

Supplementary Information

Targeted Hydrodynamic Gold Nanorods Delivery System based on Gigahertz

Acoustic Streaming

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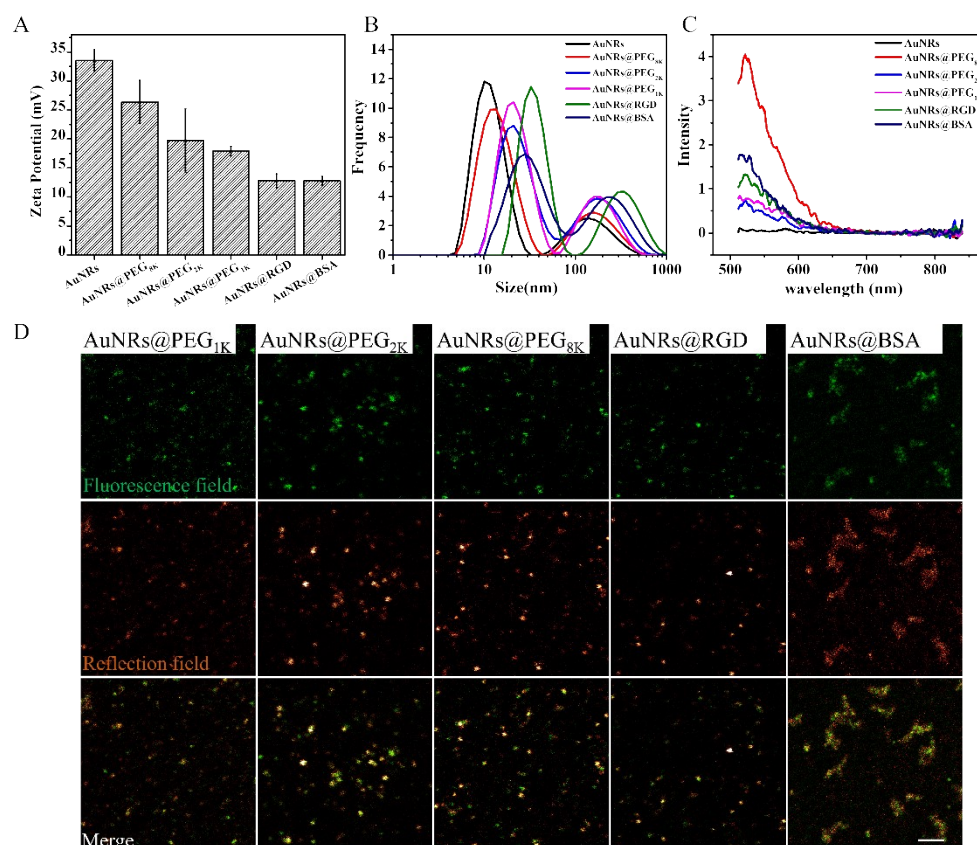


Figure S1 A. Zeta potential of AuNRs with five different modification. B. Quantitative analysis of size measured by dynamic light scattering (DLS) of AuNRs with different molecule modification. C. The fluorescence intensity of AuNRs with different modification. D. The images of AuNRs with different modification in both fluorescence field and reflection field in the same area of the view. Scale bar = 2 μ m

