

Block Copolymer Reduce, Protect and Mediate Oriented Growth into Nano-Submicron Branched Platinum

Supporting Information

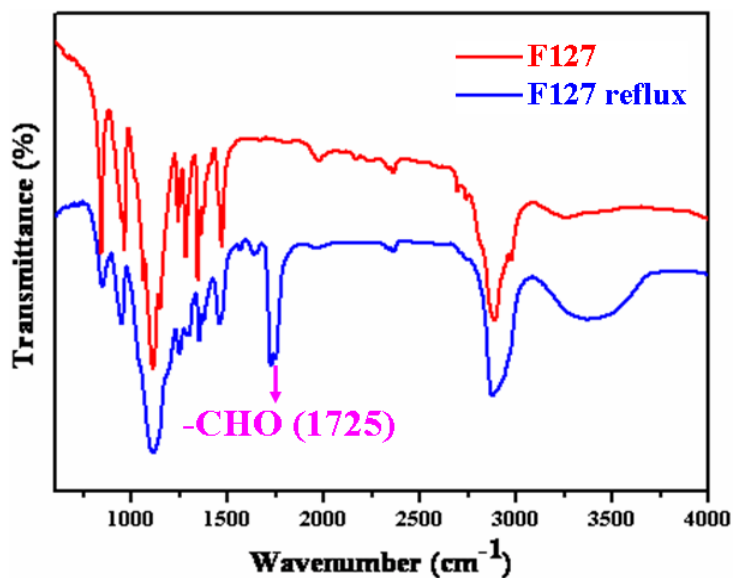


Fig. S1 Fourier Transform Infrared Spectrum (FTIR) of pure Pluronic F127 and after reflux.

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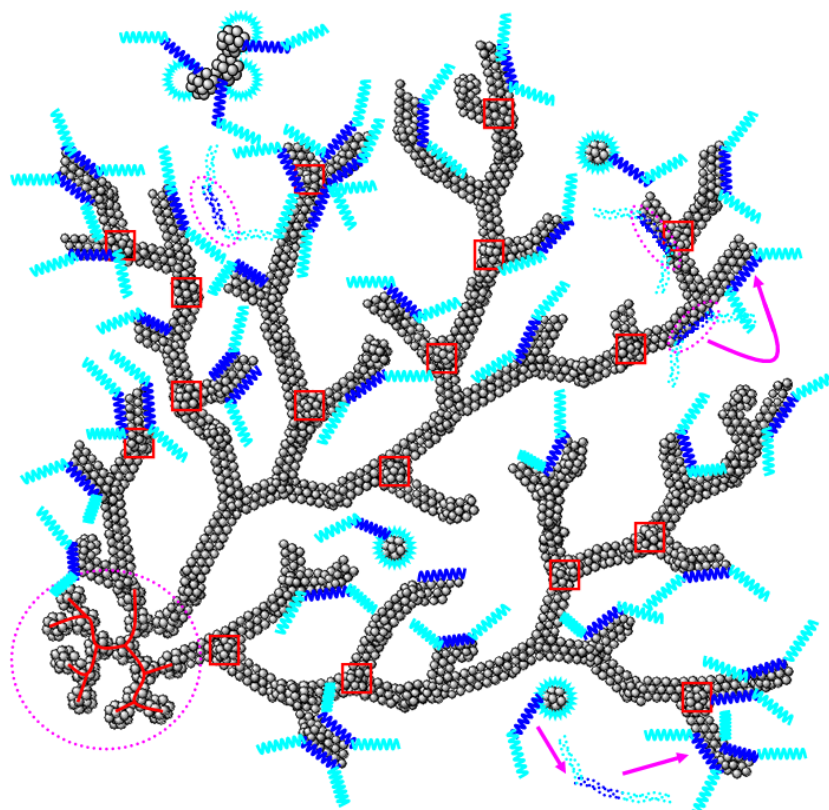


Fig. S2 Geometric model of Pluronic F127 continue to migrate from low energy point to high region, the steric effect of hydrophobic PPO mediated Pt-NDs oriented growth into 3D nano-submicron B-Pt.

