Supporting Information

for:

Growth Mechanism and Size Control of FePt Nanoparticles
Synthesized via Fe(CO)$_x$ (x<5)-Oleylamine and Platinum (II) Acetylacetonate

Baoru Bian,† Weixing Xia,† Juan Du,†† Jian Zhang,† J ping Liu,‡ Zhaohui Guo,§
Aru Yan,†

Figure S1. HRTEM images of FePt NPs synthesized from Fe(CO)$_x$-OAm at time points during synthesis: 220 °C (a), 280 °C (b) and refluxing at 280 °C for 60 min(c) and 240 min(d), selected from Figure. 3(a), (b), (c), and (d), respectively.
Figure S2. Size and size distributions of particles obtained at various stages using Fe(CO)$_5$-OAm prepared at 90 °C. (a)-(d) correspond to Figure 3 (a)-(d). (In each case, at least 400 particles were counted to determine the size and the size dispersion.)

Figure S3. Enlarge HRTEM image of FePt nanoparticles shown in Figure 4c, showing a very apparent oriented-attached nanostructure
Figure S4. Photograph of FePt nanoparticles synthesized from Fe(CO)$_3$-OAm (prepared with OAm:Fe(CO)$_3$ = 1:1 at 90 °C) refluxing at 280 °C for 60 min. These oriented-attached particles tend to be combined between two particles.

Figure S5. Size distributions of particles correspond to Figure 7 (a, b), (c, d), (e, f), (g, h) and (i, j), respectively. (In each case, at least 400 particles were counted to determine the size and the size dispersion.)