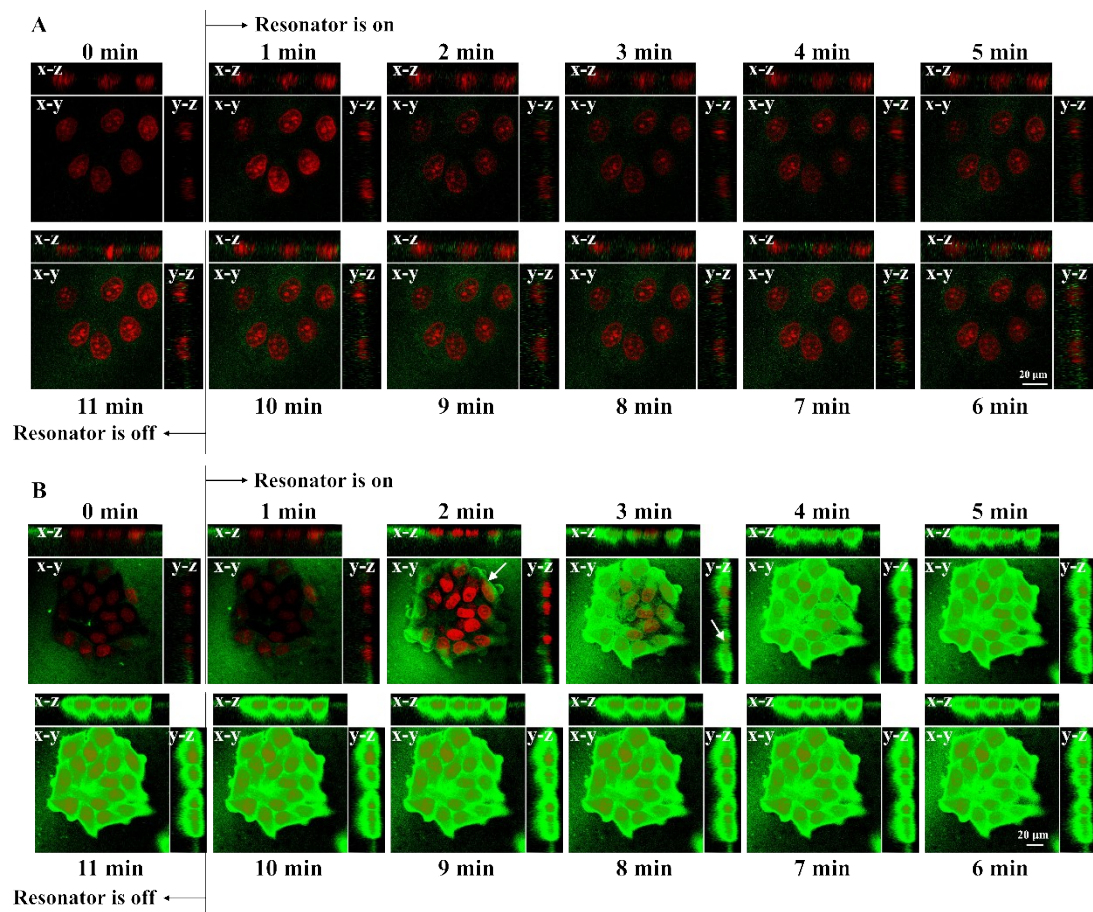


Figure S2 The cellular delivery of AuNRs@PEG_{1K} (A) and AuNRs@RGD (B) at different times with AS stimulation.

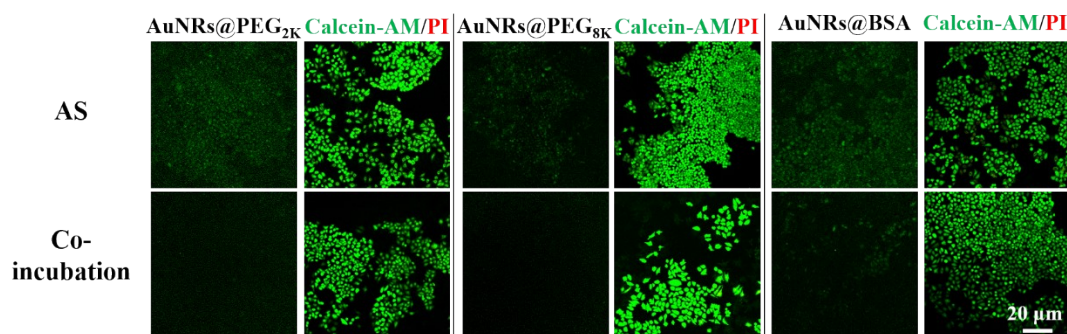


Figure S3 Cell viability test after AuNRs intracellular delivery via AS and co-incubation method. Calcein-AM (green) represents living cells and PI (red) represents dead cells.

