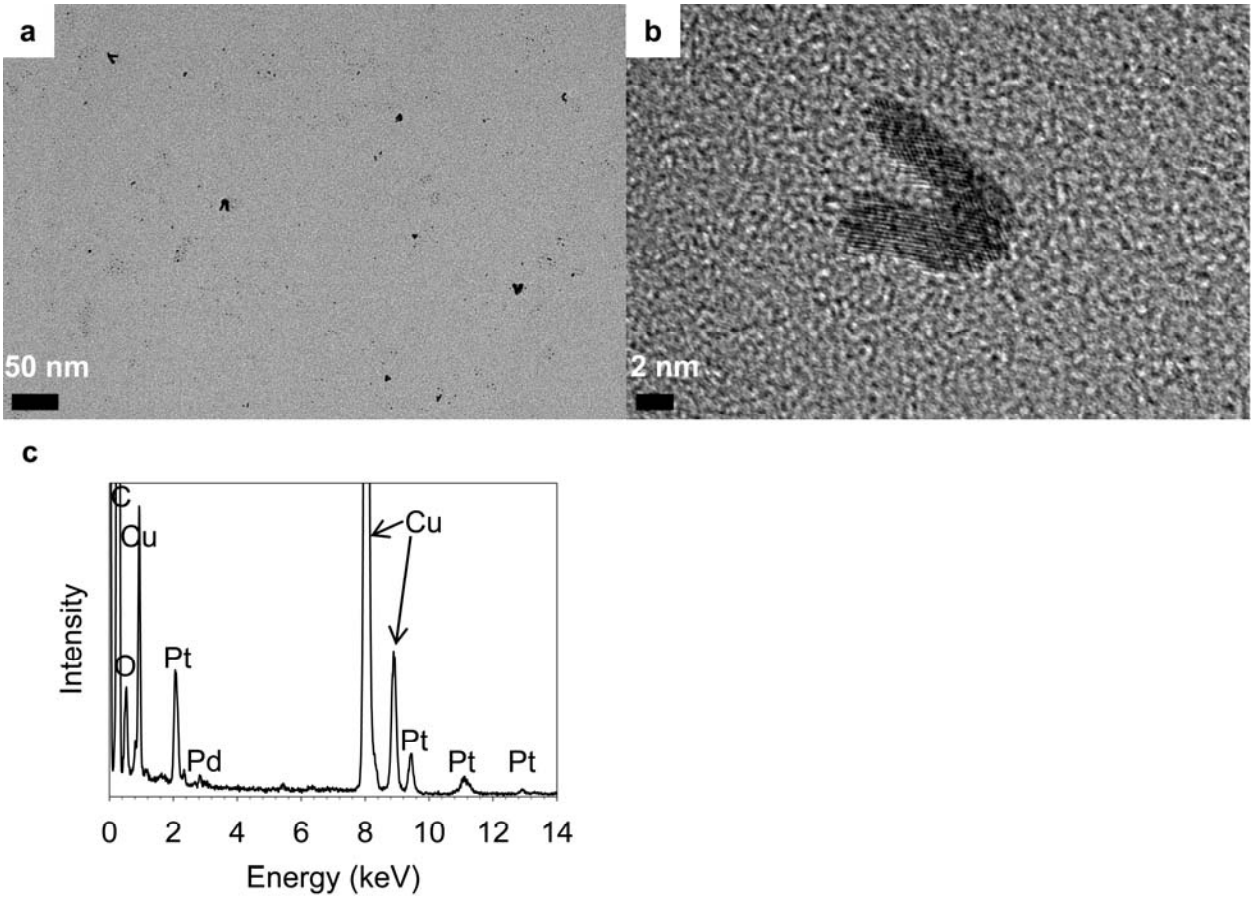

Fig. S8 TEM (a-b) and EDS (c) of PdPt bimetallic nanoparticles prepared with resorcinarene amine surfactant at room temperature.