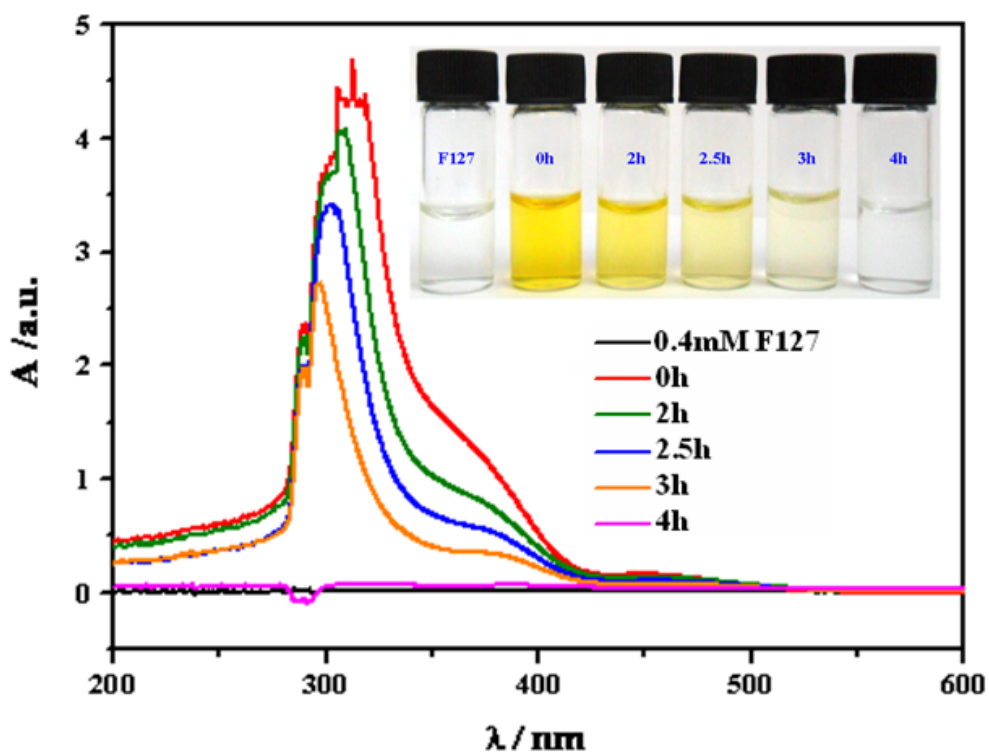


Fig. S3 UV spectrum of the supernatant reaction solution at different reflux times.

