

Supporting Information

PEGylated Gold Nanoprisms for Photothermal Therapy at Low Laser Power Density

Xingqun Ma,^a Yuan Cheng,^a Yong Huang,^a Ying Tian,^b Shouju Wang^{*b} and Yingxia Chen^{*a}

a. PLA Cancer Center of Nanjing Bayi Hospital, Nanjing 210002, China

b. Department of Medical Imaging, Jinling Hospital, School of Medicine, Nanjing University, Nanjing 210002, China

*Corresponding authors:

Yingxia Chen, M.D.

PLA Cancer Center of Nanjing Bayi Hospital, Nanjing 210002, China

E-mail: chenyingxiacsco@163.com

Shouju Wang, M.D.

Department of Medical Imaging, Jinling Hospital, School of Medicine, Nanjing University, Nanjing 210002, China

E-mail: shouju.wang@gmail.com

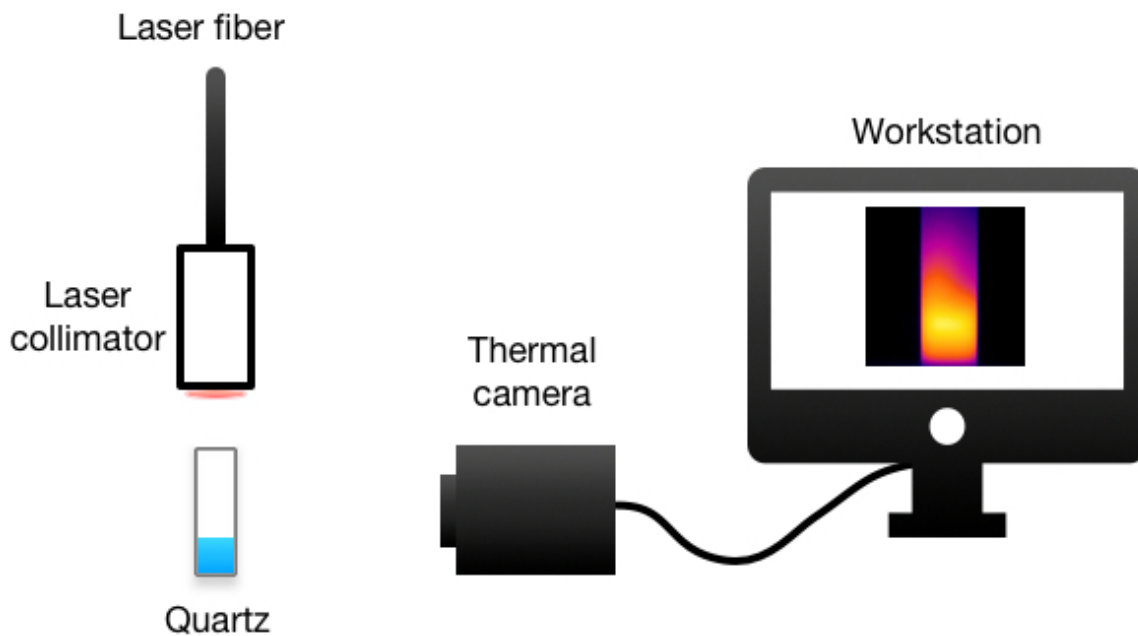


Figure S1. A schematic representation of the laser setup and temperature measurement. The volume of GNPs solutions is 1 mL. The wavelength and power density of the laser is 650 ± 10 nm and 2 W cm^{-2} .

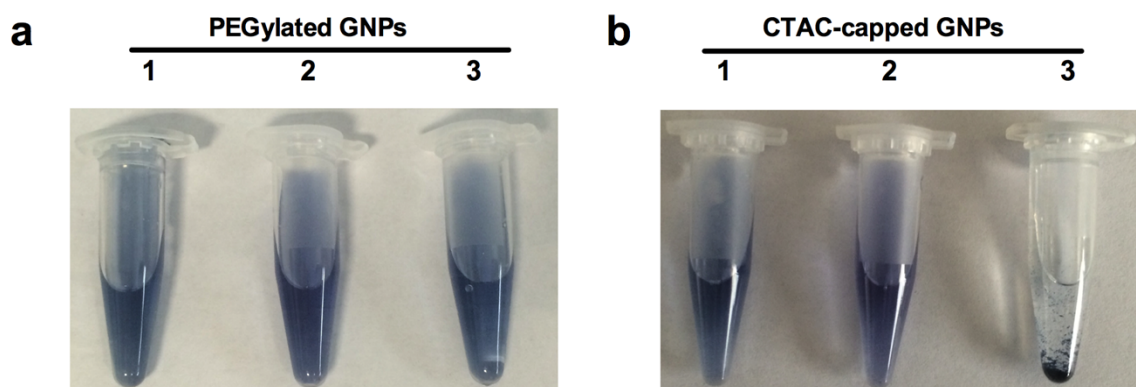


Figure S2. (a) Digital photos of PEGylated GNPs dispersed in (1) water, (2) PBS, (3) DMEM without phenol red after 24 h. (b) Digital photos of CTAC-capped GNPs dispersed in (1) water, (2) PBS, (3) DMEM without phenol red after 24 h.

Table S1. Photothermal conversion efficacy of GNPs comparing with other types of gold nanostructures.

Gold nanostructures	Photothermal conversion efficacy	Reference
Gold nanorods	22%	[15]
Gold nanoshells	13%	[24]
Gold nanocages	63%	[25]
Gold hexapods	29.6%	[25]
Gold bellflowers	74%	[3]
Gold nanoprisms	70%	This study