

Biocompatible Fluorescent Europium (III) Magnetic Nanoparticles

Supplemental Information

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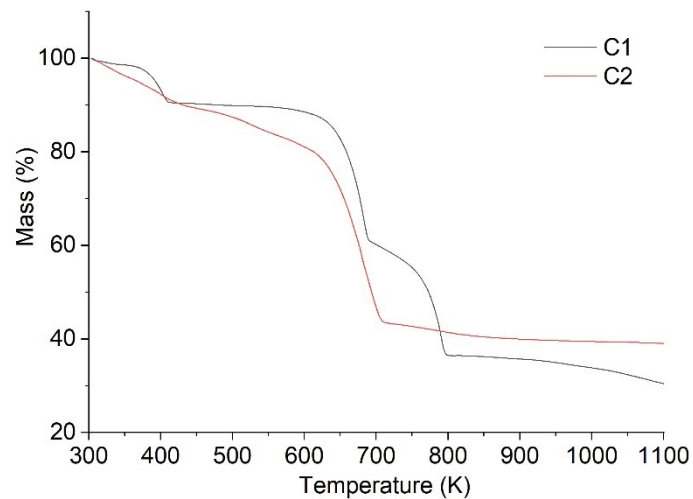


Figure S1. Thermogravimetric analysis (TGA) of **C1** and **C2** Eu complexes.

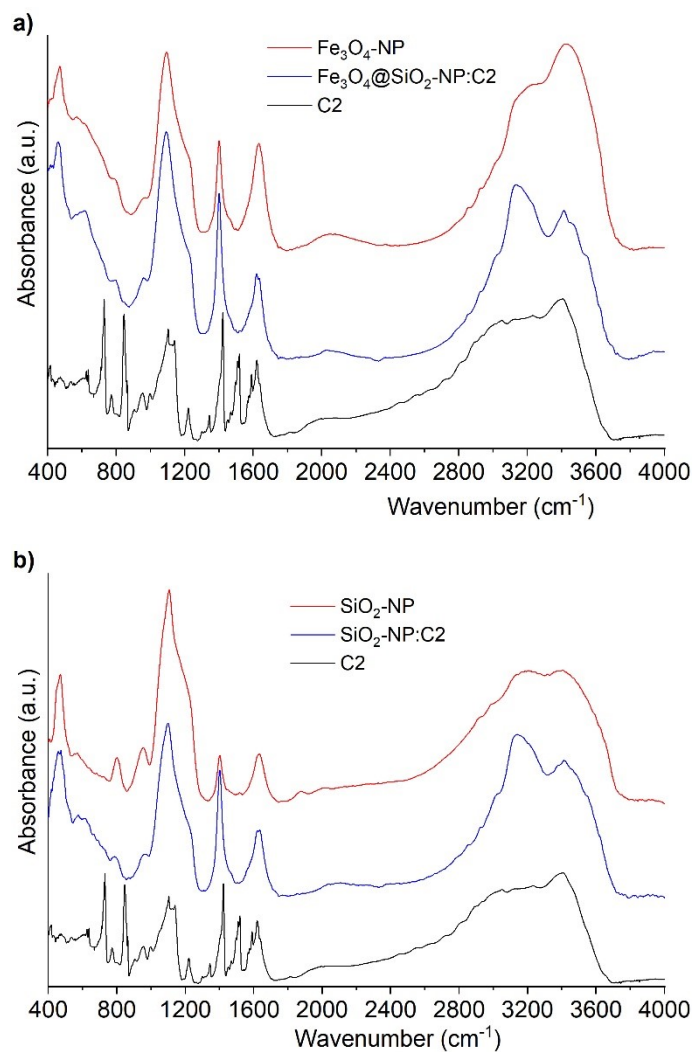


Figure S2. FTIR spectra of Si-NP (a) and Fe@Si-NP (b) nanomaterials in the 400-4000 cm^{-1} range. For the sake of comparison, the Eu complex spectrum was also included.

Table S1: Particle size distribution obtained from DLS measurements and ζ potential values in water at pH 7.

Parameter	SiO₂-NP	SiO₂-NP:C2	Fe₃O₄@SiO₂-NP	Fe₃O₄@SiO₂-NP:C2
Diameter ^a (nm)	72.95	76.81	84.80	91.28
Std Dev. (nm)	14.40 (19.74%)	9.26 (12.06%)	14.04 (16.56%)	15.42 (16.89%)
ζ (mV)	-40.64	46.31	-38.91	43.17
Std Dev. (mV)	0.59 (1.45%)	1.16 (2.50%)	0.91 (2.34%)	1.19 (2.76%)

^a Values presented refer to the number distribution data for easier comparison with results from electron microscopy.