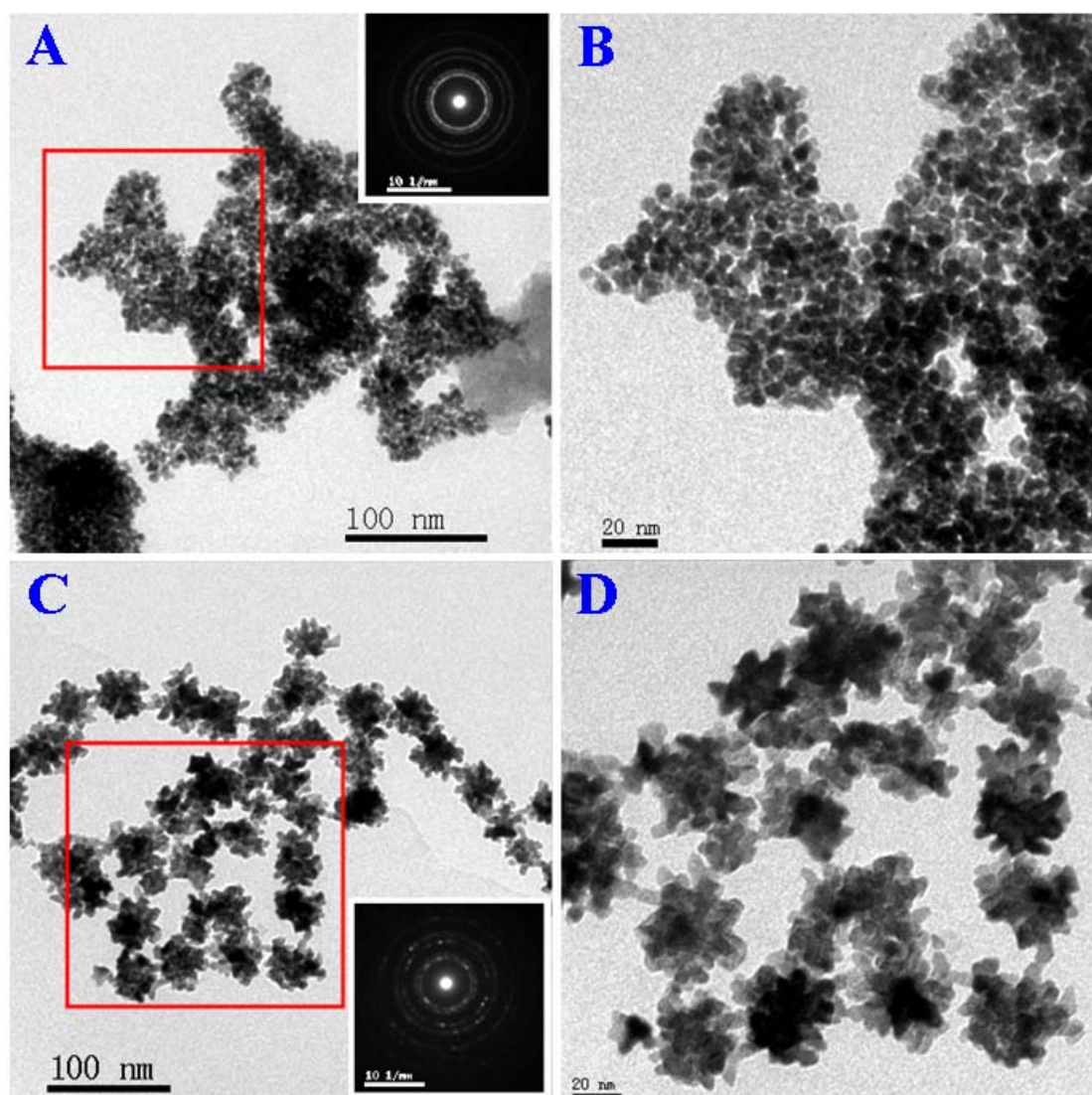


Fig. S4 (A, B) TEM images of the monodisperse Pt nanoparticles synthesized with 1mMolL^{-1} PEG6000. (C, D) TEM images of the spiny Pt nanoclusters synthesized with 0.5mMolL^{-1} P123.

