

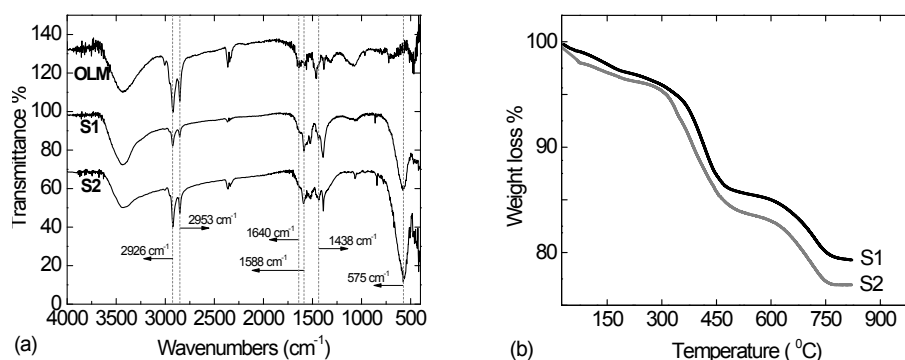
## Reducing the inversion degree of $\text{MnFe}_2\text{O}_4$ nanoparticles through synthesis to enhance magnetization; Evaluation of their $^1\text{H}$ NMR relaxation and heating efficiency

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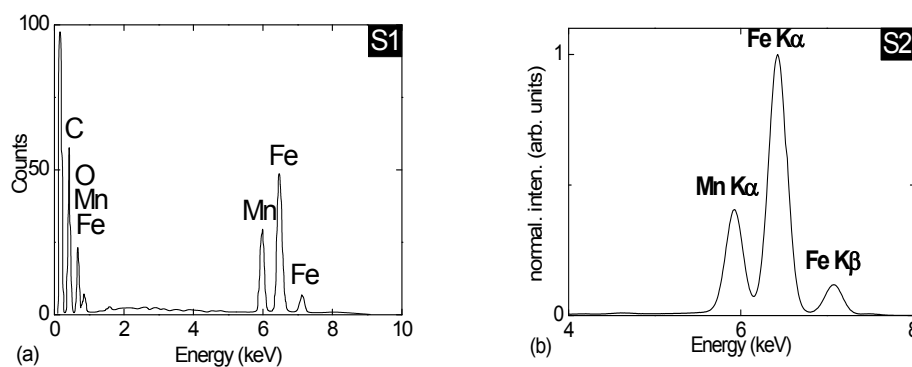
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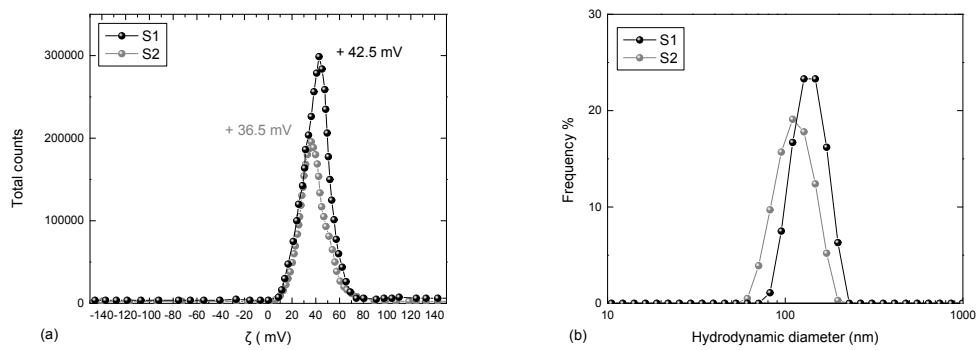
### † Electronic supplementary information (ESI)



**Fig. 1S** (a) FT-IR spectra and (b) TGA curves of samples S1 and S2.



**Fig. 2S** Representative EDS (a) and XRF (b) spectra of S1 and S2, respectively.



**Fig. 3S** (a) Zeta potential ( $\zeta$ ) distribution of samples measured at neutral suspension pH. (b) Particle size distribution of the CTAB-coated nanoparticles in water by DLS.