

Supporting Information:

Construction of Nanoparticle Superstructures on the Basis of Host-Guest Interaction to Achieve Performance Integration and Modulation

Zhaolai Chen,^a Jing Li,^a Xue Zhang,^a Zhennan Wu,^a Hao Zhang,^{*a} Haizhu Sun^{*b} and Bai Yang^a

^a State Key Laboratory of Supramolecular Structure and Materials, College of Chemistry, Jilin University, Changchun 130012, P. R. China.

^b College of Chemistry, Northeast Normal University, Changchun 130024, P. R. China.

E-mail: hao_zhang@jlu.edu.cn; sunhz335@nenu.edu.cn

Figure S1. DLS size distribution of Au/Fe₃O₄ superstructures. The corresponding TEM image is shown in Figure 2b.

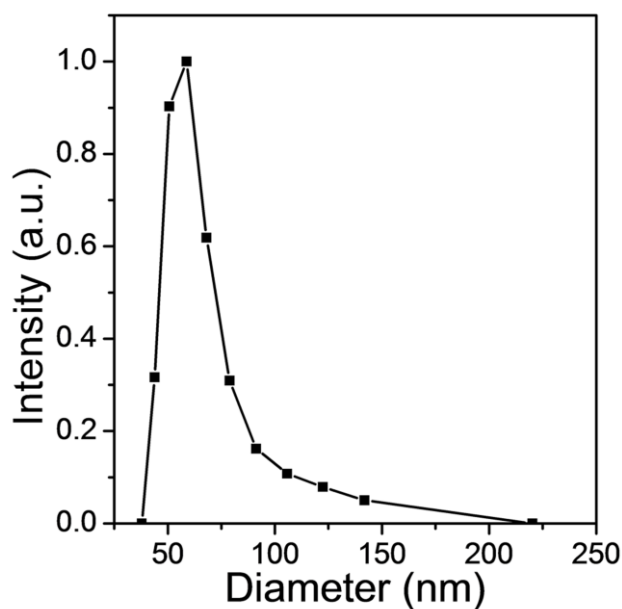


Figure S2. An enlarged SAED pattern of Au/Fe₃O₄ superstructures in Figure 2b with marked crystallographic facets. From inside to outside, the lattice parameters calculated from the diffuse rings are 0.2962, 0.2506, 0.2096, 0.1622, and 0.148 nm, which correspond to the Fe₃O₄(220), Au(111), Au(200)/Fe₃O₄(400), Fe₃O₄(511), and Au(220)/Fe₃O₄(440) facets.

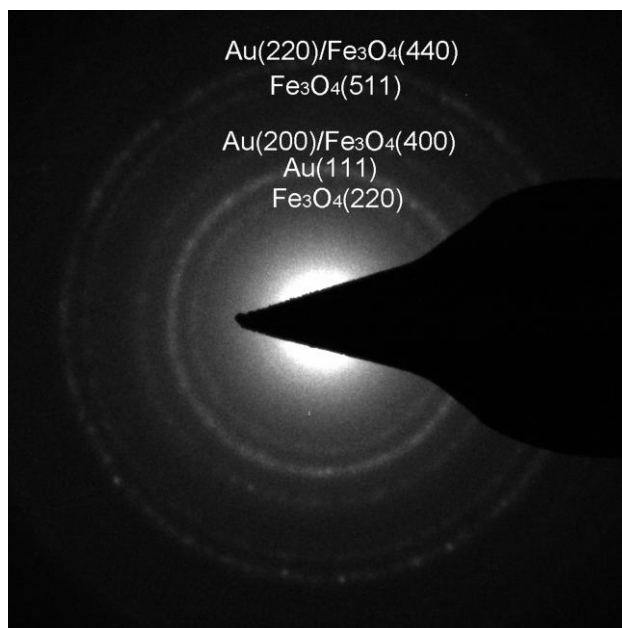


Figure S3. TEM image of 6.1 nm Au NPs.

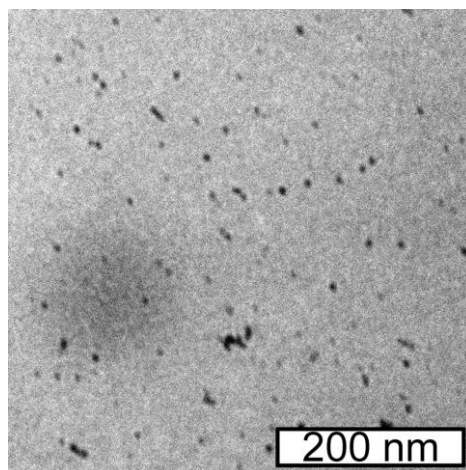


Figure S4 TEM image of Au/Fe₃O₄ superstructures after storing for one month.

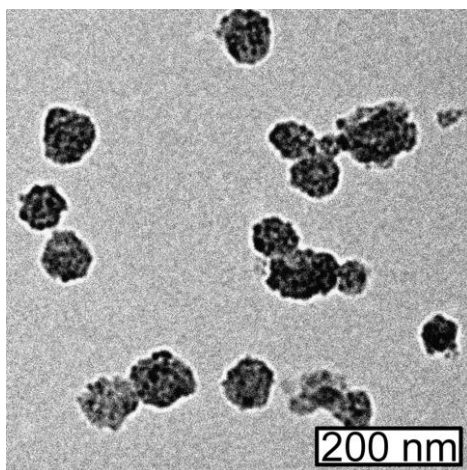


Figure S5. TEM images of (a) 2.8 nm Pt and (b) 38 nm NaYF₄:Yb,Tm NPs.

