

# Synergistic Effect of Folate and RGD Dual Ligand of Nanographene Oxide On Tumor Targeting and Photothermal Therapy In Vivo

Cheol Jang<sup>†</sup>, Jong Hyun Lee<sup>†</sup>, Abhishek Sahu and Giyoong Tae\*

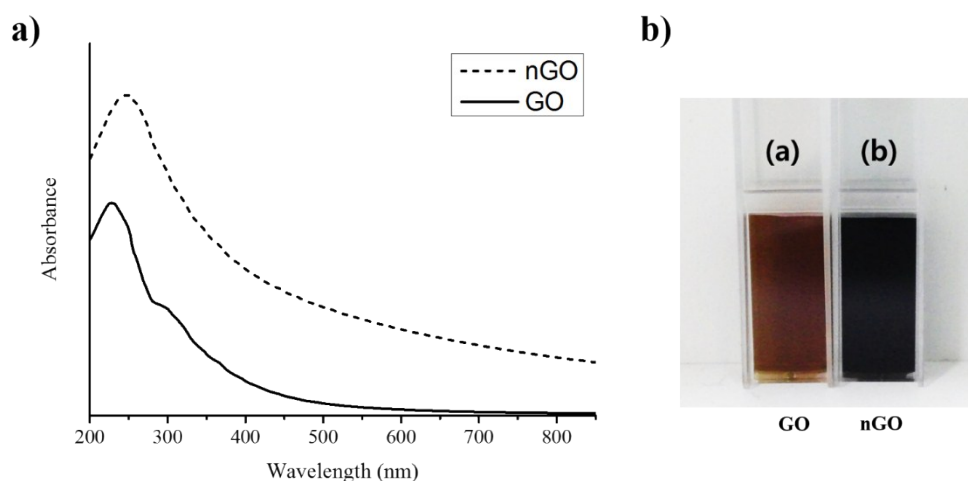
<sup>†</sup>Both authors contributed equally

\*Corresponding author, e-mail: [gytae@gist.ac.kr](mailto:gytae@gist.ac.kr)

School of Materials Science and Engineering, Gwangju Institute of Science and Technology,  
261 Cheomdan-gwagiro, Buk-gu, Gwangju 500-712, Republic of Korea

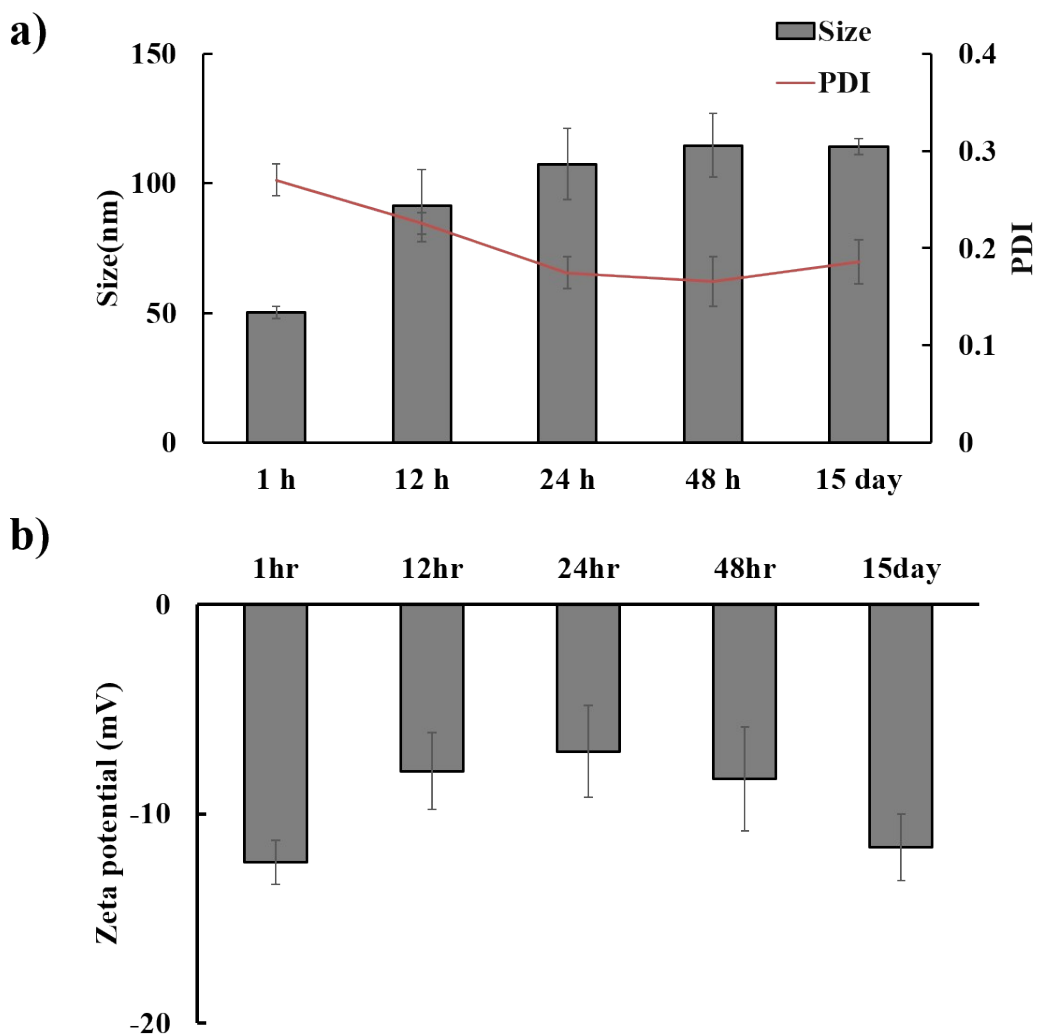
## Supplementary figure 1.

