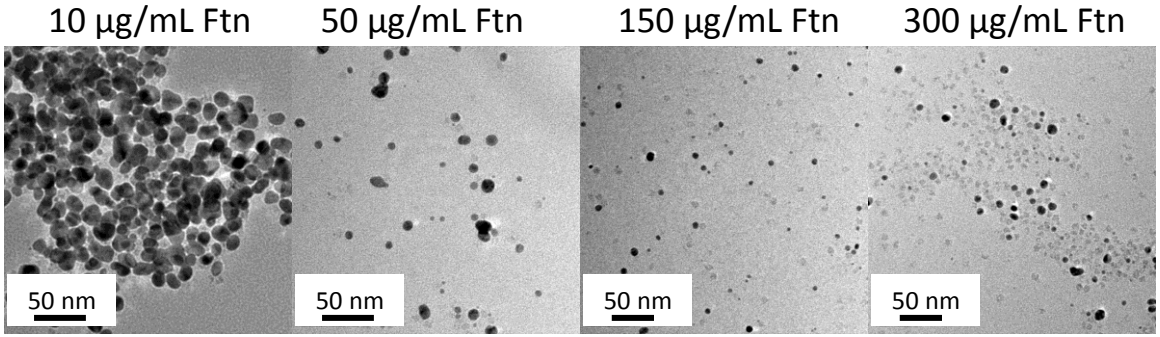
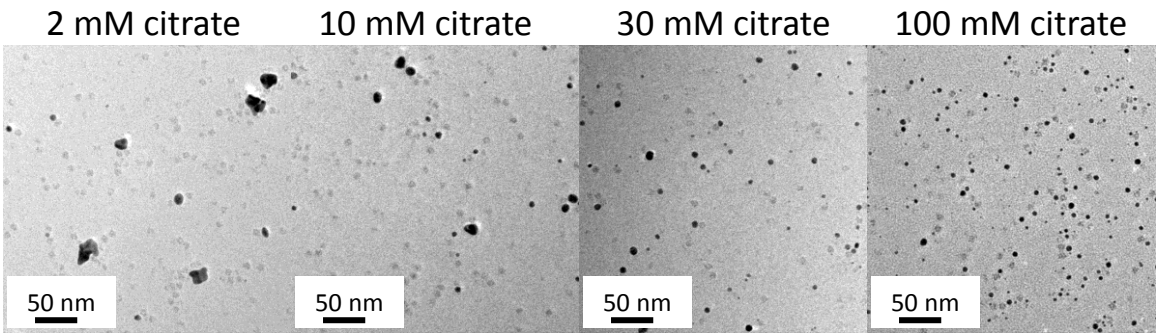
Supplementary Fig.1



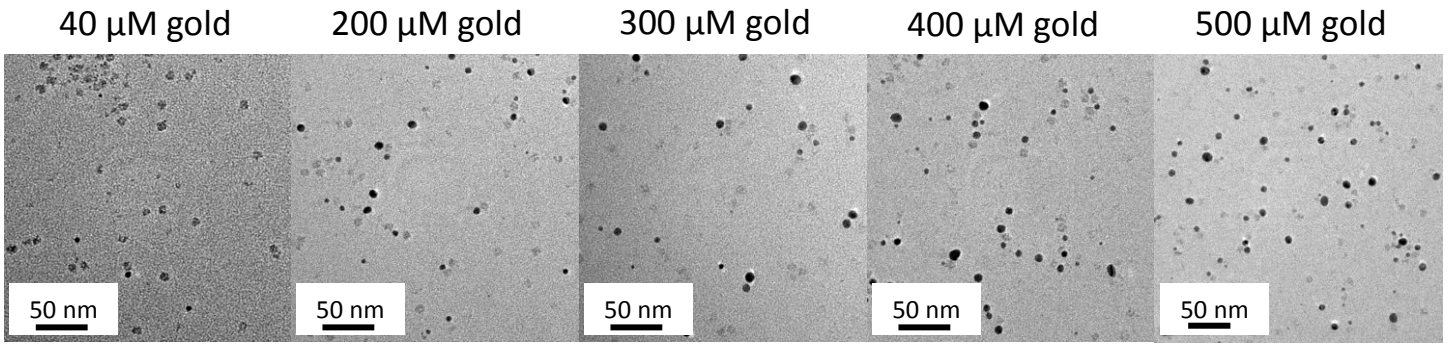
Supplementary figure 1. TEM images of the AuNPs at increasing concentrations of Ftn (left to right). Lower concentrations of ferritin (Ftn) form aggregates of larger particles (10 µg/mL Ftn) and few large ovoidal particles (50 µg/mL Ftn). Higher concentrations of Ftn form large numbers of small spherical or quasi-spherical particles.

