Supporting Information for:

Exclusive Photothermal Heat Generation by a Gadolinium Bis(naphthalocyanine) Complex and Inclusion Into Modified High-Density Lipoprotein Nanocarriers for Therapeutic Applications

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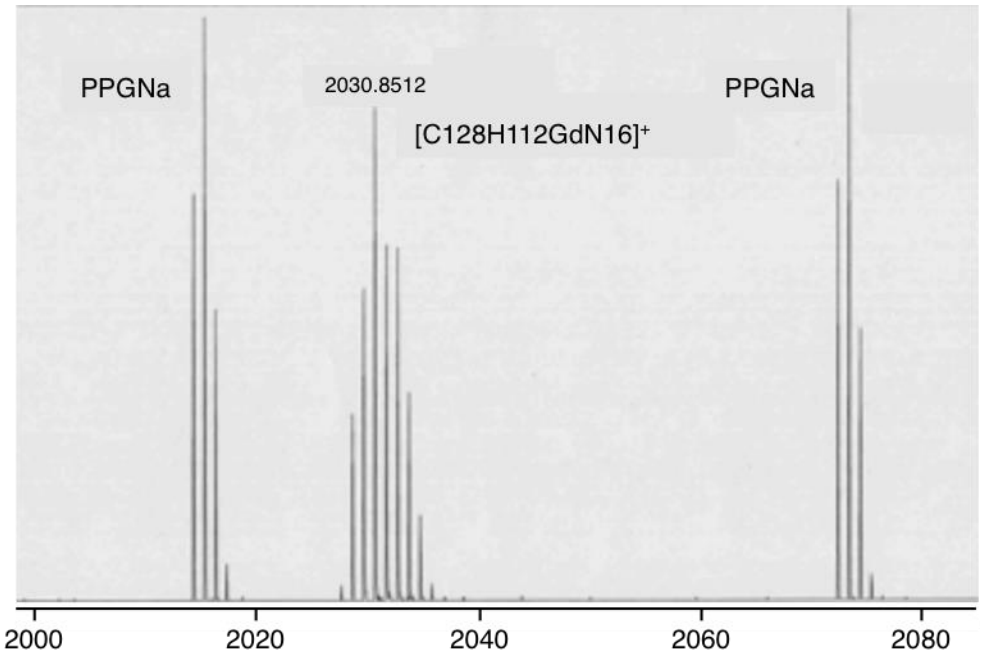

Figure S1. HRMS (ESI-MS) of ***GdSand*** *(m/z): [M]⁺ calcd. for* $C_{128}H_{112}GdN_{16}$ *2030.8496; obs. 2030.8512. PPGNa is the polypropylene glycol-sodium salt used as a tuning reference.*

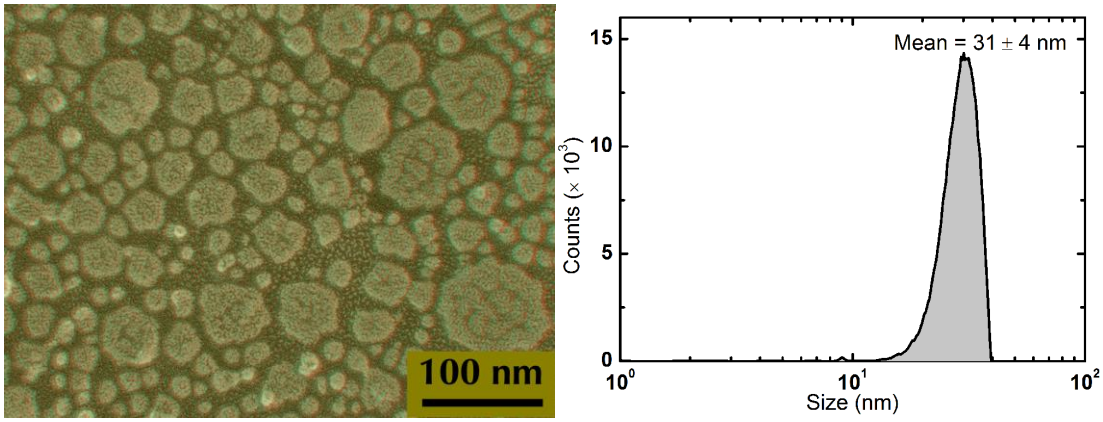

Figure S2. EM analysis of the ***GdSand@cpHDL*** *(left) and histogram of* ***GdSand@cpHDL*** *size distribution (right).*

