

# Fluorescent phthalocyanine-encapsulated bovine serum albumin nanoparticles: their deployment as therapeutic agents in the NIR region

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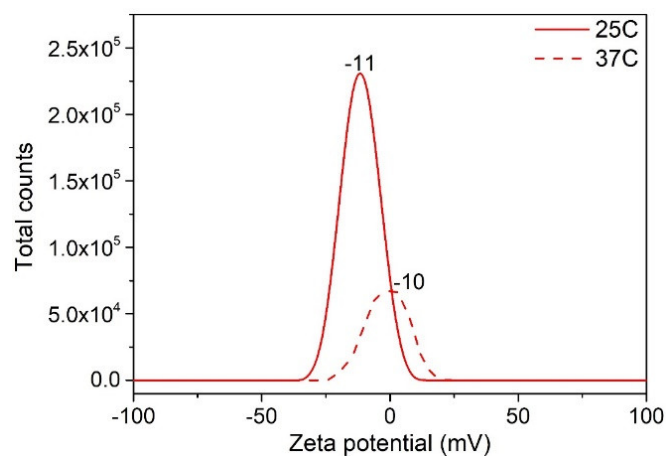
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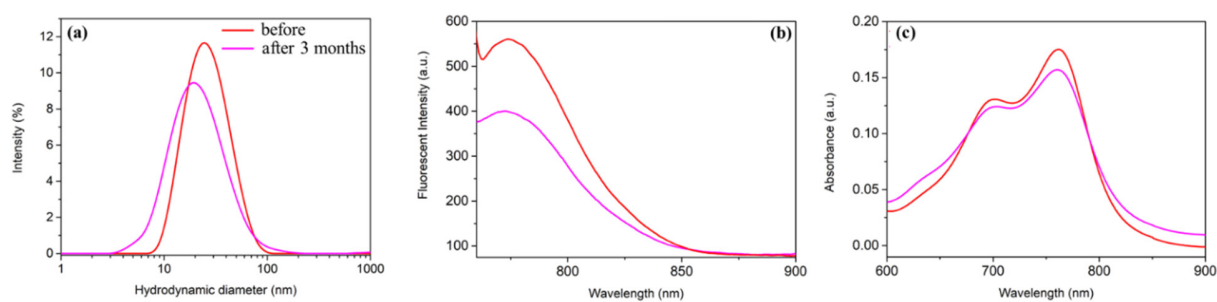
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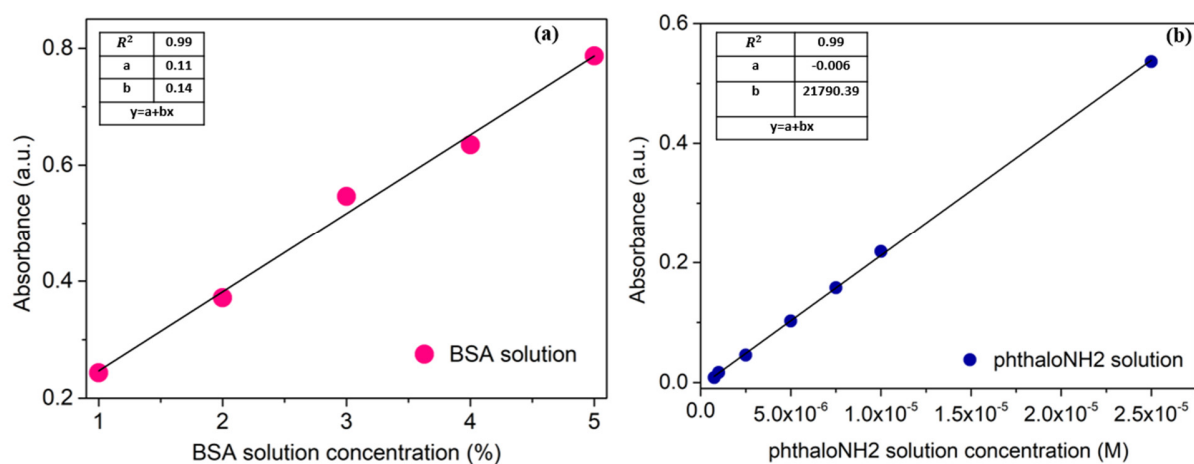
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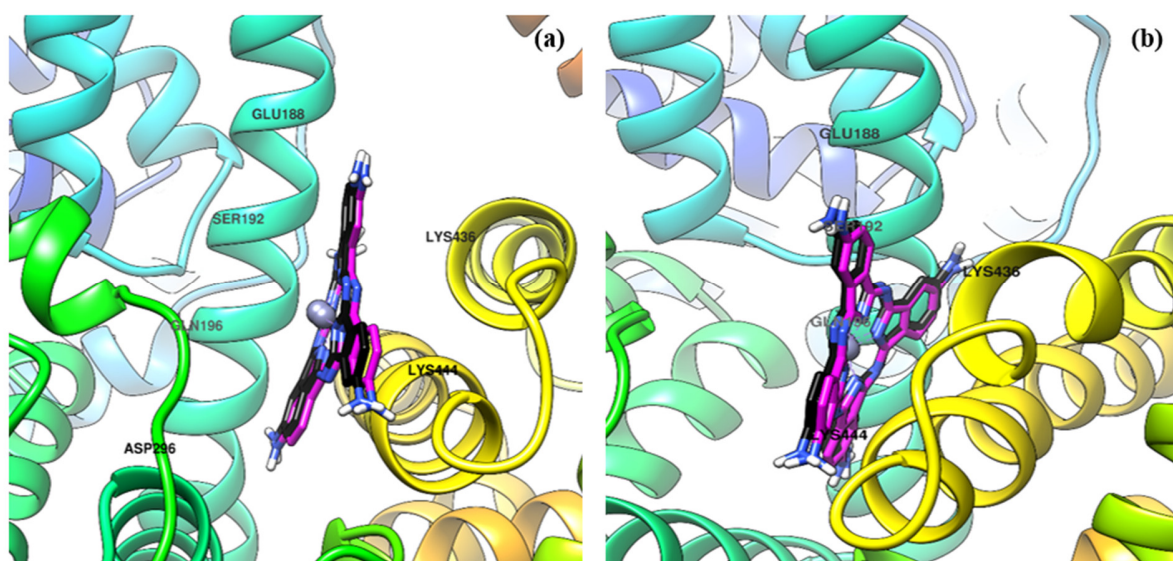
**Figure S1.** Zeta potential measurements of the BSA&phthaloNH<sub>2</sub> NPs at 25 °C (solid line) and at 37 °C (dashed line).