a) UV-Vis spectra of GO and nGO. b) Photograph of GO and nGO (1mg/ml)



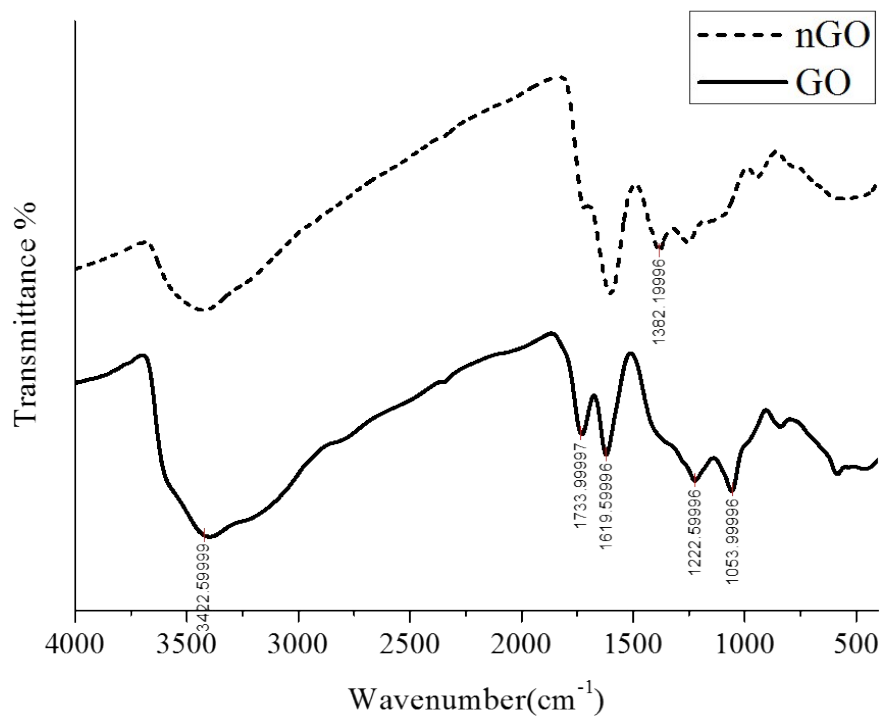
### Supplementary figure 2.

Long term stability of dual ligand functionalized cRGD-FA-nGO in serum containing cell culture media (DMEM + 10% FBS) at several time points (n = 3). Samples were maintained in shaking incubator at 37°C. Change of (a) hydrodynamic size and (b) zeta potential were measured by DLS at 37°C.



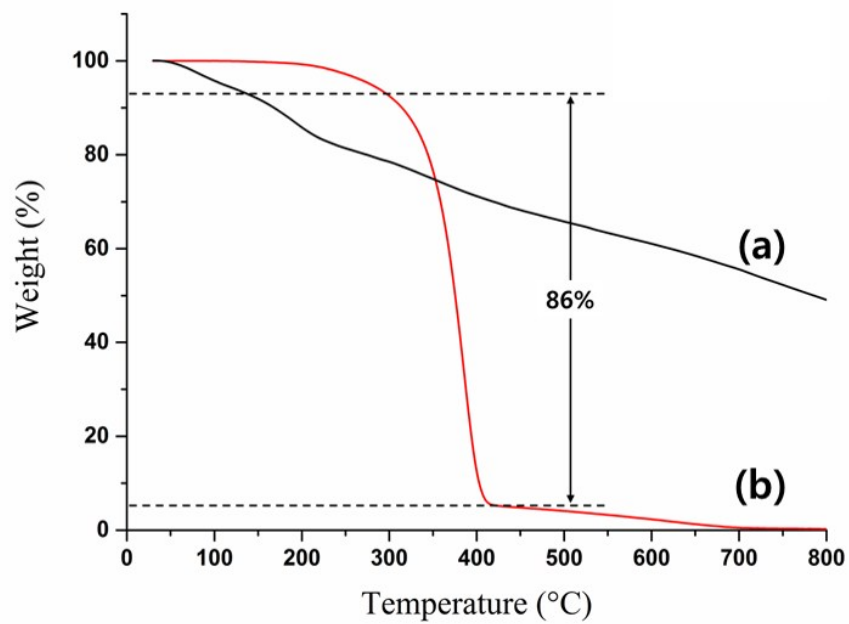
### Supplementary figure 3.

FTIR spectra of (a) GO and (b) nGO. Freeze dried samples (1wt%) were prepared in KBr pellet.



**Supplementary figure 4.**

TGA curves of (a) nGO and (b) PF-nGO. 5mg of freeze dried samples were heated from 30°C to 800°C at scanning rate of 5°C/min in N<sub>2</sub> atmosphere.



### Supplementary figure 5.

Body weight changes after photothermal therapy