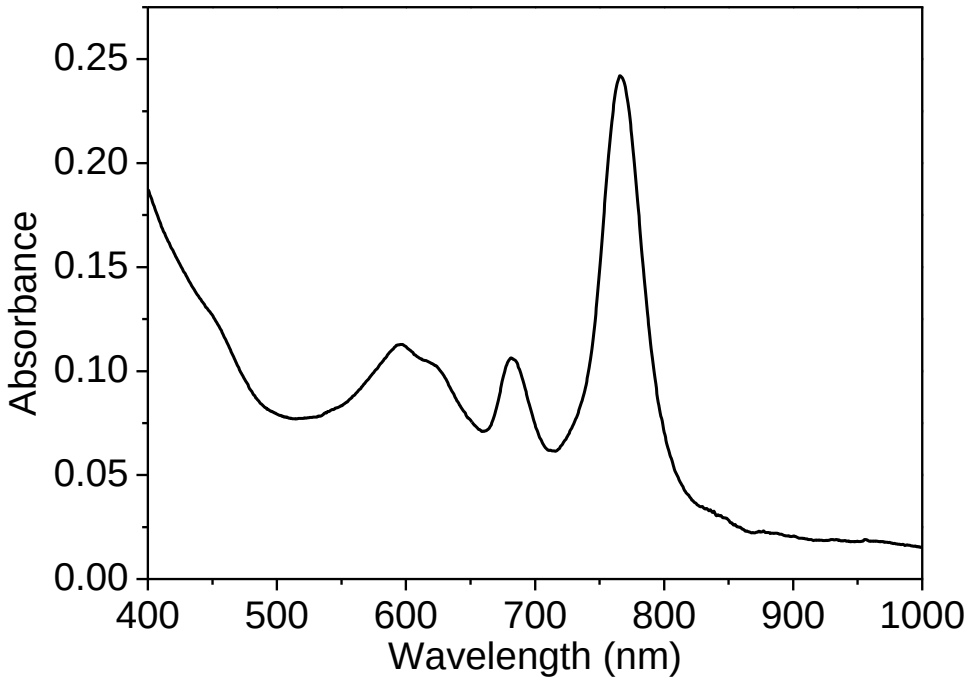

Figure S3. UV–Vis–NIR absorption spectrum of ***GdSand@cpHDL*** *(made with the [GdSand] = 0.49 mM stock solution) in saline.*

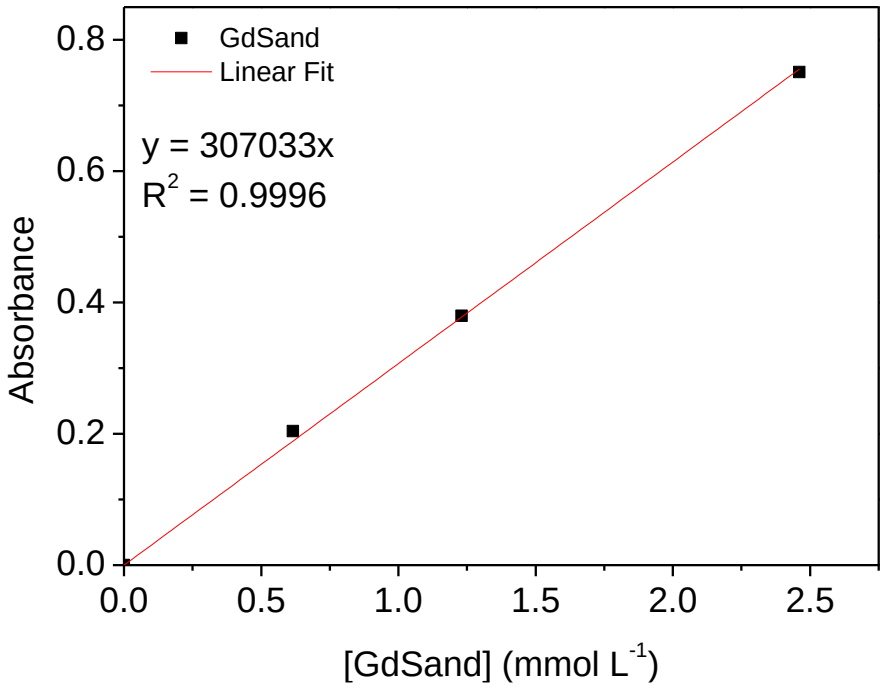

Figure S4. Calibration curve for ***GdSand*** *in methyl oleate to determine uptake of* ***GdSand*** *by the* ***cpHDL*** *nanocarrier.*

