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Supporting Information for

Monitoring the Death of Single BaF3 Cells Under Plasmonic Photothermal Heating Induced by Ultrasmall Goldnanorods

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Toxicity Test for Gold Nanorods

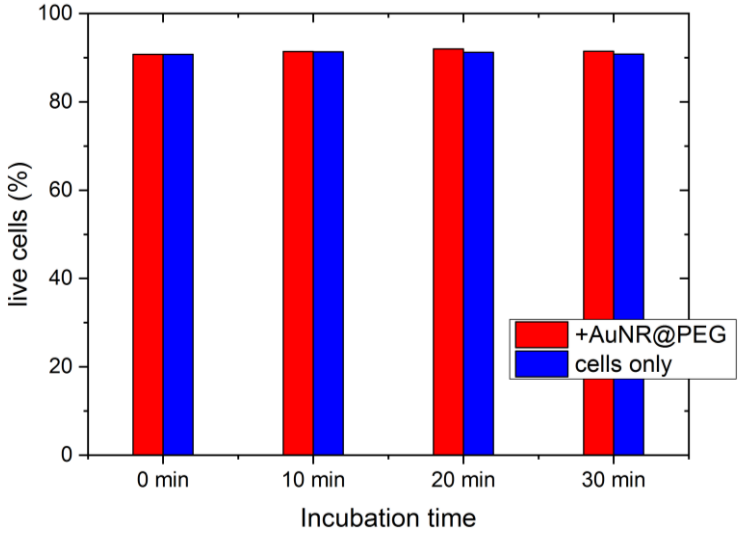
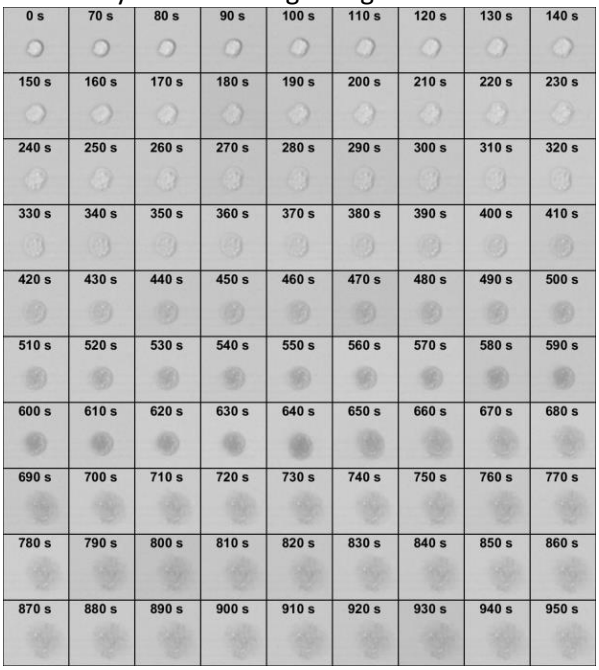


Figure S1: Toxicity test of PEGylated gold nanorods on cells. Cells were incubated with PEGylated gold nanorods (1~nM nanorods, 37°C, 5% CO_2) for up to 30 minutes. Every 10 minutes the cell viability was analyzed via cell exclusion assay using trypan blue. Even after 30 minute incubation with gold nanorods, no decrease in cell viability compared to before the incubation is observed.

Micrographs being the Basis for the Analysis Presented in Figure 4 (a)

PEGylated non-targeted gold nanorods



Aptamer-functionalized, targeted gold nanorods

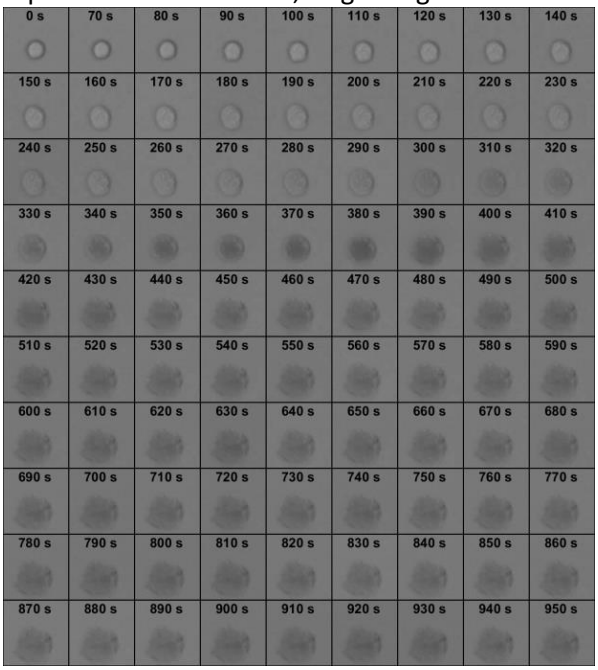


Figure S2: Observation of the plasmonic photothermal effect of non-targeted gold nanorods (left) and targeted gold nanorods (right) on a single cell irradiated at 690~nm with 22Wcm^{-2} for 60 s, after incubation with gold nanorods (1~nM gold nanorodsM, 30 min, 37°C, 5% CO_2).