Electronic Supplementary Material (ESI) for Photochemical & Photobiological Sciences.

Supporting Information

Photophysical studies on lanthanide(III) chelate complexes conjugated to Pittsburgh compound B as luminescent probes for targeting Aβ amyloid aggregates

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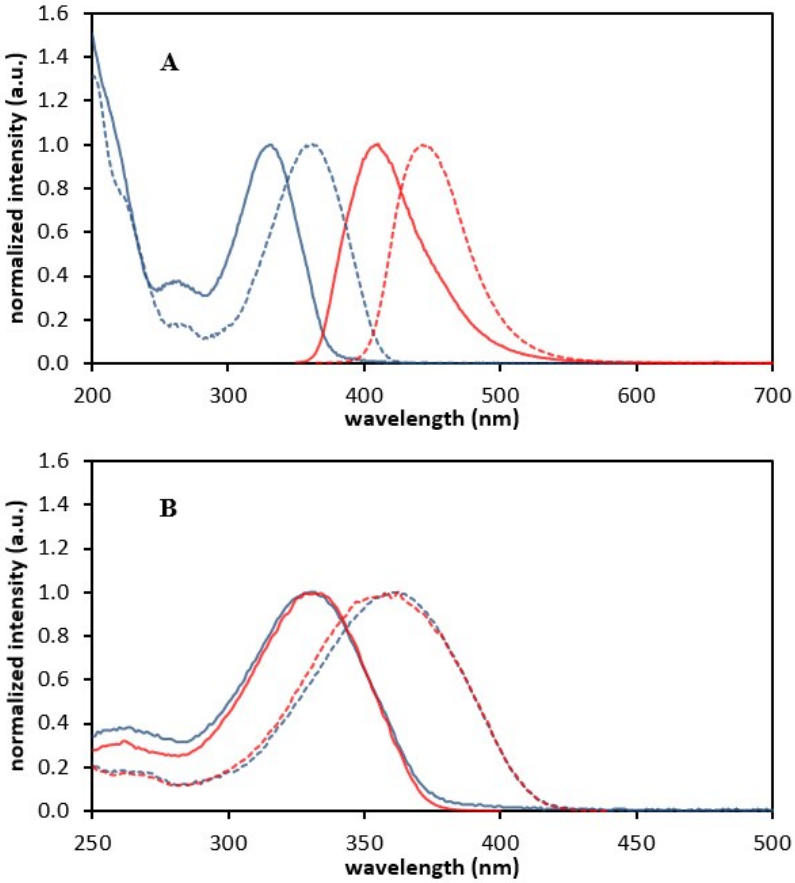

Figure S1. A) Normalized absorption (blue) and fluorescence (red) spectra of 3.7 μM L1 (solid line) and 5.8 μM L2 (dashed line) ligands compared with B) the normalized fluorescence excitation (red) and absorption (blue) spectra of L1 (solid line) and L2 (dashed line) complexes, in 10 mM sodium phosphate buffer (pH= 7.4), using normalized arbitrary intensity units (a.u.). For the ligands L1 and L2, the fluorescence emissions spectra were recorded with excitation at 330 nm and 360 nm, respectively, and for the excitation spectra the fluorescence emission were recorded at 410 nm and 443 nm, respectively.

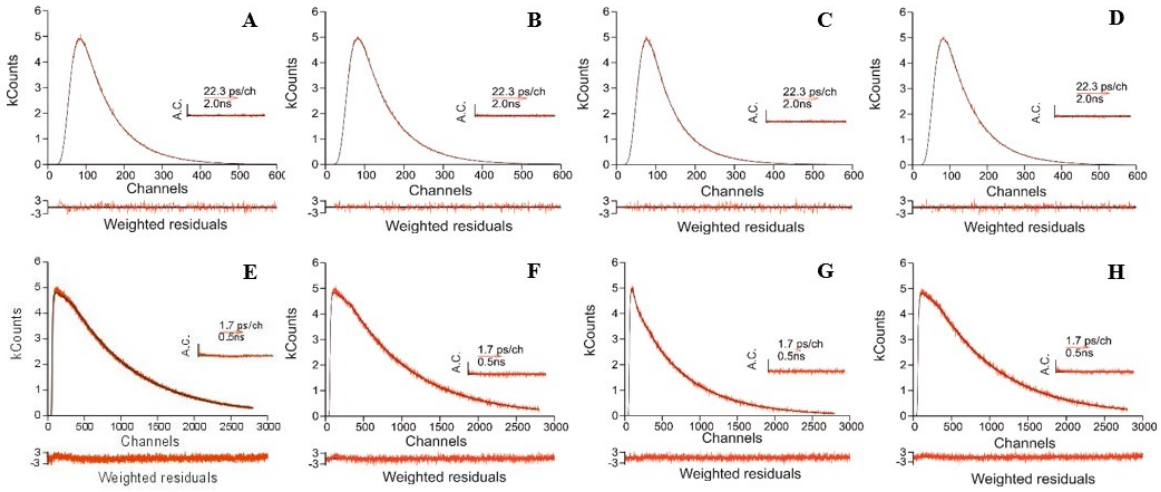

Figure S2. Fluorescence decay profiles obtained through the TCSPC technique, in 10 mM sodium phosphate buffer, pH = 7.4. The data were fitted to a mono-exponential curve for the free ligands and the La^{3+} and Tb^{3+} complexes, and to a bi-exponential curve for the Eu^{3+} complexes. A) L1; B) LaL1; C) EuL1; D) TbL1; E) L2; F) LaL2; G) EuL2; H) TbL2.

