

Supplementary Materials

Table S1. Grain size parameters calculated from peak width data and thetas for HBPAA- γ -Fe₂O₃ and HBPAA- γ -Fe₂O₃/BIGGT.

Sample	β	2θ	D (nm) ^a
HBPAA- γ -Fe ₂ O ₃			
1	0.022	35.8	6.62
2	0.031	63.2	5.25
HBPAA- γ -Fe ₂ O ₃ /BIGGT			
3	0.018	35.8	8.09
4	0.029	63.0	5.61

^a Calculated from Scherrer equation: $D = k\lambda/\beta\cos\theta$, where k is the shape factor, λ is the wavelength of the X-rays, β is the full width at half maximum of the peak, and θ is the Bragg angle.

Figure S1. TEM micrographs of iron oxide NPs: (a) pristine iron oxide, revealing clusters of particle aggregates (particle size: 20–30 nm) and (b) HBPAA-Fe₃O₄ (1:1, w/w), revealing iron oxide particles (particle size: 6–11 nm).