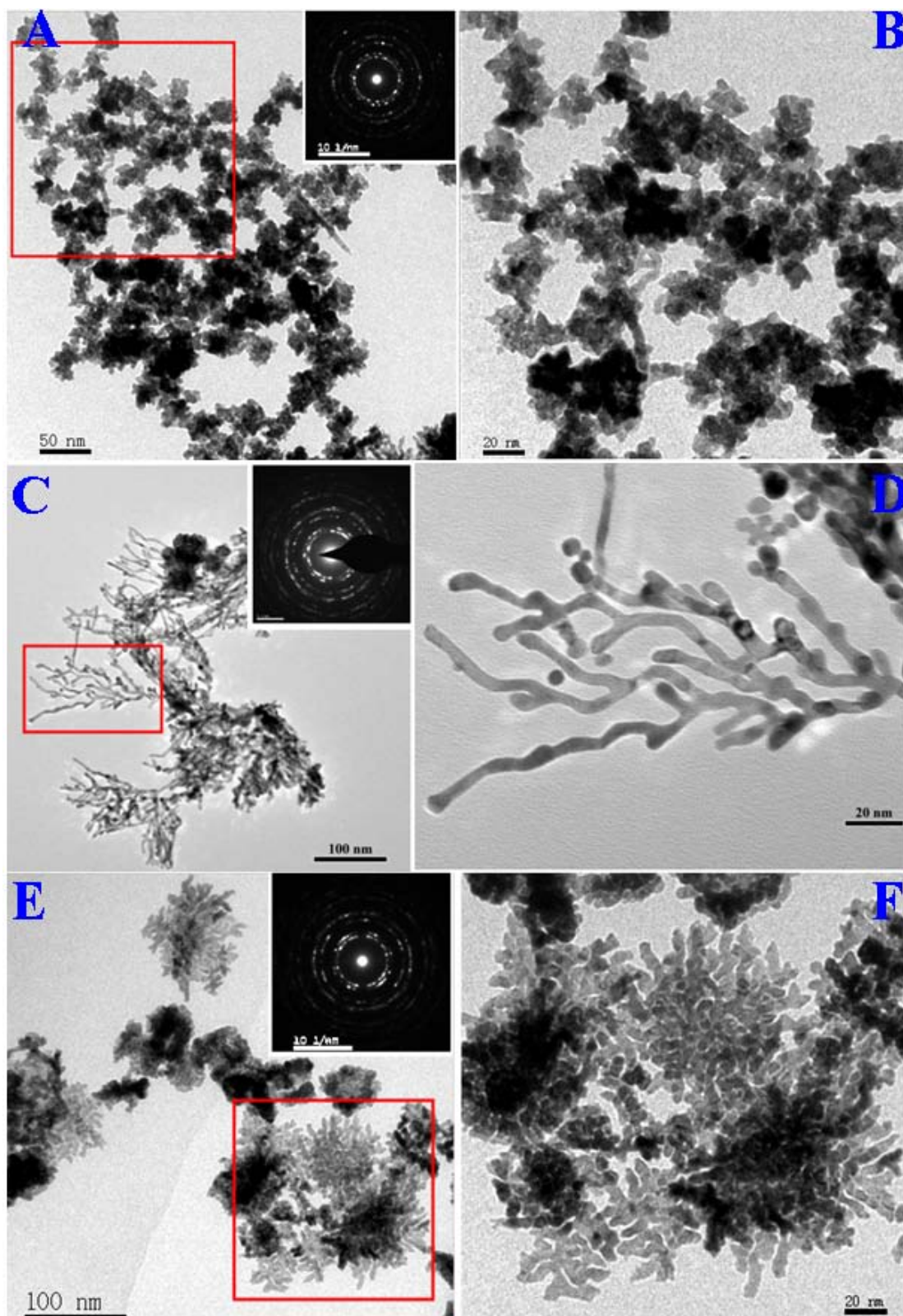


Fig. S5 TEM images of the Pt nanocrystal synthesized with different concentrations of Pluronic F127 (A, B) 0.08 mMolL^{-1} , (C, D) 0.4 mMolL^{-1} , (E, F) 2 mMolL^{-1}

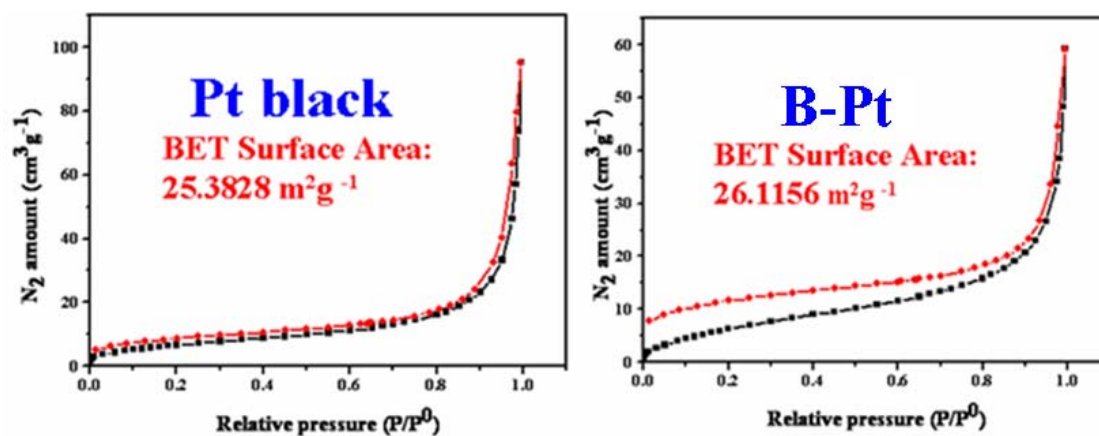


Fig. S6 N₂ adsorption-desorption isotherm of the Pt black and the nano-submicron B-Pt, respectively.