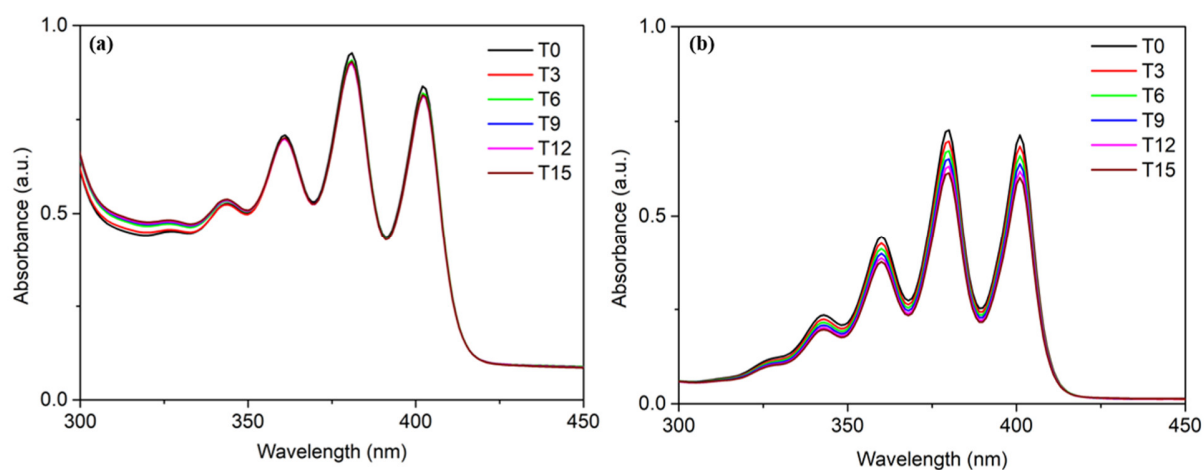
**Figure S2.** (a) DLS, (b) fluorescence and (c) absorption spectra of the BSA&phthaloNH<sub>2</sub> NPs just after development (red) and after 3 months of storage (pink).



