

## Supplementary Information

# Effectiveness of gold nanorods of different sizes in photothermal therapy to eliminate melanoma and glioblastoma cells.

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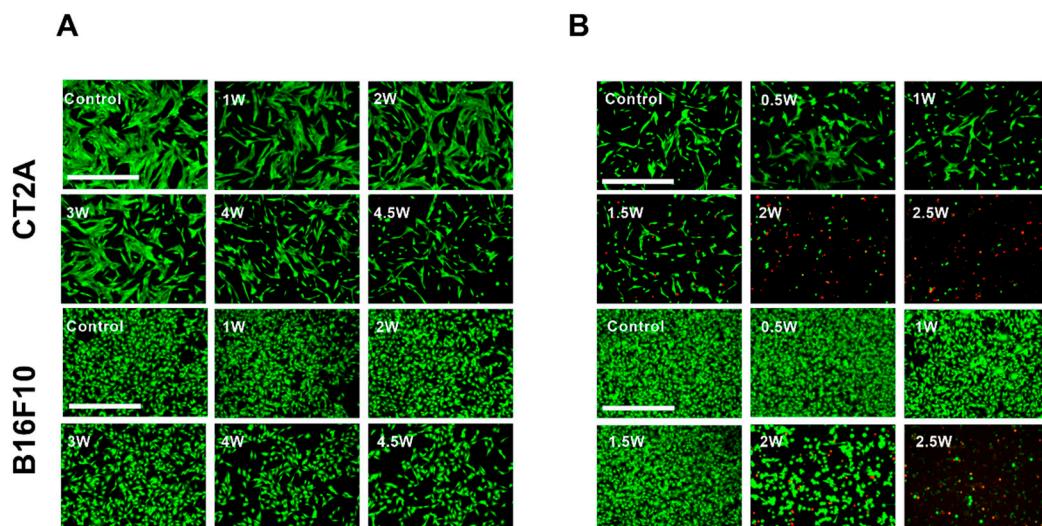
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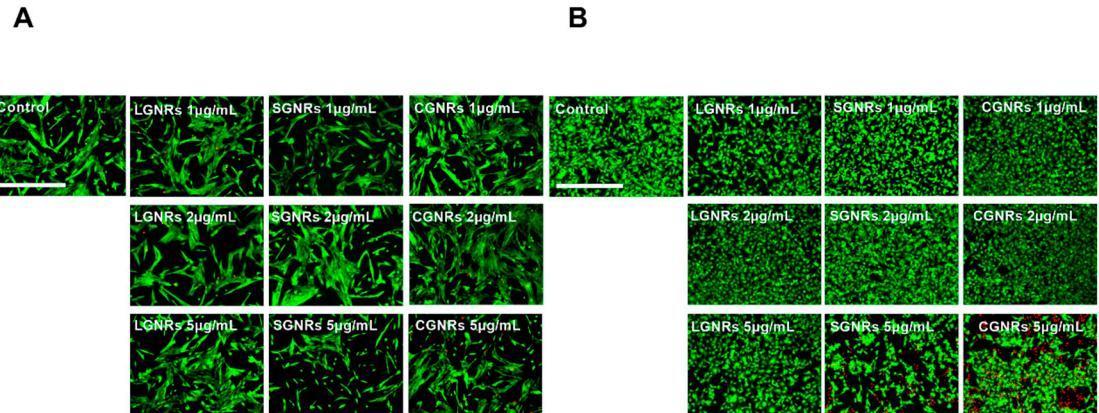
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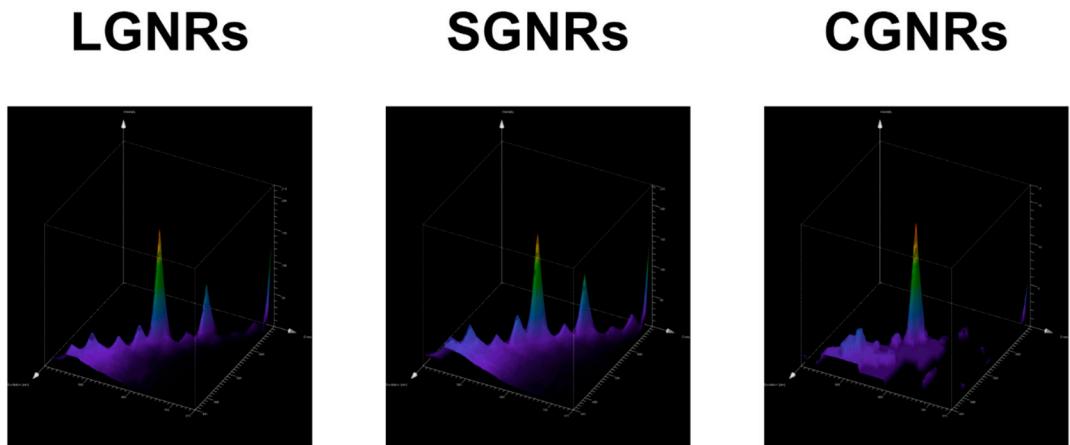
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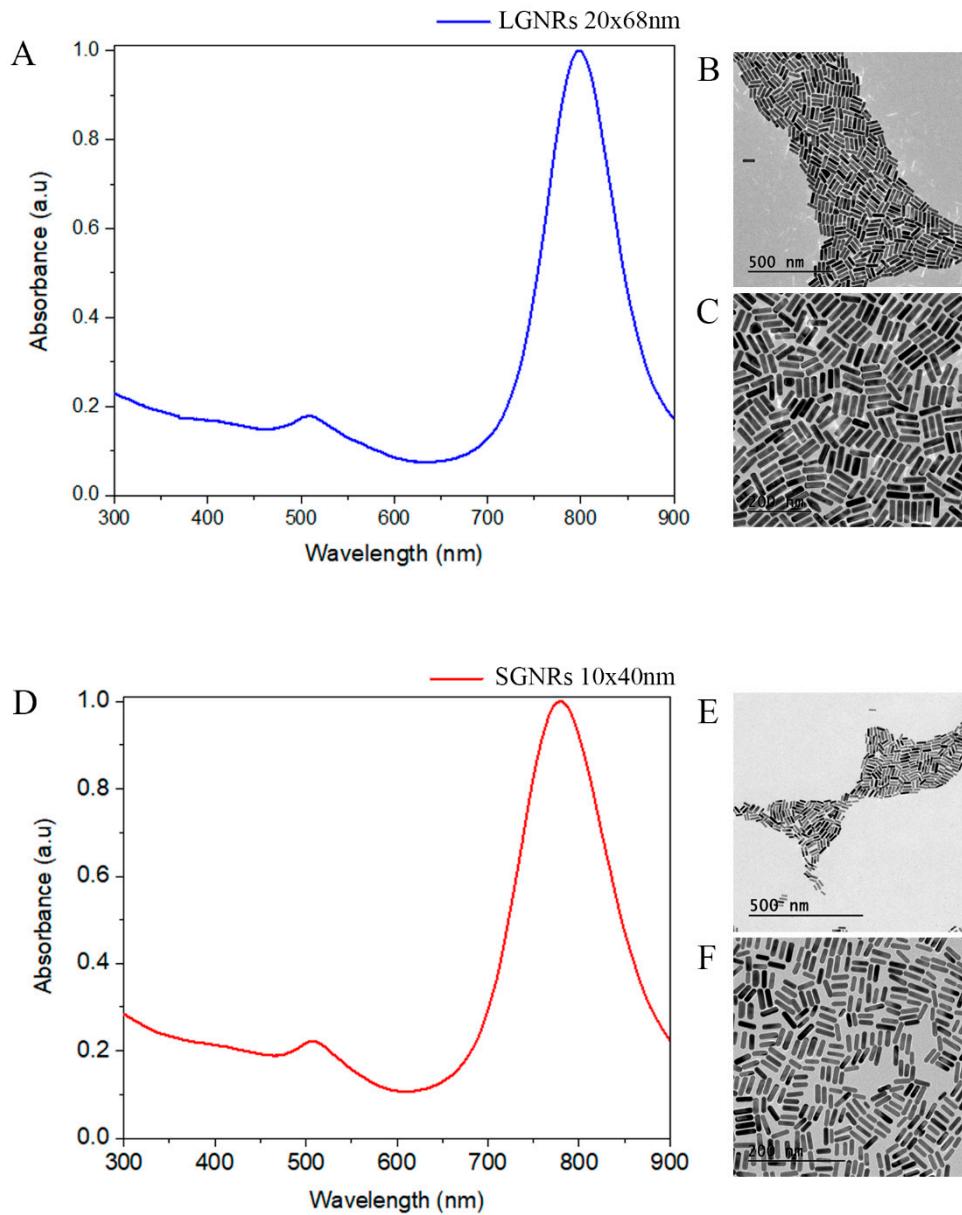
**Supplementary Figure S1.** Viability of CT2A and B16F10 cells evaluated by the calcein/PI assay 24 h after irradiation with an 808 nm laser for 10 min at the indicated powers. Cells were irradiated at RT (A) and at 37 °C (B). Fluorescence microscopy images show living cells in green stained with calcein and dead cells in red stained with PI. Scale bars: 400 μm



**Supplementary Figure S2.** CT2A (A) and B16F10 (B) cell viability determined by the calcein/PI assay after incubation with increasing concentrations of LGNRs, SGNRs and CGNRs for 24 h. Fluorescence microscopy images show living cells in green stained with calcein and dead cells in red stained with PI. Scale bars: 400  $\mu\text{m}$ .



**Supplementary Figure S3.** 3D Autofluorescence emission and excitation profiles of the different GNRs by confocal microscope. All types of GNRs were detected by reflection under excitation with a laser line of 488 nm and by collecting the emission in the 480–500 nm range.



**Supplementary Figure S4.** Peak of absorbance at 808 nm of LGNRs (A) and SGNRs (D). Images TEM of LGNRs (B-C) and SGNRs (E-F) with different magnifications.