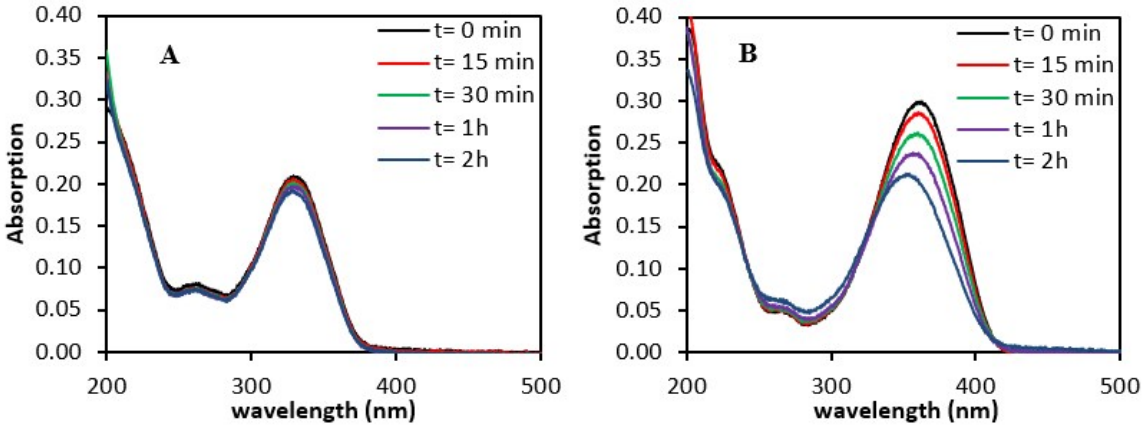

Figure S3. Absorption spectra of solutions of A) ligand L1 and B) ligand L2 in 10 mM aqueous sodium phosphate buffer (pH= 7.4) obtained at increasing irradiation times at 350 nm.

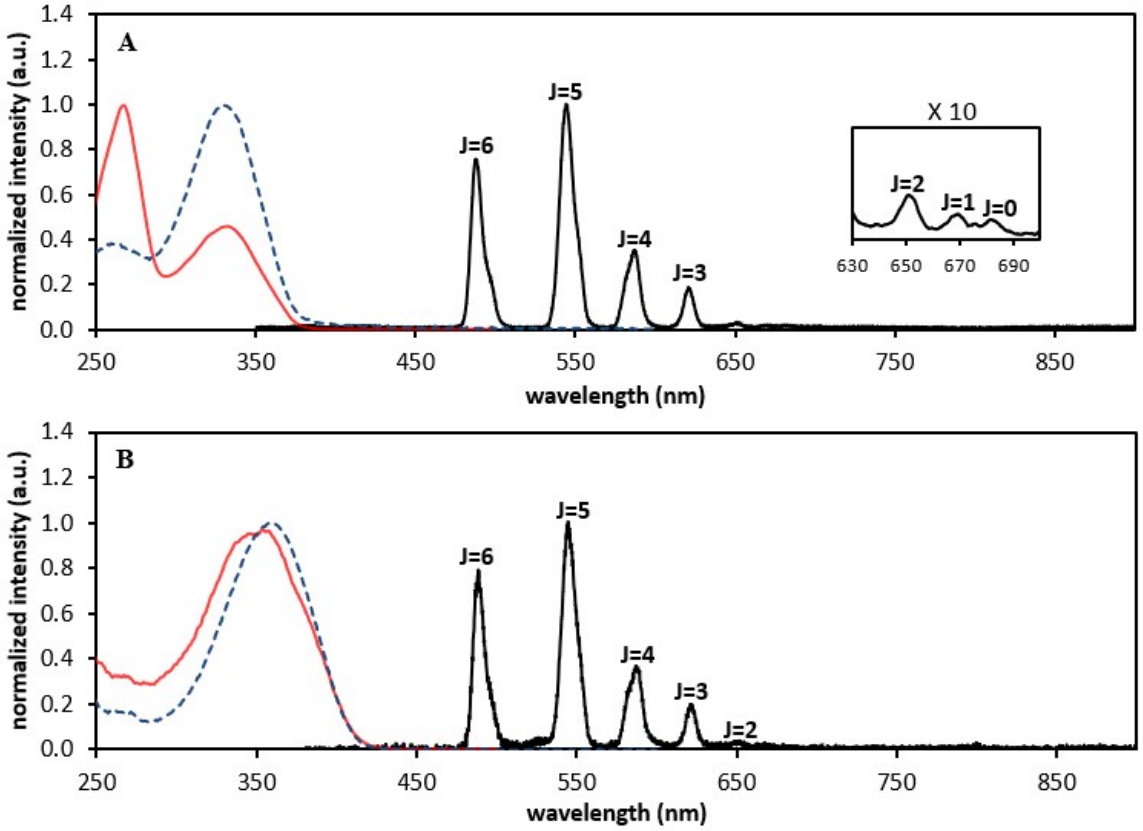

Figure S4. Luminescence spectra (black line) of the TbL1 (**A**) and TbL2 (**B**) complexes in 10 mM sodium phosphate buffer (pH = 7.4), collected with excitation wavelengths of 330 nm and 360 nm, respectively, at T = 298 K. The absorption (blue dashed line) and the luminescence excitation (red line) spectra are also presented. The emission for the luminescence excitation spectra was collected at 545 nm. In the luminescence spectra, the J = 0 - 6 levels of the Tb^{3+} ground state involved in the electronic transition $^5D_4 \rightarrow {}^7F_J$ are indicated.