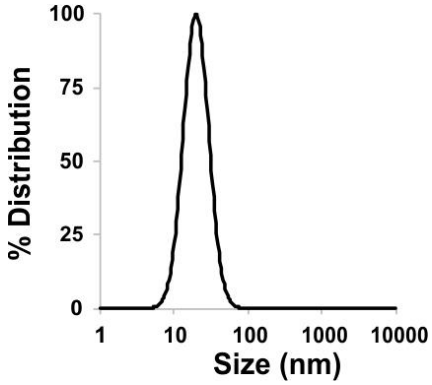
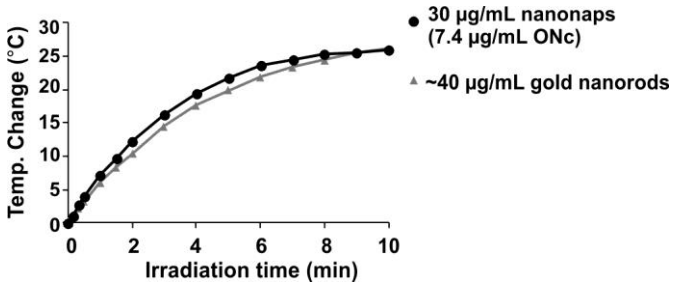
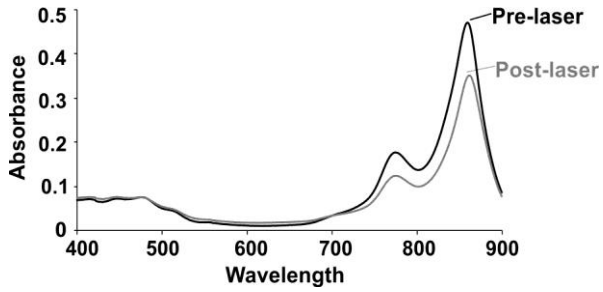
Supporting Information: Surfactant-stripped Naphthalocyanines for Multimodal Tumor Theranostics with Upconversion Guidance Cream



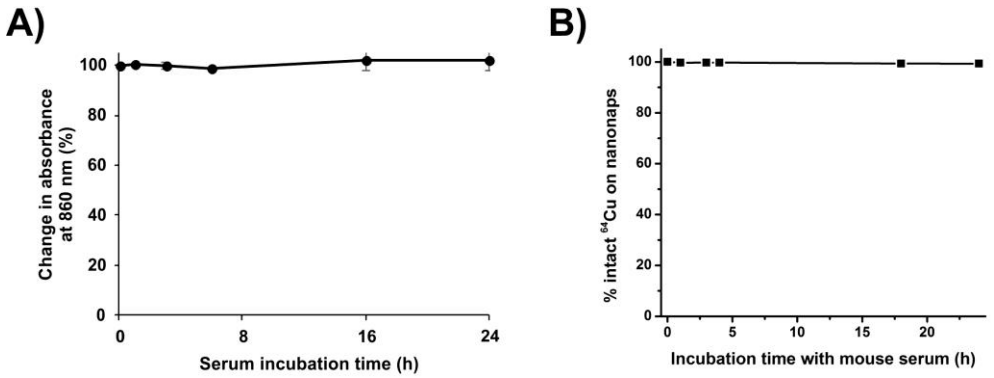
Supplementary Fig. 1: Size by volume distribution of ONc nanonaps measured in PBS by dynamic light scattering. The z-average was 29.45 with a polydispersity index of 0.177.



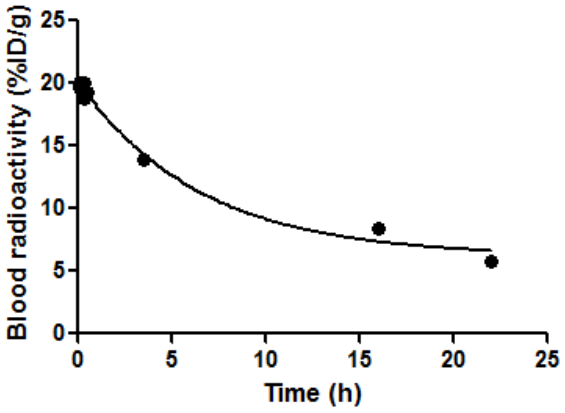
Supplementary Fig. 2: Heating comparison of ONc nanonaps and PEGylated gold nanorods with peak absorption at 860 nm. Absorption was matched at 860 nm.