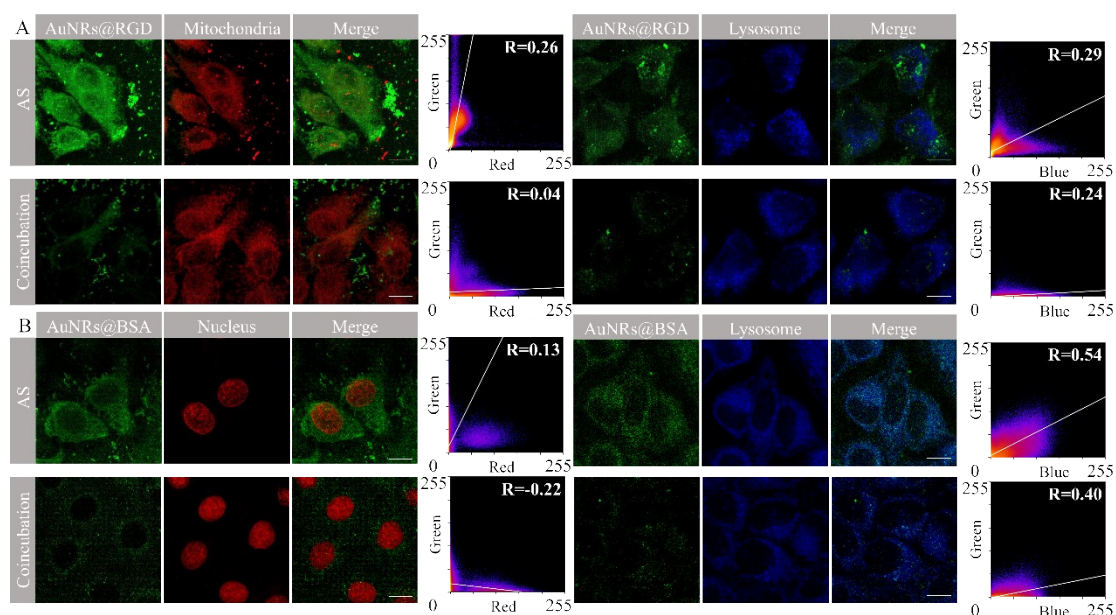


Figure S4 CLSM images and the Pearson's correlation coefficient for intracellular tracking after AuNRs@RGD (A) and AuNRs@BSA (B) delivered with AS and coincubation method. Scale bar = 10 μm