Supplementary Fig.2

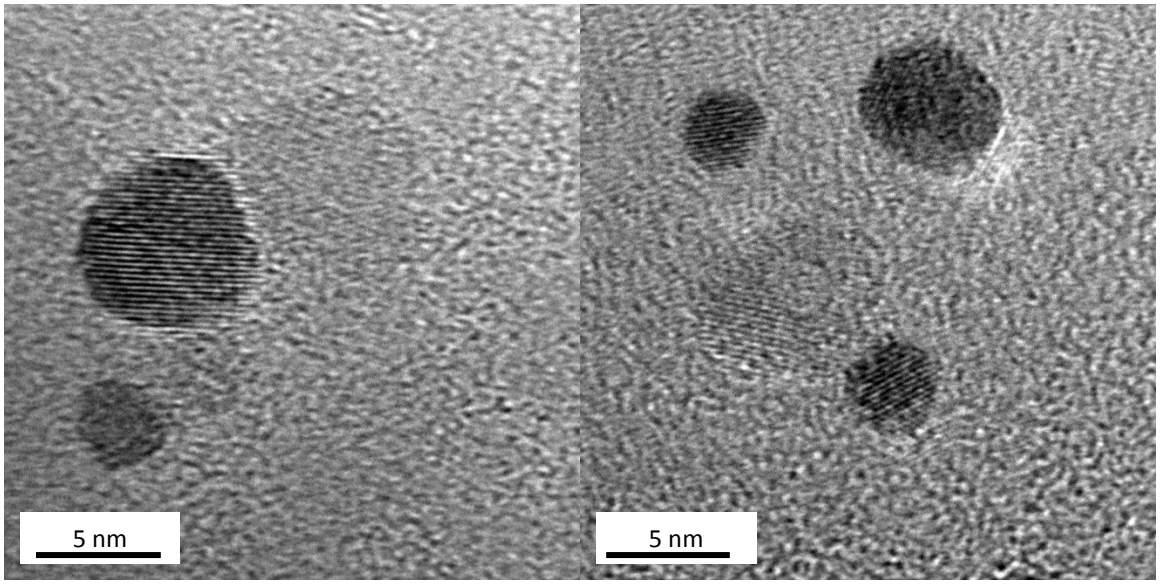


Supplementary figure 2. TEM images of the AuNPs at increasing concentrations of citrate (left to right). Lower concentrations of citrate form few large irregularly-shaped particles. Higher concentrations of citrate form large numbers of small spherical or quasi-spherical particles.

Supplementary Fig.3



Supplementary figure 3. TEM images of the AuNPs at increasing concentrations of Au^{3+} (left to right). Lower concentrations of Au^{3+} form few smaller particles. Higher concentrations of Au^{3+} form large numbers of particles with a slight increase in size. In each figure there are very dark nanoparticles (gold) and more faint nanoparticles (the iron core of ferritin). Most of the particles visible in the 40 µM gold (far left) are the Ftn iron cores (better distinguishable in figure 7).



Supplementary figure 4. Single-crystal nanoparticles. These images show two types of nanoparticles: the lighter ones are the iron cores of ferritin; the darker ones are AuNPs. The horizontal lines present on the AuNPs represent the atomic planes of the gold fcc crystal lattice.