

Effects and side effects of plasmonic photothermal therapy in brain tissue

Yue He, Kristoffer Laugesen, Dana Kamp, Salik A. Sultan, Lene B. Oddershede, and Liselotte Jauffred

The Niels Bohr Institute, University of Copenhagen, Copenhagen, DK-2100, Denmark

Additional figure S1

Plasmonic photothermal heating of brain tissue and AuNSs

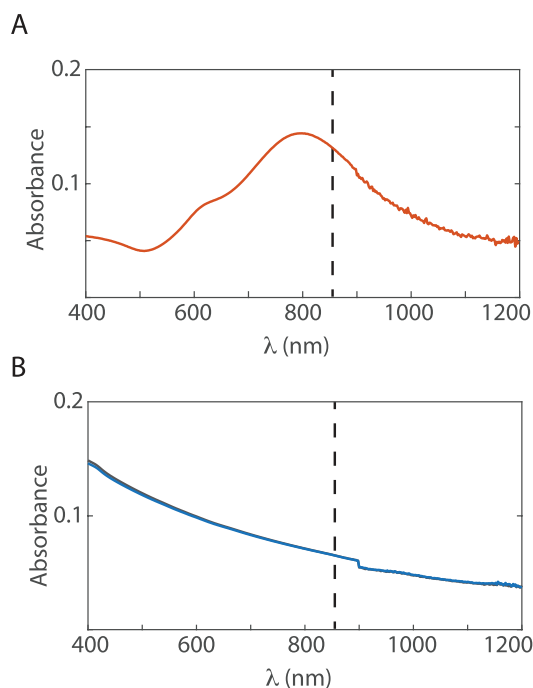


Fig S1 UV-Vis-NIR absorbance spectra of homogenized porcine brain and AuNSs. Absorbance versus wavelength. The vertical black punctuated line signifies the wavelength (806 nm) of our laser and the jump at 900 nm is an artifact from the shift of detectors at this wavelength. **(A)** Absorbance spectrum of 5.8 $\mu\text{g/ml}$ AuNSs suspension in PBS. **(B)** Example of an absorbance spectrum of homogenized porcine cerebrum tissue with 5.8 $\mu\text{g/ml}$ AuNSs. The suspension is 1000 times diluted (red) and compared to diluted tissue alone (gray). The tissue with and without AuNSs show similar absorbance and the 800 nm peak from (A) is not detectable. This is in a favor of a view where the absorbance spectrum of porcine brain tissue is governed by scattering.