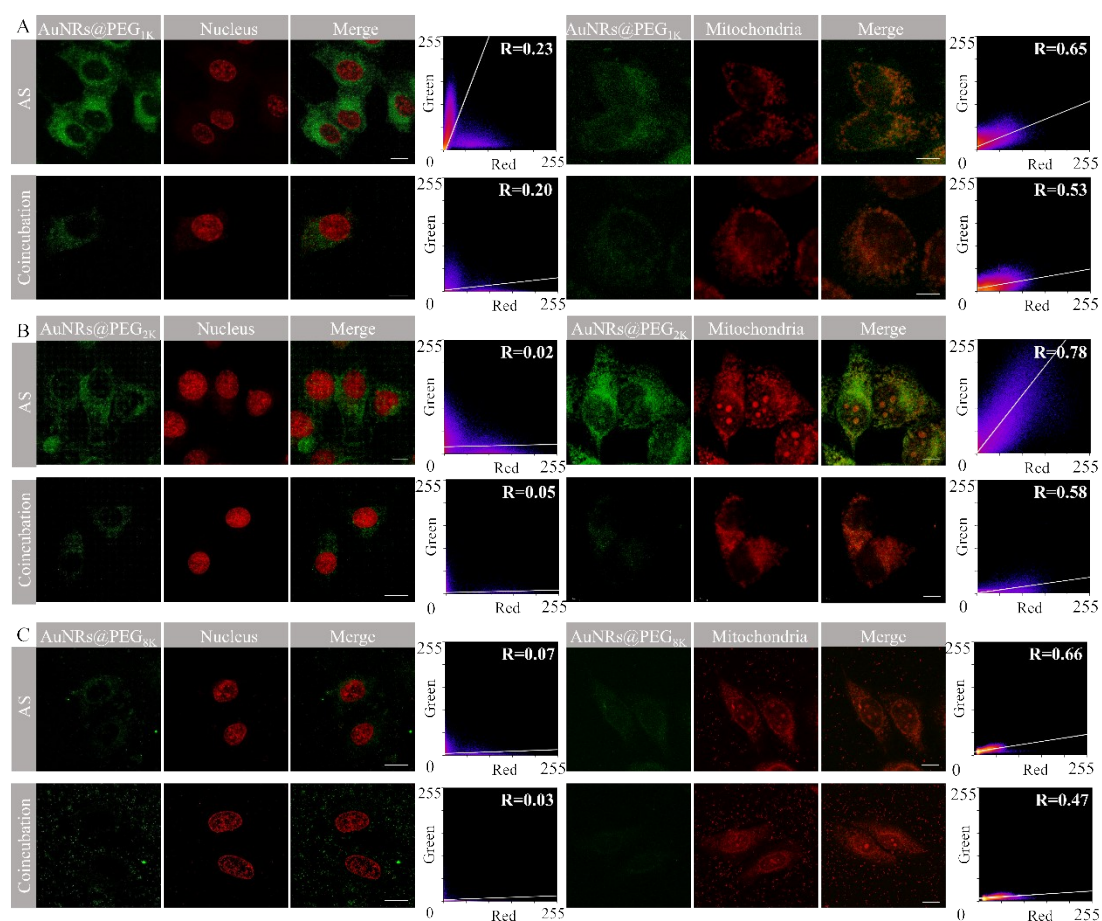


Figure S5 CLSM images and the Pearson's correlation coefficient for intracellular tracking after (A) AuNRs@PEG_{1K}, (B) AuNRs@PEG_{2K} and (C) AuNRs@PEG_{8K} delivered with AS and coincubation method. Scale bar = 10 μm