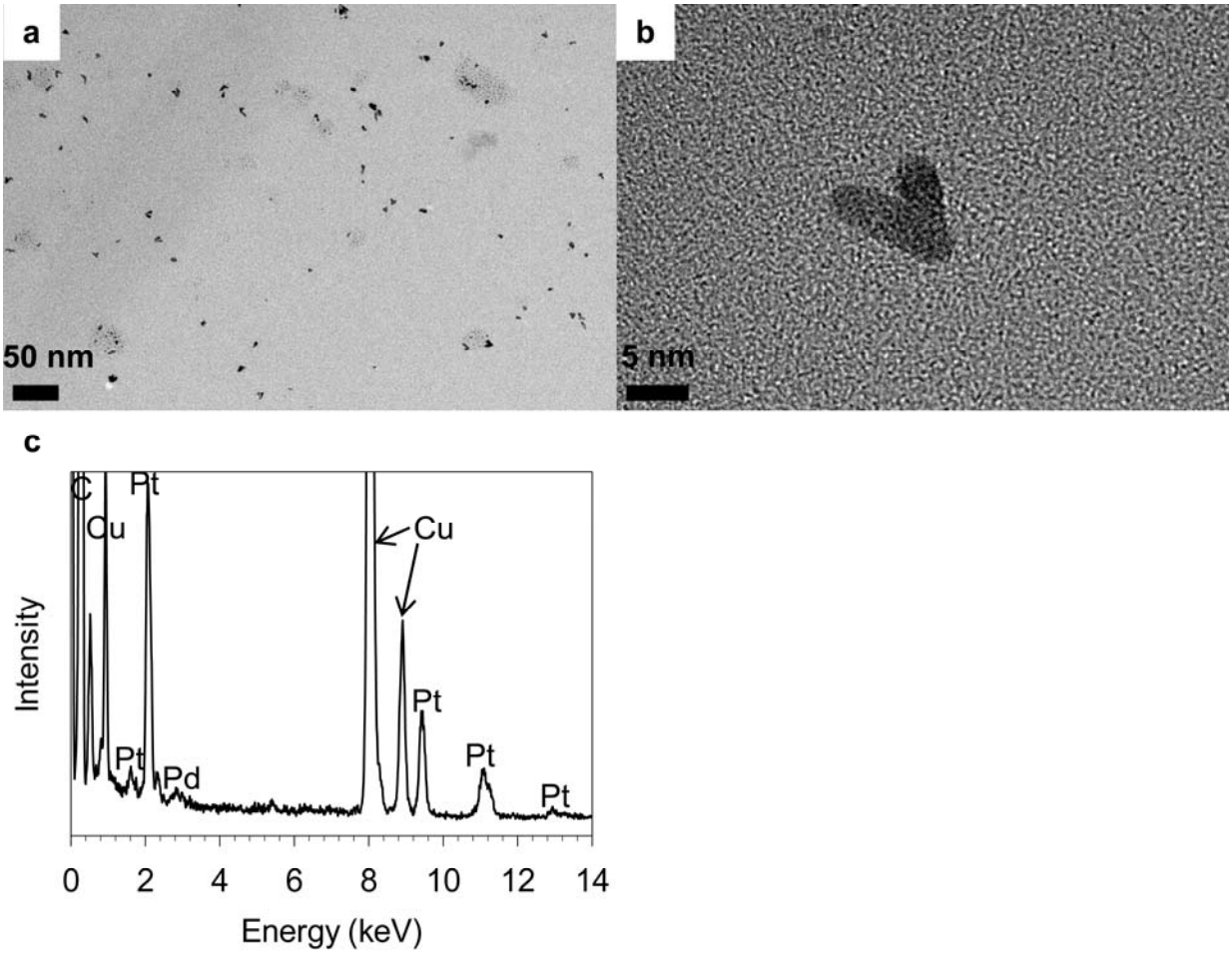

Fig. S9 TEM (a-b) and EDS (c) data of as-prepared PdPt bimetallic nanoparticles prepared from K_2PtCl_4 and H_2PdCl_4 at 0 ^{0}C.

