

Supplementary data

Controlled Release of Plasmid DNA from Gold Nanorods Induced by Pulsed-Near-Infrared Light

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Gel electrophoresis patterns of PC-NR/DNA complexes before (a) and after (b-f) 15 seconds of the laser irradiation are shown in Fig. S1. Before laser irradiation (a), all plasmid DNA remains in the well. After 100 (a) and 150 (b) mJ/pulse of laser irradiation, no fluorescent bands of migrated DNA can be seen in the gel. When 200, 250, and 300 mJ/pulse of laser light are irradiated onto the PC-NR/DNA complexes respectively (lane d-f), the fluorescent bands can be seen at the same position as that of the supercoiled DNA (ref). This indicates that the plasmid DNA are partially released from the PC-NR/DNA complexes by 15 seconds of the laser irradiation.

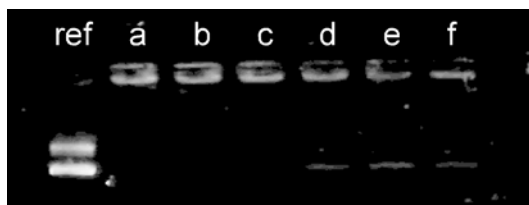


Fig. S1 Agarose gel electrophoresis of plasmid DNA (ref), and PC-NR/DNA complexes before (a) and after (b-f) 15 seconds of laser irradiation. Plasmid DNA was mixed with 1 mM of PC-NR solutions (8 μ L) (“ref” is 0.05 μ g of plasmid DNA without PC-NRs). Laser intensities: (a) 0, (b) 100, (c) 150, (d) 200, (e) 250 and (f) 300 mJ/pulse. PC-NR/DNA complexes were electrophoresed in an agarose gel (1% w/v) and stained with SYBR[®] Green.