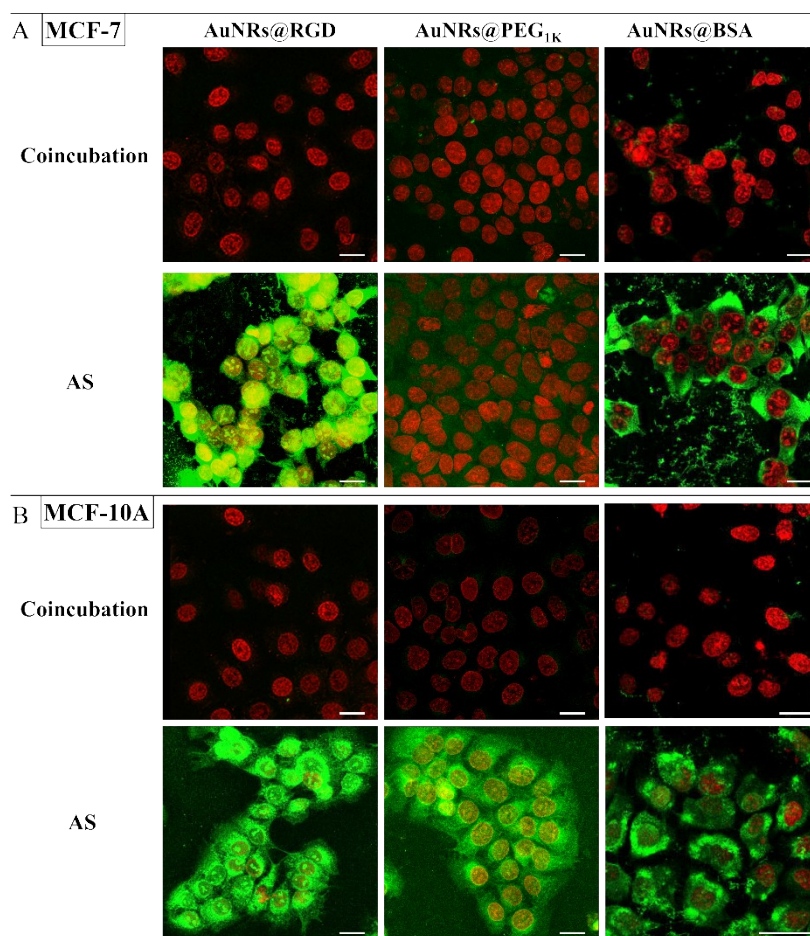


Figure S6 A. AuNRs@RGD, AuNRs@PEG_{1K} and AuNRs@BSA intracellular delivery of MCF-7 cells induced by AS and co-incubation. B. AuNRs@RGD, AuNRs@PEG_{1K} and AuNRs@BSA intracellular delivery of MCF-10A cells induced by AS and co-incubation. Scale bar = 20 μ m

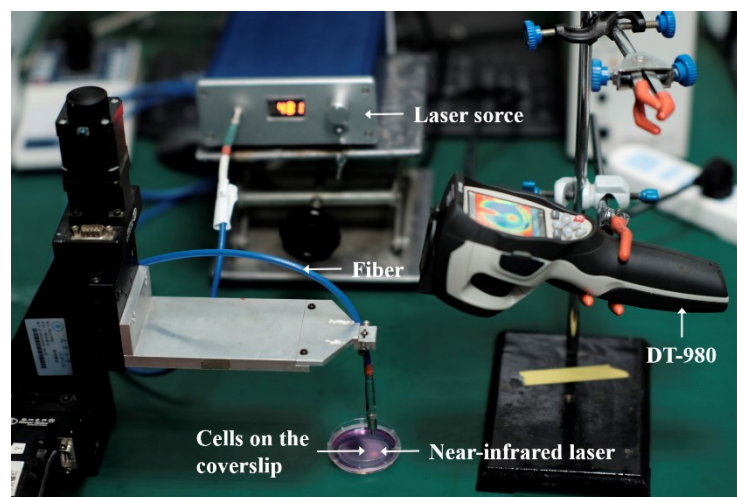


Figure S7 Cells with AuNRs were irradiated with 500 mW near-infrared laser of 785 nm, and the temperature was recorded with DT-980.

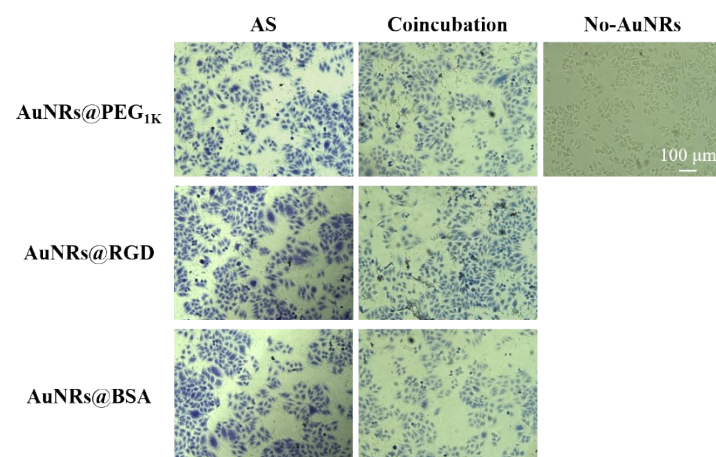


Figure S8 The characterization of cell viability after photothermal therapy via trypan blue.