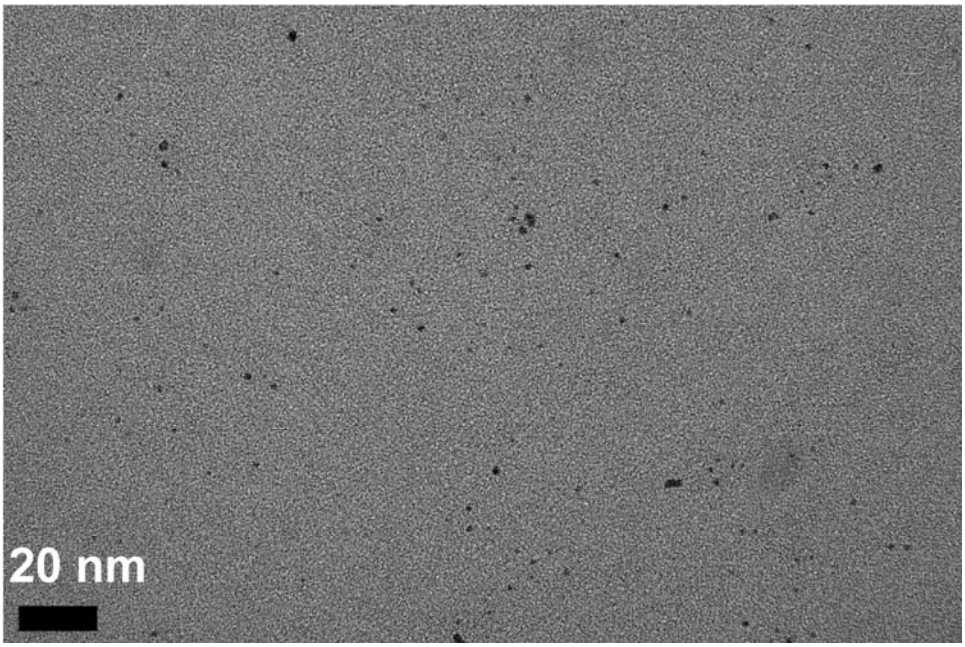

Fig. S10 TEM image of as-prepared PdPt bimetallic nanoparticles synthesized by a monophasic approach at 0 ^{o}C.

