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Highly versatile SPIONs encapsulated PLGA nanoparticles as photothermal ablators of cancer cells and as multimodal imaging agents Balasubramanian Sivakumar<sup>1#</sup>, Ravindran Girija Aswathy<sup>1#§</sup>, Rebeca Romero-Aburto<sup>2</sup>, Trevor Mitcham<sup>3</sup>, Keith A. Mitchel<sup>4</sup>, Yutaka Nagaoka<sup>1</sup>, Richard R.

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## **Supplementary Information**

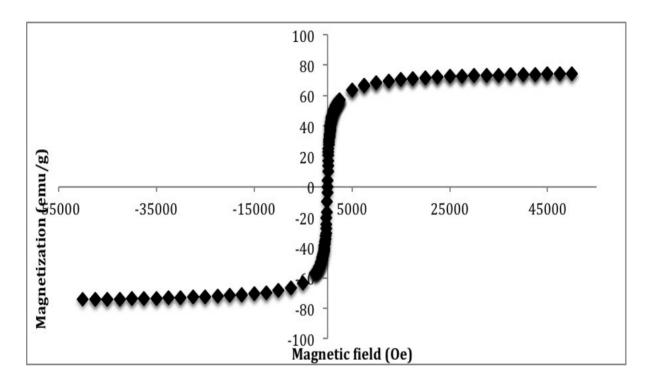
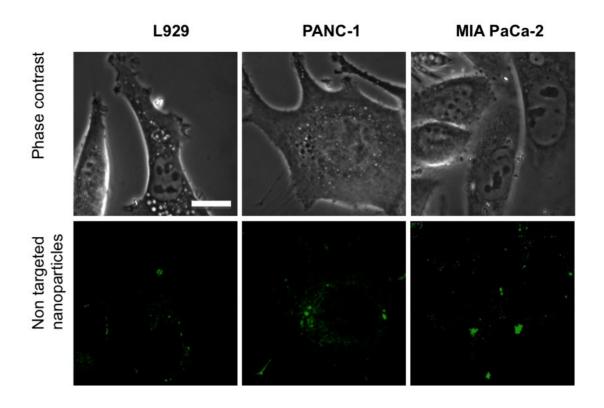


Fig. S1 SQUID analysis of bare SPIONs.



**Fig.** S2 Optical imaging: Confocal laser scanning images of internalization of non-targeted nanocomposites in L929, PANC-1 and MIAPaCa-2 cell lines (scale 20 μm).

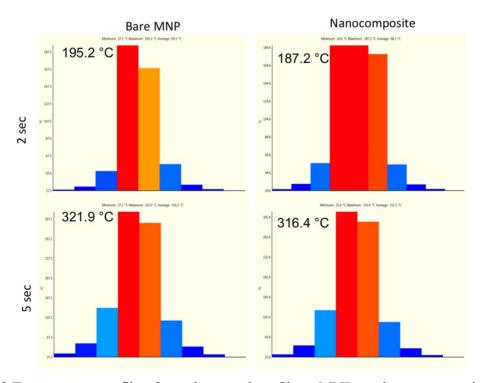


Fig. S3 Temperature profile of powder samples of bare MNPs and nanocomposite

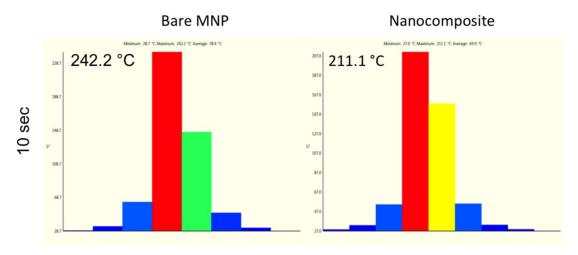


Fig. S4 Temperature profile of samples in suspension; 200  $\mu L$  of bare MNPs and nanocomposite

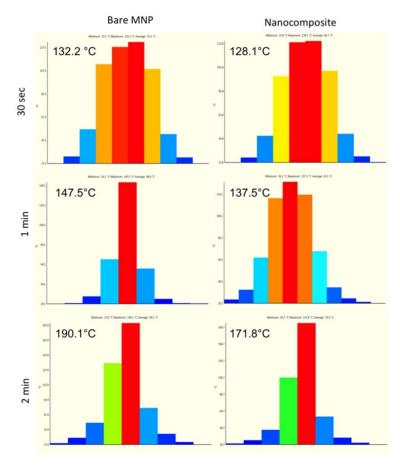


Fig. S5 Temperature profile of samples in suspension; 100  $\mu$ L of bare MNPs and nanocomposite

Concentration	T2	R2=1/T2
(ug/mL)	(msec)	(msec <sup>-1</sup> )
150	134.747	0.007421316
300	77.442	0.01291289
450	66.7109	0.014990054
Magnevist 469	271.2685	0.003686385

Table T1: The R2 relativity of Nanocomposite.