

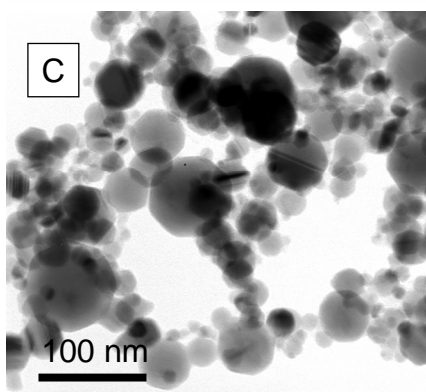
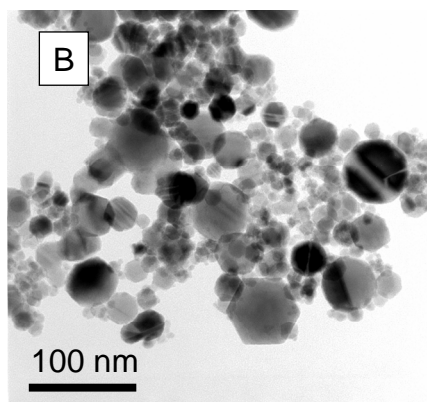
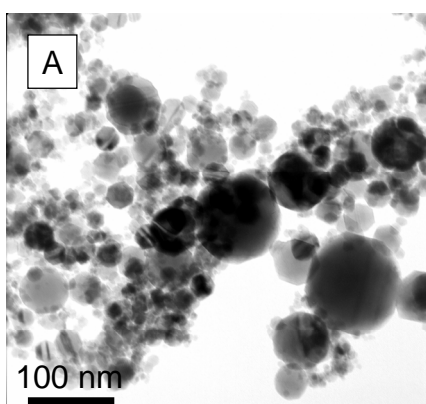
## Supporting Information for:

### Magnetic Iron Oxide Nanoparticles for Bio-recognition: Evaluation of Surface Coverage and Activity

Isaac Koh, Xiang Wang, Bindhu Varughese, Lyle Isaacs, Sheryl H. Ehrman,

Douglas S. English

**TEM Images:** Transmission electron microscopy images for bare  $\gamma\text{-Fe}_2\text{O}_3$  nanoparticles (A), APTES modified nanoparticles (B), and anti-mouse IgG modified nanoparticles (C) were acquired and are shown below.



Particles were suspended in PBS (pH 7.4) before being loaded on a TEM grid

A: bare  $\gamma\text{-Fe}_2\text{O}_3$

B: APTES-modified  $\gamma\text{-Fe}_2\text{O}_3$

C:  $\gamma\text{-Fe}_2\text{O}_3$  immobilized with anti-mouse IgG

Particle size distributions were created from the TEM images and were invariant with surface preparation. The size distribution constructed from TEM images of bare nanoparticles is shown below.

