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Supporting Material

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Supporting Information

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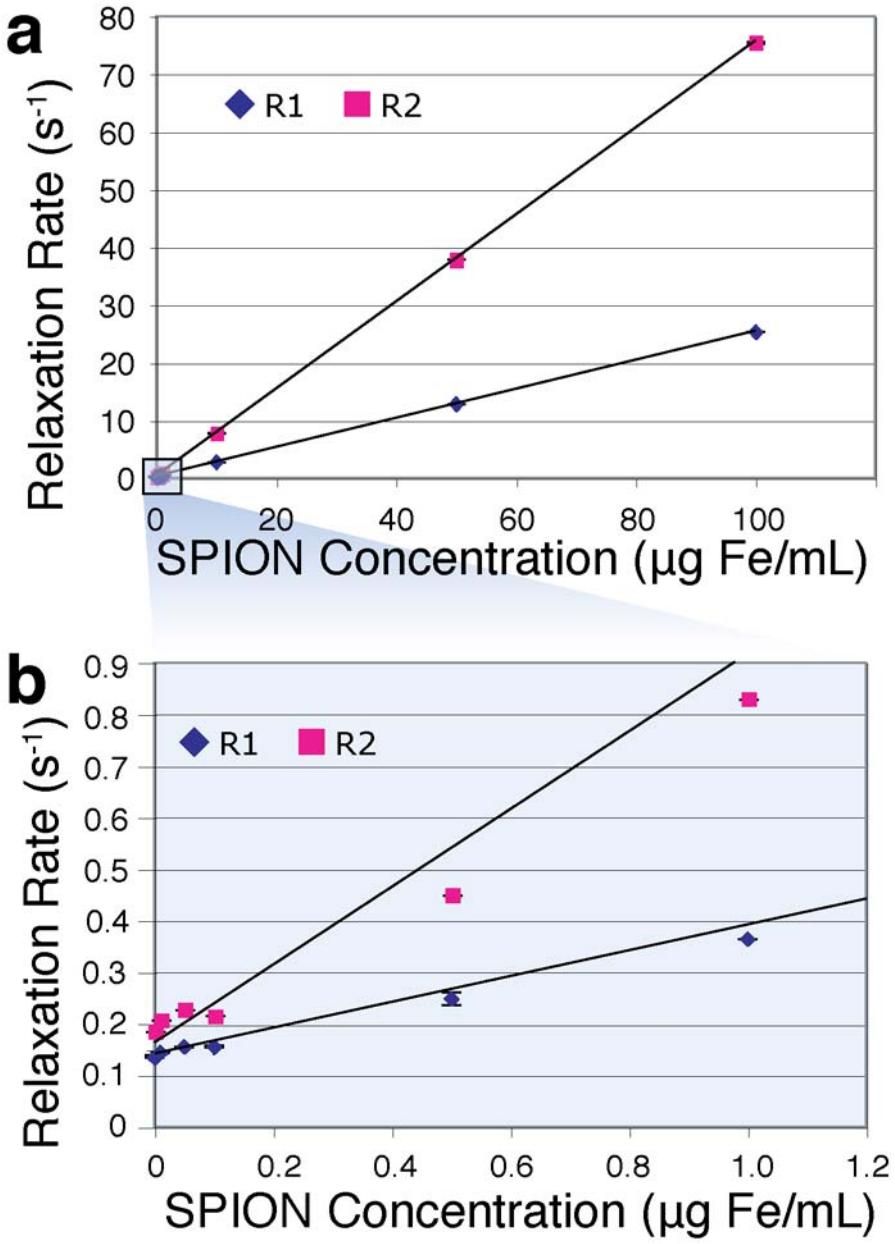
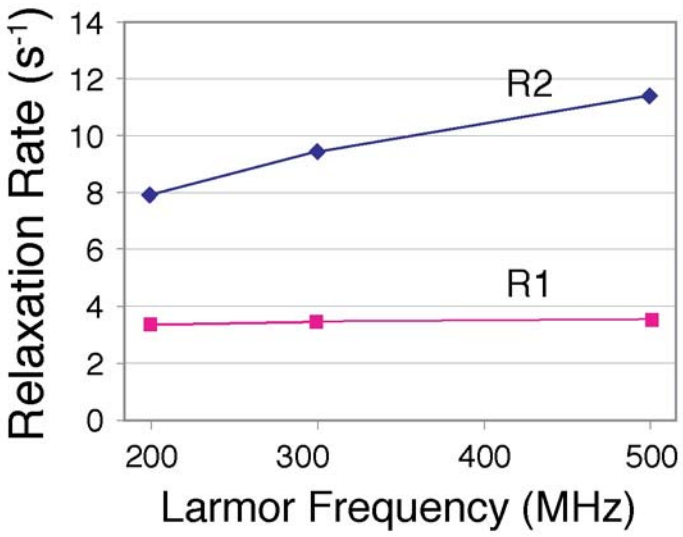
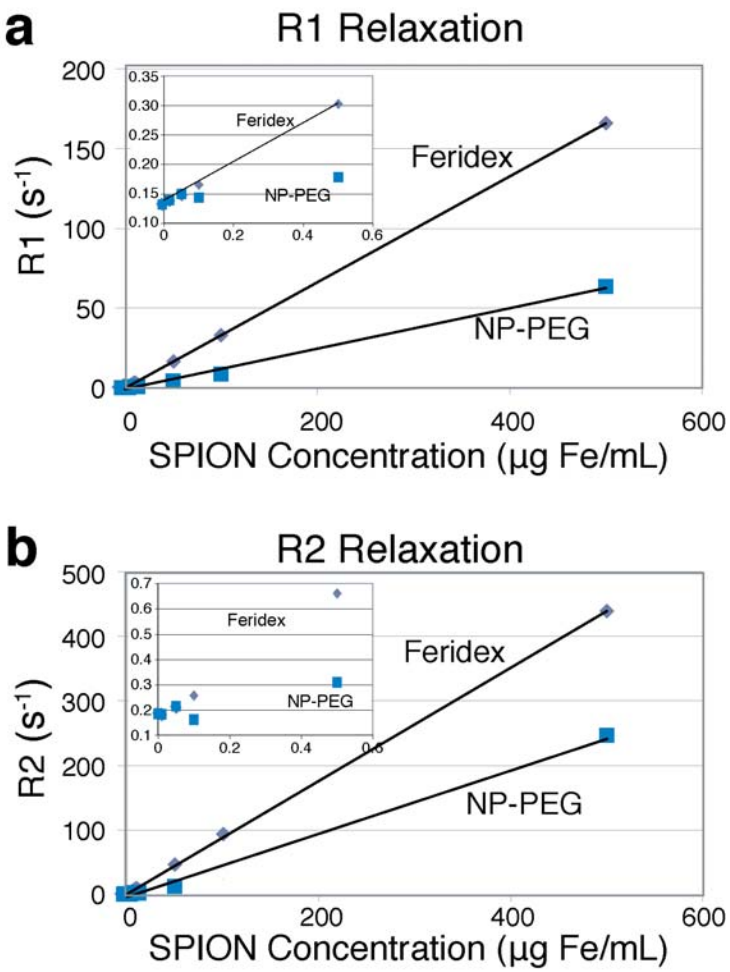
Supplementary Figures



Supplementary Figure 1. Analysis of uncoated SPIONs. Linear correlations between the concentration of dissolved, uncoated iron-oxide nanoparticles and the R_1 and R_2 of sample water were observed at 0–100 µg Fe/mL.



Supplementary Figure 2. R_1 and R_2 of Feridex SPION samples of 10μg/mL concentration in DCl at three NMR frequencies: 200, 300, and 500 Mhz. R_2 shows a frequency dependence while R_1 is essentially unchanged across different NMR frequencies, making it a universal indicator of concentration even when different spectrometers are combined to perform the quantification assays.



Supplementary Figure 3. Analysis of coated SPIONs. Linear correlations of SPION concentration with (a) R_1 and (b) R_2 are observed at varying concentration ranges. SPIONs coated with dextran (Feridex) and PEG (NP-PEG) were individually tested. Linear fits were prepared across the entire range of iron concentrations.