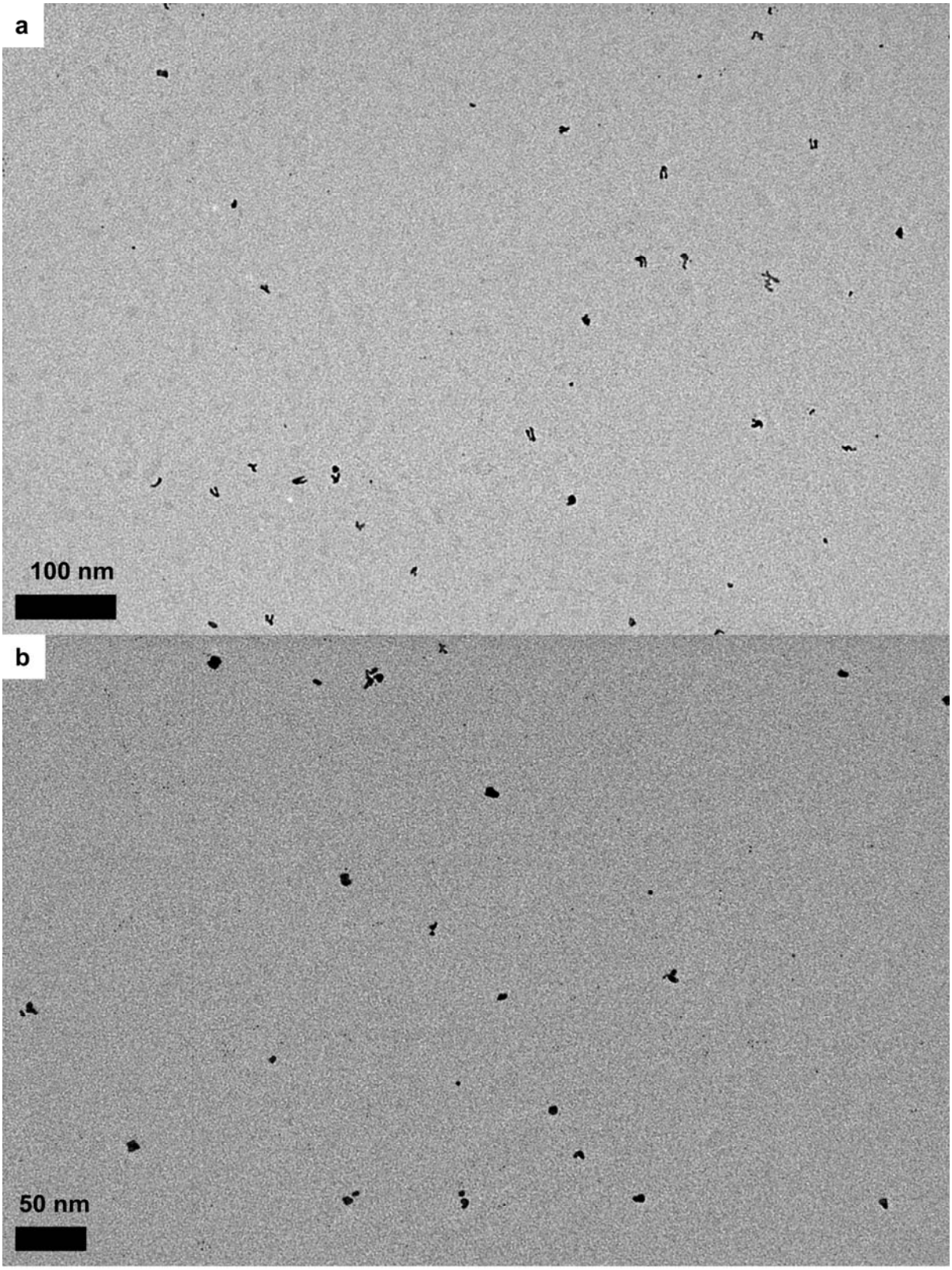

Fig. S11 TEM image of reversed Brust synthesis carried out with a 10 s (a) and 5 min (b) delay.