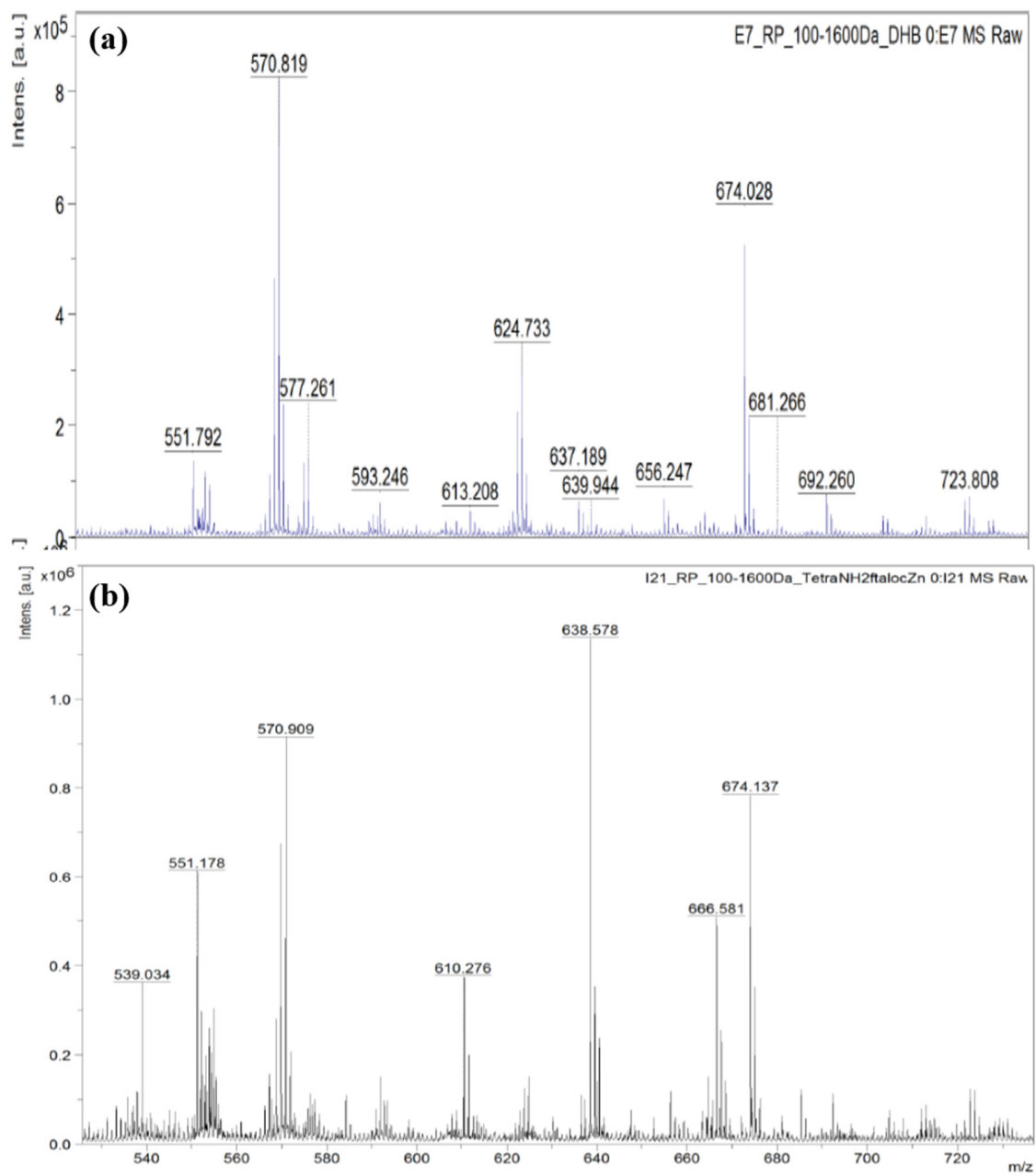
**Figure S3.** The calibration curves for different concentrations of (a) free BSA (b) phthaloNH<sub>2</sub> dye solution.



**Figure S4.** View from both sides of the poses predicted for phthalonH<sub>2</sub> into the two Sudlow's site I by **(a)** AutoDock (carbon atoms in magenta) and **(b)** AutoDock vina (carbon atoms in black). Some amino acid labels were depicted for a better comprehension.



**Figure S5.** Degradation of ABDA during 15 minutes of irradiation in the presence of **(a)** BSA&phthalonH<sub>2</sub> NPs and **(b)** free phthalonH<sub>2</sub>.



**Figure S6.** Mass spectra (MALDI-TOF-MS): (a) the DHB (2,5-dihydroxybenzoic acid) matrix and (b) Zn (II)-2,9,16,23-tetraaminophthalocyanine ( $m/z = 638.578$ ) in the presence of the DHB matrix.