

Supplementary information

ESR as a monitoring method of the interactions between TEMPO-functionalized magnetic nanoparticles and yeast cells

Ryszard Krzyminiewski¹, Bernadeta Dobosz^{1*}, Grzegorz Schroeder², Joanna Kurczewska²

¹Medical Physics Division, Faculty of Physics, Adam Mickiewicz University in Poznań, Uniwersytetu Poznańskiego 2, 61-614 Poznań, Poland

²Faculty of Chemistry, Adam Mickiewicz University in Poznań, Uniwersytetu Poznańskiego 8, 61-614 Poznań, Poland

* corresponding author: benia@amu.edu.pl

The magnetic nanoparticles studied were characterized using Fourier transform infrared (FTIR) spectroscopy, X-ray diffractometry (XRD), transmission electron microscopy (TEM) and energy dispersive X-ray (EDX) spectroscopy.

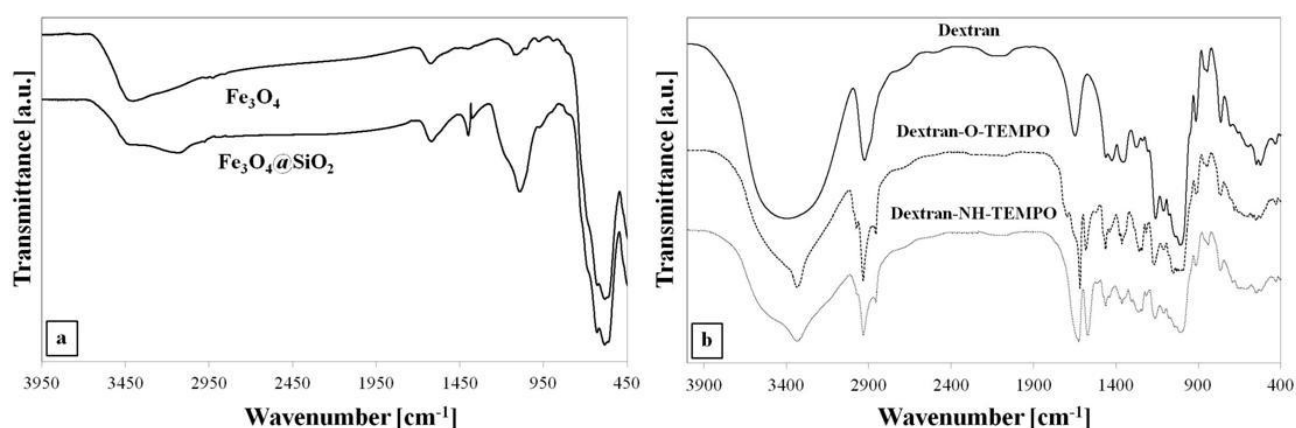


Fig. S1. FTIR spectra of Fe₃O₄ and Fe₃O₄@SiO₂ (a), Dextran and Dextran-NH (or O)-TEMPO (b)

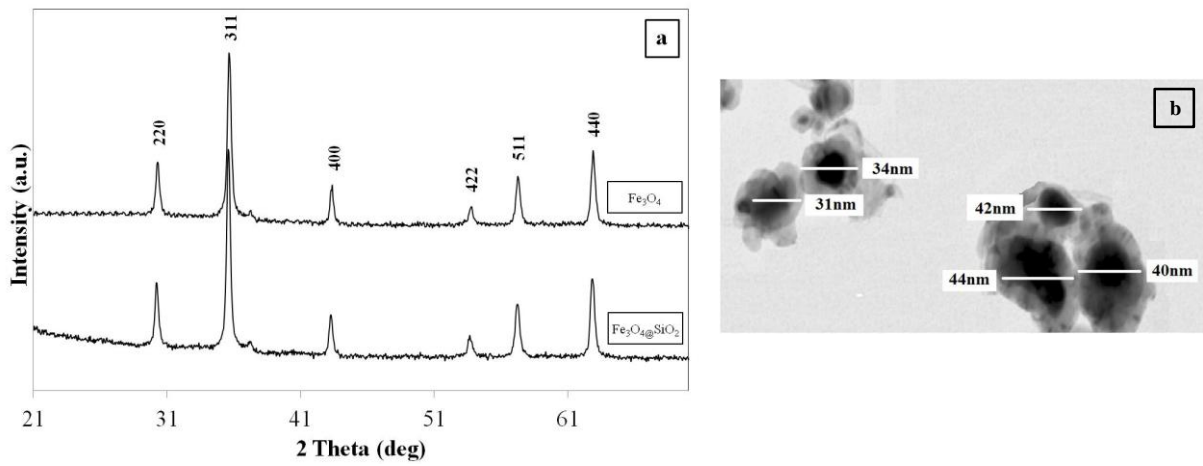


Fig. S2. XRD pattern (a) and TEM image (b) of $\text{Fe}_3\text{O}_4@\text{SiO}_2$

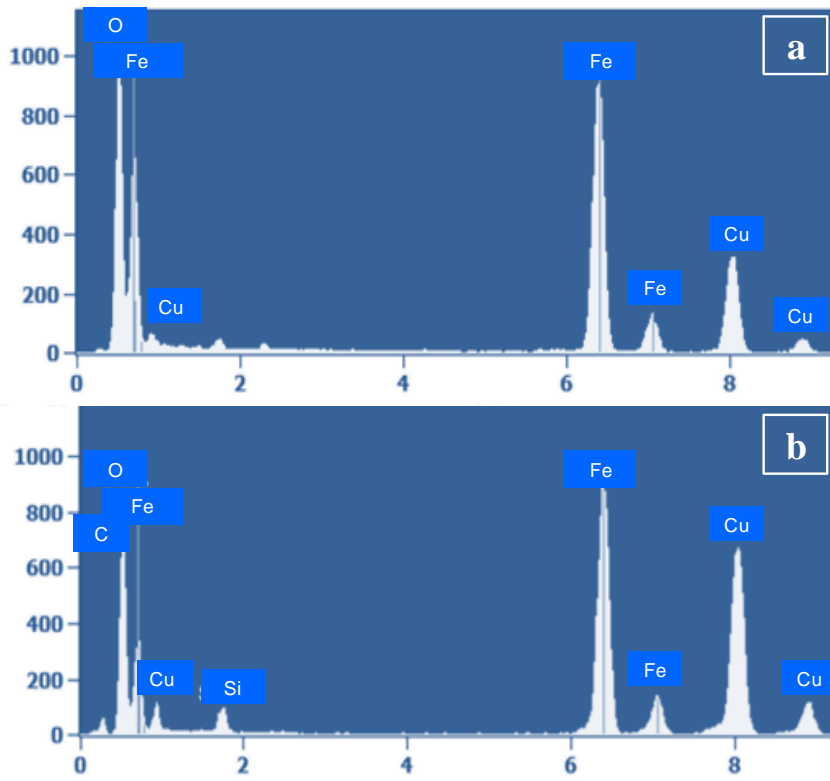


Fig. S3. EDX patterns of Fe_3O_4 (a) and $\text{Fe}_3\text{O}_4@\text{SiO}_2$ (b)