

Supporting Information:

Polymer-Based Multiferroic Nanocomposites *via* Directed Block Copolymer Self-Assembly

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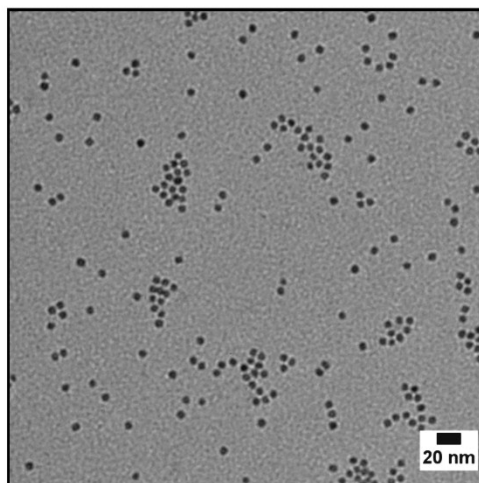


Fig. S1 TEM image of gallic acid coated cobalt ferrite nanoparticles demonstrating good dispersion of nanoparticles. Nanoparticles are deposited on carbon coated copper grids from diluted solutions in dimethylformamide.

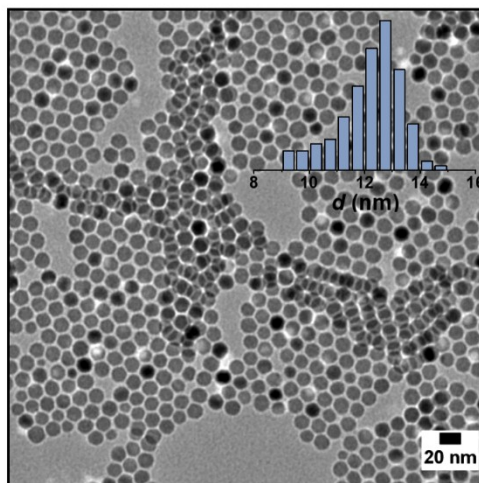


Fig. S2 TEM image of oleic acid capped cobalt ferrite nanoparticles and the size distribution. The average diameter is 12.5 ± 1.5 nm and was obtained using ImageJ image analysis. The size of the nanoparticles is easily varied by changing the flow of nitrogen through the reaction mixture. The flow used is two times smaller than the flow used for the preparation of 6.6 nm nanoparticles.

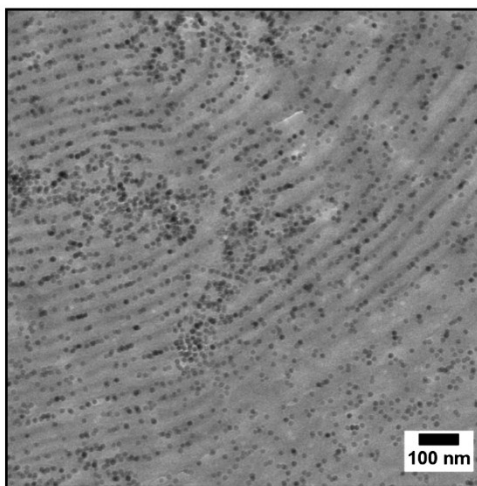


Fig. S3 TEM image of nanocomposite with 30 wt. % of nanoparticles (size 12.5 nm) demonstrating successful and selective dispersion of nanoparticles inside block copolymers at high d/L ratio ($d/L=0.85$). Small regions of aggregated nanoparticles are a consequence of the reduction of nanoparticles' stability with the increase of their size.