## **Supporting Information for**

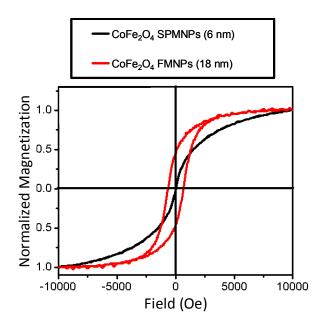
## **Monodisperse Cobalt Ferrite Nanomagnets with Uniform Silica**

## **Coatings**

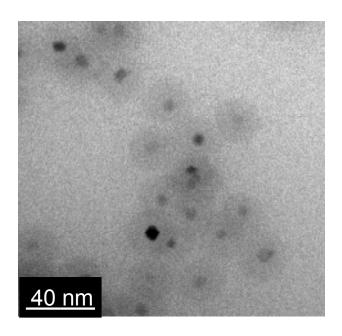
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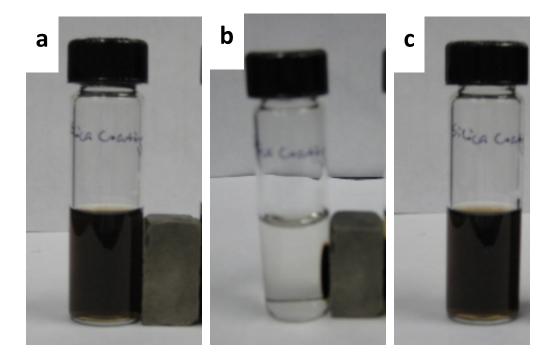
**Figure S1.** Hysteresis loops measured by VSM (298 K) of the oleic acid-stabilized CoFe<sub>2</sub>O<sub>4</sub> SPMNPs and CoFe<sub>2</sub>O<sub>4</sub> (FMNPs).



**Figure S2.** TEM image of superparamagnetic CoFe<sub>2</sub>O<sub>4</sub> nanoparticles (6 nm) encapsulated by a silica shell produced using a reverse microemulsion process.<sup>8d</sup>



**Figure S3.** (a) Freshly prepared 20 nm silica-coated cobalt ferrite nanoparticles dispersed in ethanol; (b) the particles were attracted to the vial wall using magnet; (c) after removing magnetic field, the particles return back to the solution and were stable for more than 3 months.



**Figure S4.** TEM image of 18 nm PAA-modified CoFe<sub>2</sub>O<sub>4</sub> FMNPs