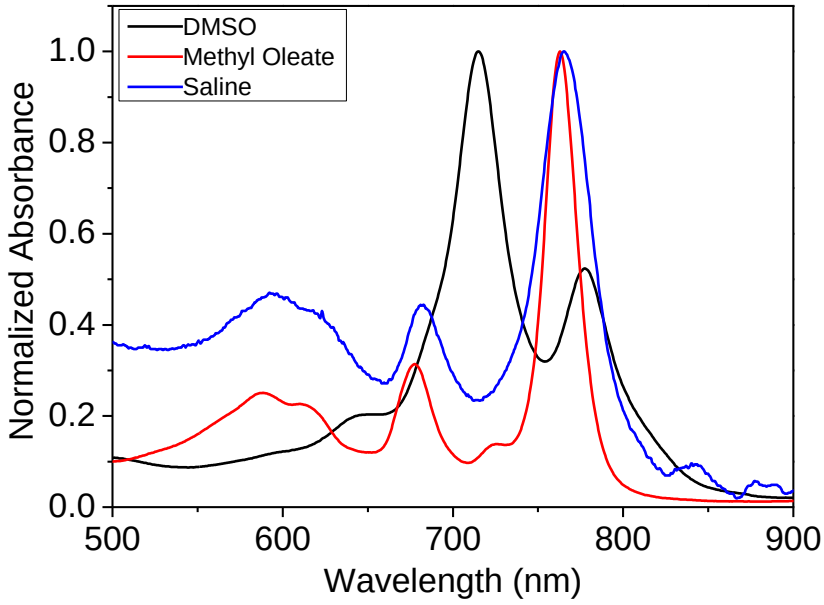

Figure S5. Comparison of normalized UV–Vis–NIR spectra of ***GdSand*** *(0.25 mM) in DMSO (black) and methyl oleate (red) and* ***GdSand@cpHDL*** *in saline, formulated using 0.25 mM* ***GdSand*** *stock (blue). Note that spectra acquired in DMSO exhibit a significant shifting of the absorbance maximum to that of* ***GdSand*** *in methyl oleate and* ***GdSand@cpHDL*** *in saline.*

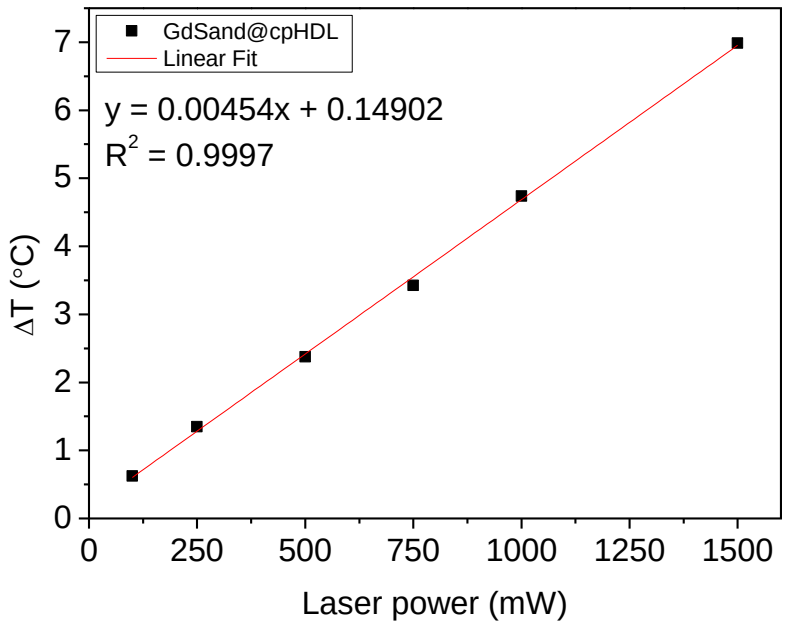

Figure S6. Photothermally induced temperature increase of ***GdSand@cpHDL*** *(O.D = 0.1) at t = 10 min of constant laser irradiation, plotted as a function of the incident laser light power.*