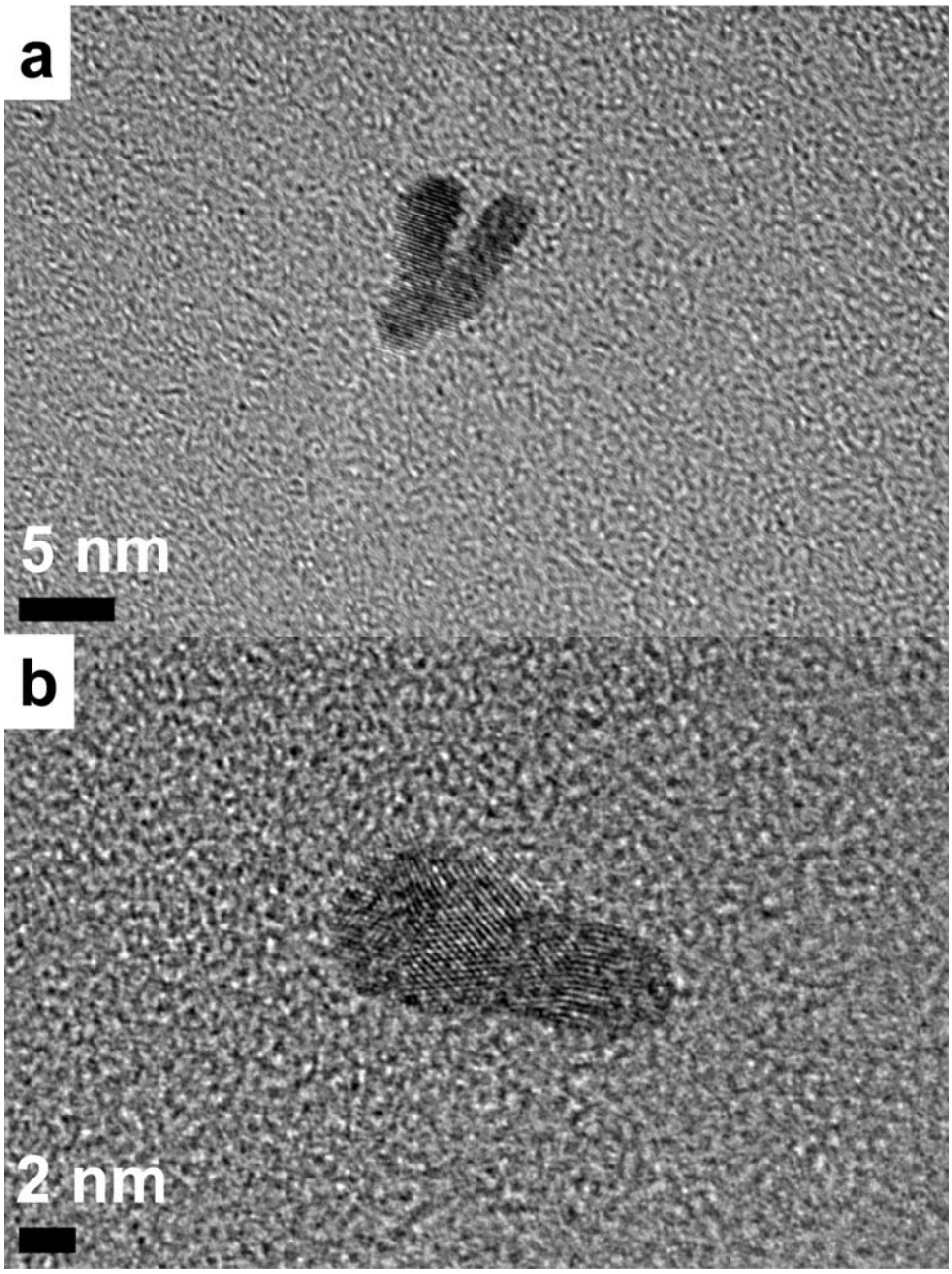

Fig. S12 HRTEM image of reversed Brust synthesis carried out with a 10 s (a) and 5 min (b) delay.