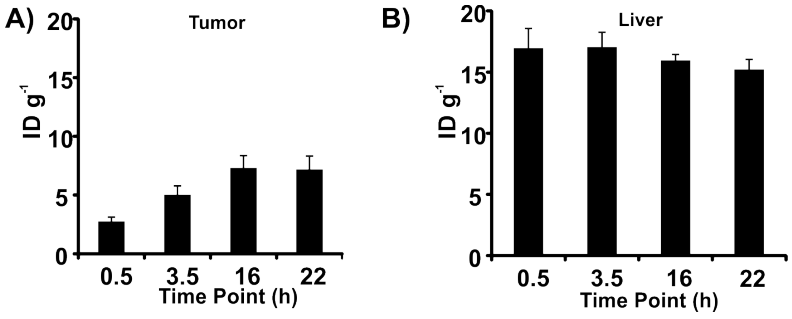
Supplementary Fig. 3: Nanonap absorption before and after photothermal heating with an 860 laser diode for 10 minutes at 1500 mW/cm^2 in PBS.



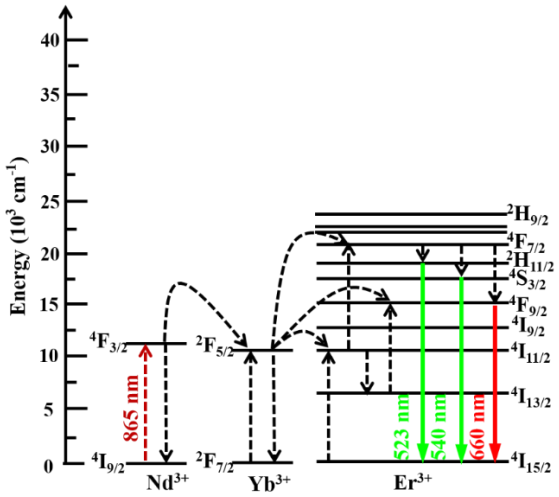
Supplementary Fig. 4: Serum stability of nanonaps. A) Absorption stability of nanonaps during incubation 50% adult bovine serum at 37 °C. B) ^{64}Cu chelation stability of nanonaps during incubation in murine serum at 37 °C.



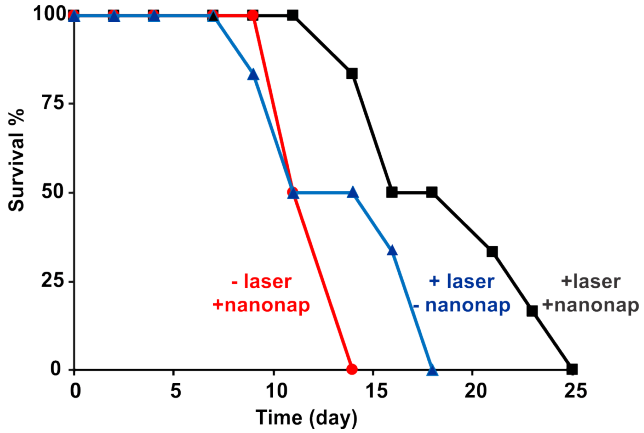
Supplementary Fig. 5: Circulation half-life of nanonaps in blood, characterized by measuring radioactivity in blood after intravenous injection.



Supplementary Fig. 6: Biodistribution of nanonaps in A) tumor and B) liver 24 hours after I.V. injection.



Supplementary Fig. 7: Energy level diagram of Nd $^{3+}$, Yb $^{3+}$ and Er $^{3+}$ ions as well as the proposed up-conversion mechanism for the emission under laser excitation of 860 nm.



Supplementary Fig. 8: Survival curve of 4T1 tumor bearing mice treated with conditions indicated. Mice were euthanized when tumors reached 1000 mm^3.