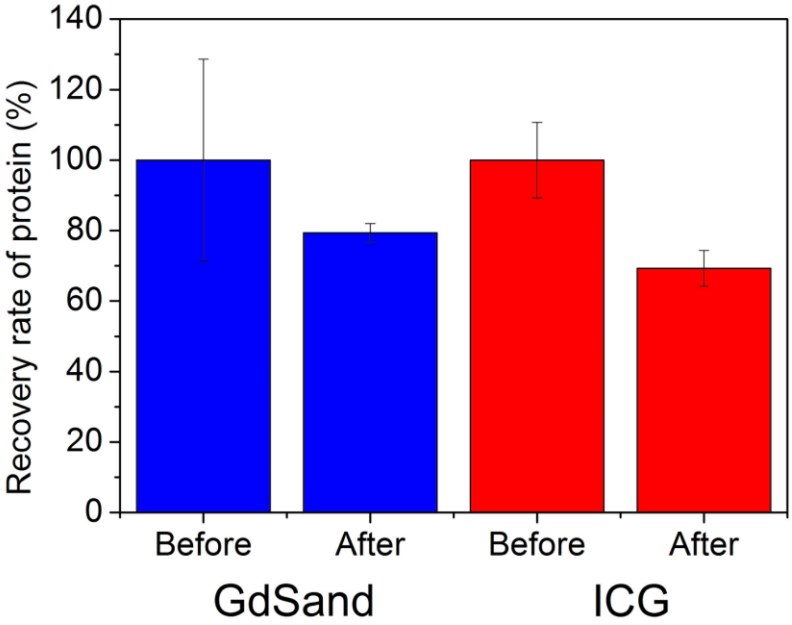

Figure S7. Densitometric analysis of the protein moiety of ***cpHDL*** *from* ***GdSand@cpHDL*** *and* ***ICG@cpHDL*** *before and after irradiation (λ_{ex} = 770 nm, 1500 mW, 20 min).*

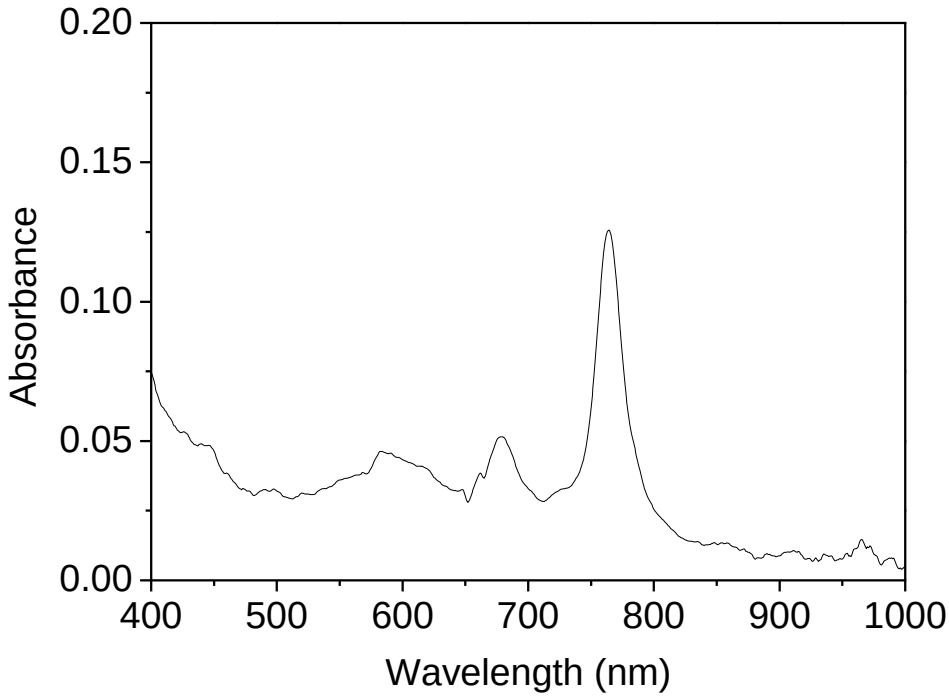

Figure S8. Absorption spectrum of the cell extract in methyl oleate, confirming the presence of ***GdSand****.*