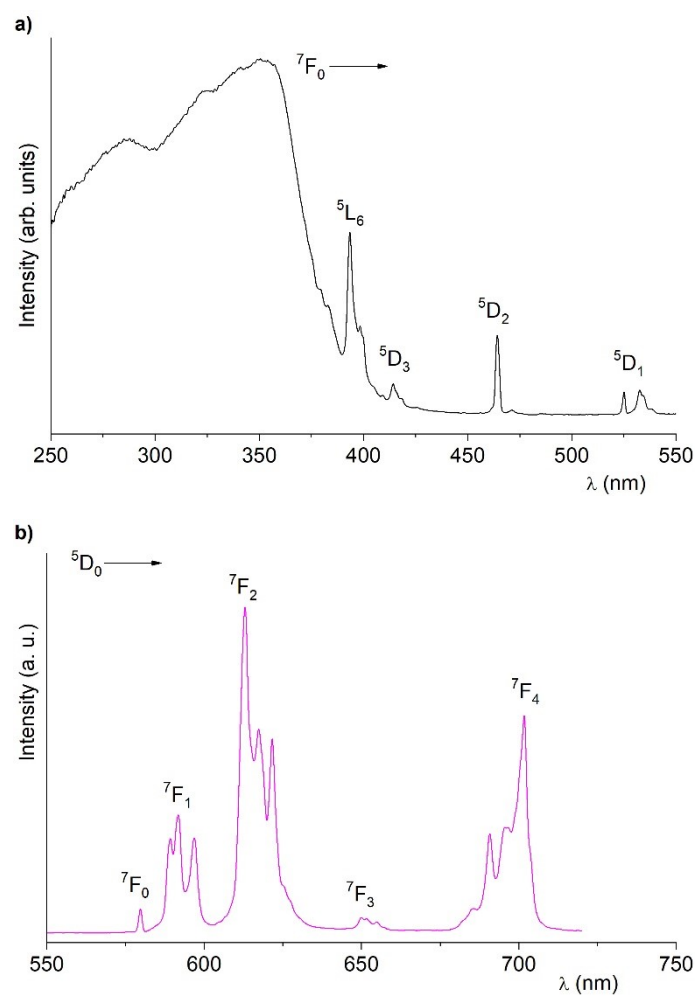


Figure S3. Excitation spectrum monitored at 612 nm (a) and emission spectrum with excitation at 355 nm (b) of Eu complex **C2**.

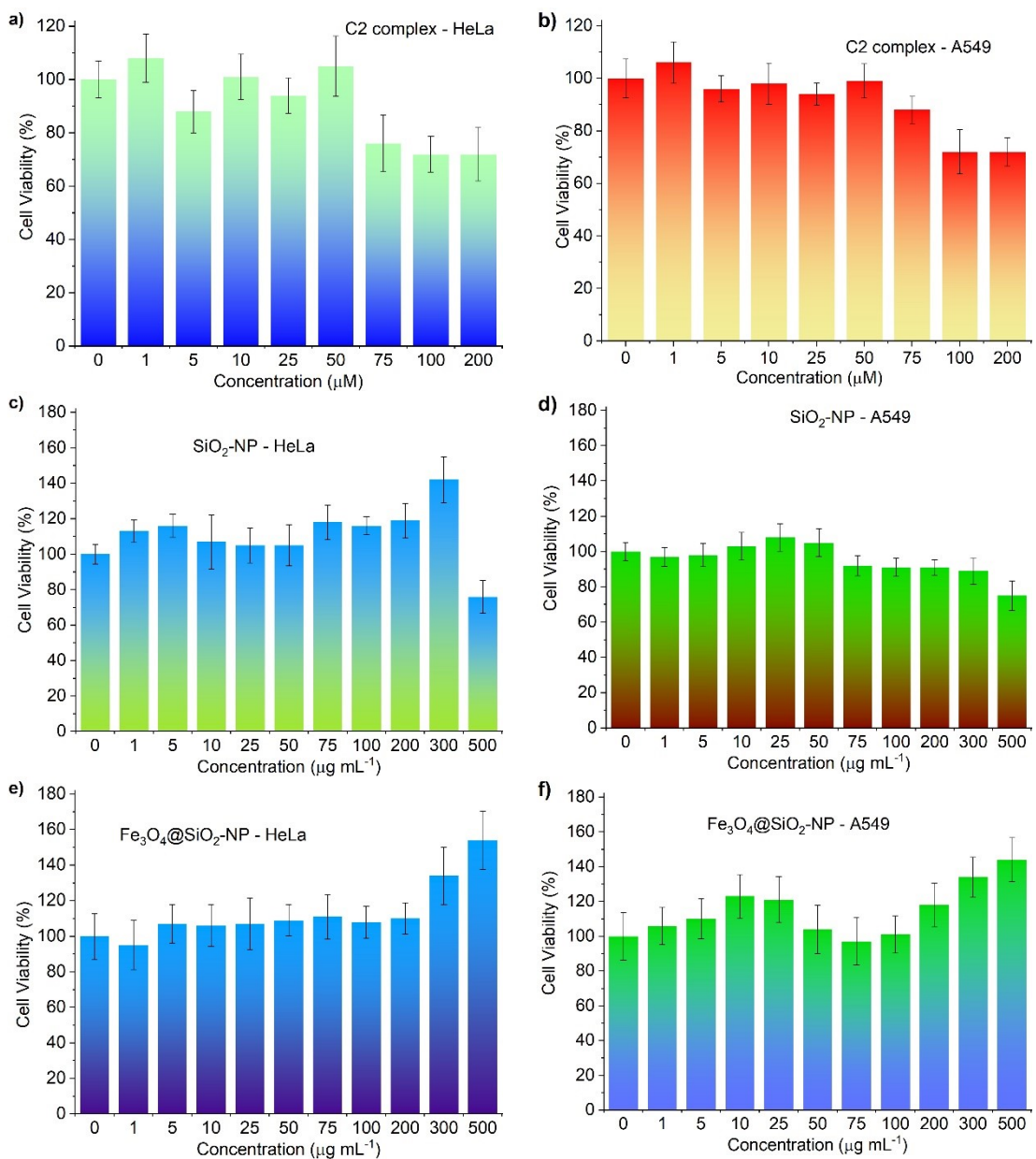


Figure S4. Cell viability tests of Eu complex **C2**, SiO₂-NP and Fe₃O₄@SiO₂-NP on HeLa (cervical cancer) and A549 (adenocarcinoma human alveolar basal epithelial cells) cell lines.