

Highly monodisperse low-magnetization magnetite nanocubes as simultaneous T₁-T₂ MRI contrast agents

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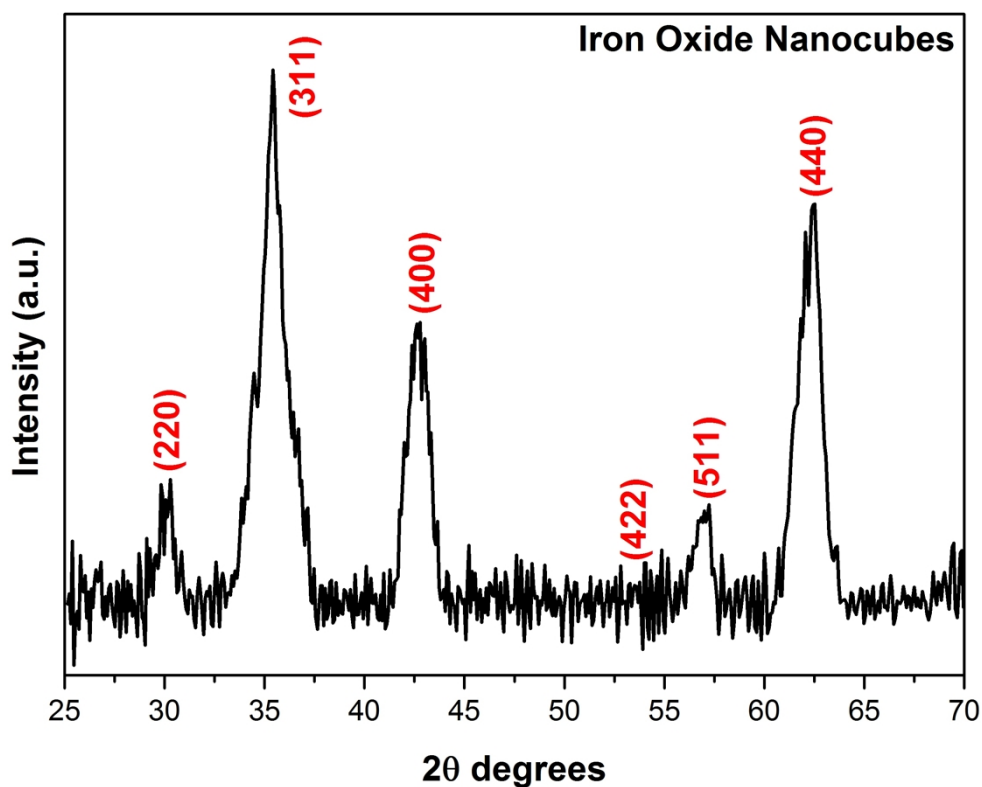


Fig. S1: XRD spectra of as-synthesized iron oxide nanocubes.

(hkl) Planes	Experimental Data d (Å)	JCPDS 19-0629 Magnetite Fe ₃ O ₄ d (Å)	JCPDS 39-1346 Maghemite Fe ₂ O ₃ d (Å)
(220)	2.96406	2.9670	2.9530
(311)	2.53165	2.5320	2.5177
(400)	2.11472	2.0993	2.0886
(422)	1.71430	1.7146	1.7045
(511)	1.61598	1.6158	1.6073
(440)	1.48642	1.4845	1.4758

Table S1: XRD data comparison of the experimental data with the standard magnetite and maghemite JCPDS data.

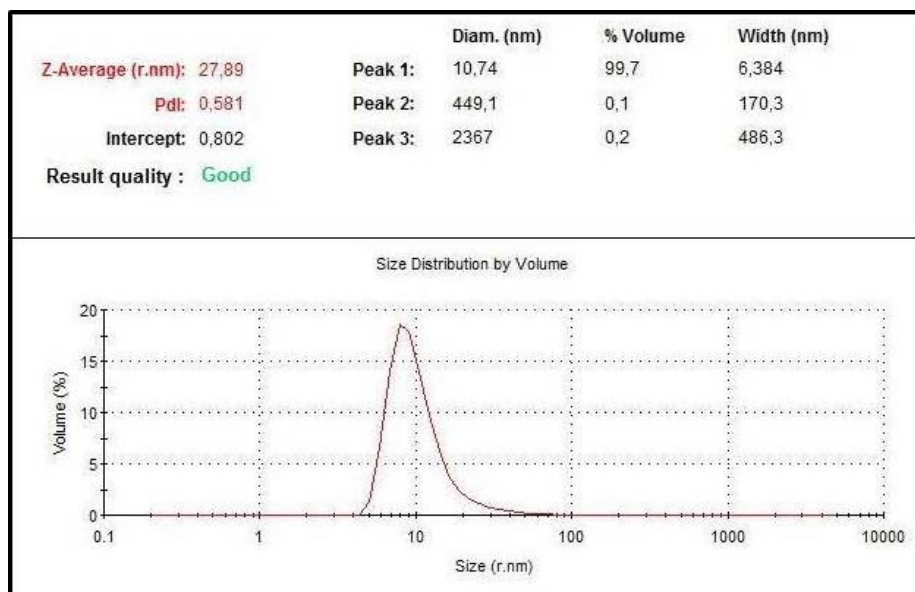


Fig. S2: DLS Particle size measurements of the magnetite nanocubes dispersed in water. Z-average (27.8 nm) obtained from DLS is considered as a robust parameter for calculating the size.

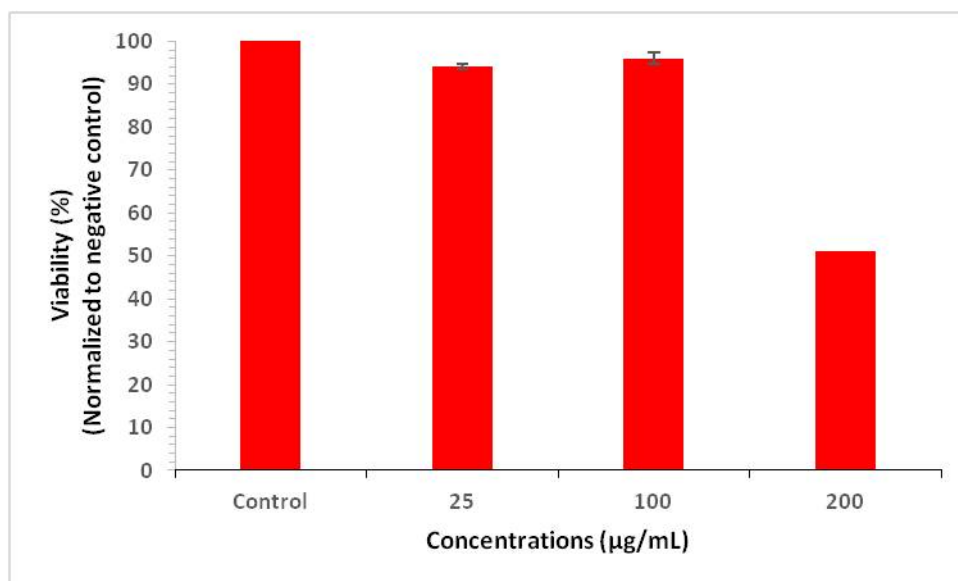


Fig. S3 Cytotoxicity data for the silica coated iron oxide nanocubes and the control.