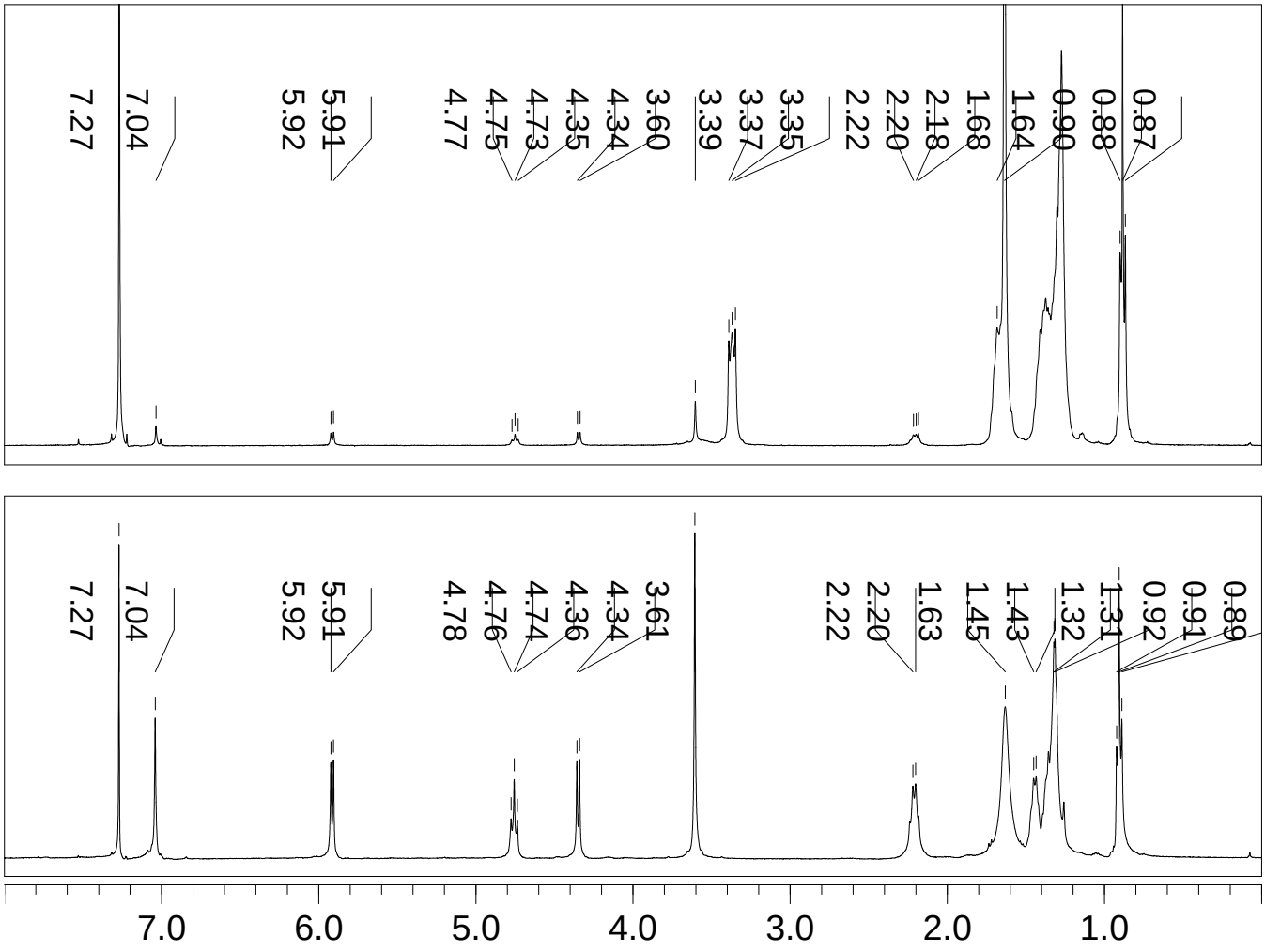

Fig. S13 ^{1}H-NMR spectra of inverse micelle formed from TOABr and resorcinarene amine surfactant (top) and resorcinarene amine (bottom).

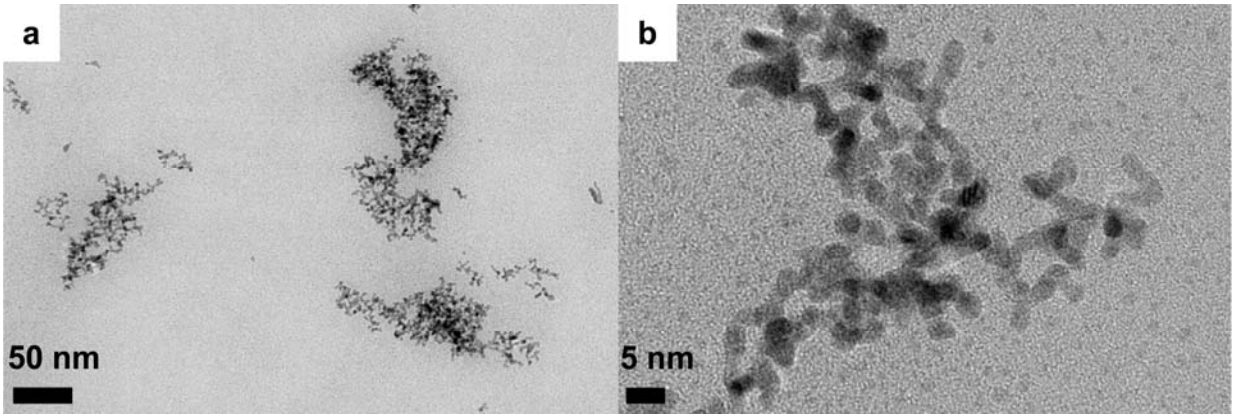

Fig. S14 TEM analysis of as-prepared bimetallic PdPt nanoparticles after Suzuki cross-coupling reaction.