SUPPORTING INFORMATION

Synthesis of core-shell gold coated magnetic nanoparticles and theirinteraction with thiolated DNA coated magnetic nanoparticles

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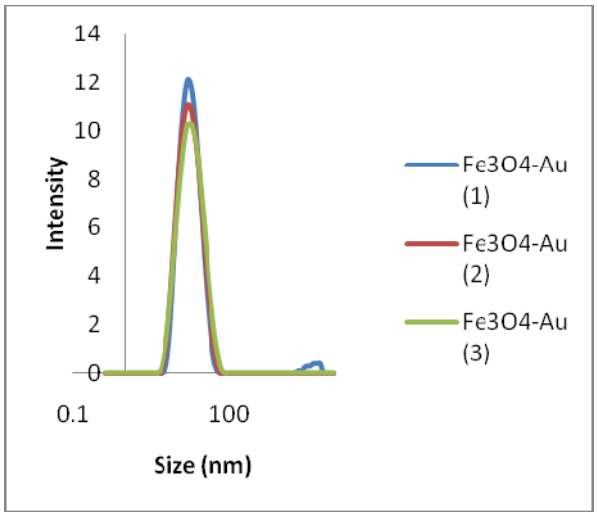

Figure 1S). The hydrodynamic size of the gold coated Fe_3O_4 NPs was measured using dynamic light scattering technique in a Zeta-sizer Nano S (Zen 3600), Malvern Instruments Ltd, UK. Average

particle size of the gold coated Fe_3O_4 NPs is roughly 10 nm. The graph shows that the particles have uniform size distribution. Three different measurements were performed in 2 hours duration.