

Supporting Information

Dual-modal imaging guided highly efficient photothermal therapy using heptamethine cyanine-conjugated hyaluronic acid micelles†

Sanpeng Li,^{‡a,b} Zhihong Sun,^{‡a} Guanjun Deng,^{a,b} Xiaoqing Meng,^{a,b} Wenjun Li,^a Dapeng Ni,^{a,b} Jiali Zhang,^{a,b} Ping Gong^{*a,c} and Lintao Cai^{*a}

^aGuangdong Key Laboratory of Nanomedicine, CAS Key Lab for Health Informatics, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen 518055, P. R. China.

^bUniversity of Chinese Academy of Sciences, Beijing 100049, P. R. China.

^cState Key Laboratory of Chemo/Biosensing and Chemometrics, Hunan University, Changsha 410082, P. R. China.

E-mail: lt.cai@siat.ac.cn; ping.gong@siat.ac.cn; Tel: +86-755-86392210

†These authors contributed equally to this work.

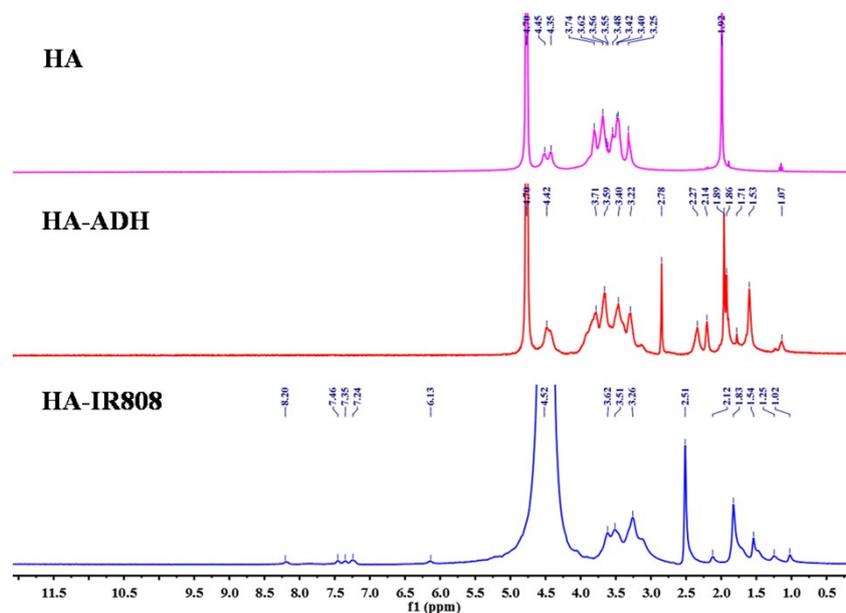


Fig. S1 ¹H-NMR spectrum of HA, HA-ADH and HA-IR808

FT-IR

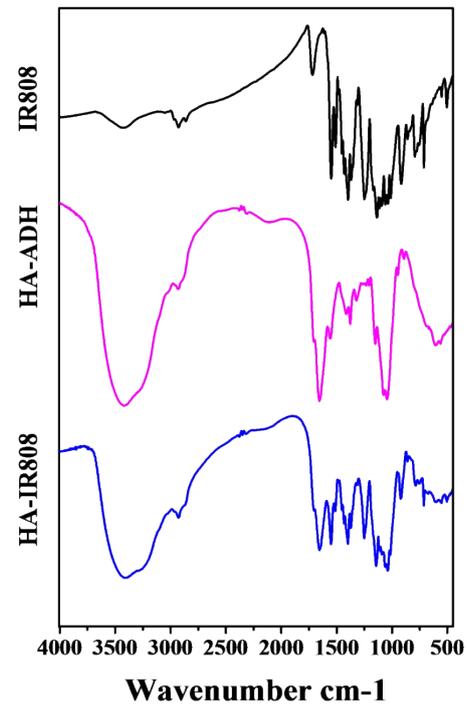


Fig. S2 FT-IR spectrum of HA, HA-ADH and HA-IR808

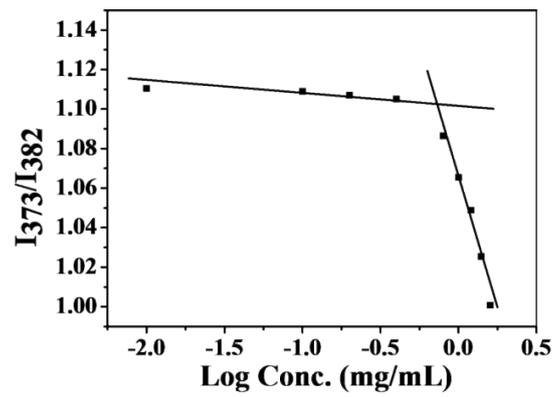


Fig. S3 The critical micelle concentration (cmc) of HAIR nanoparticles

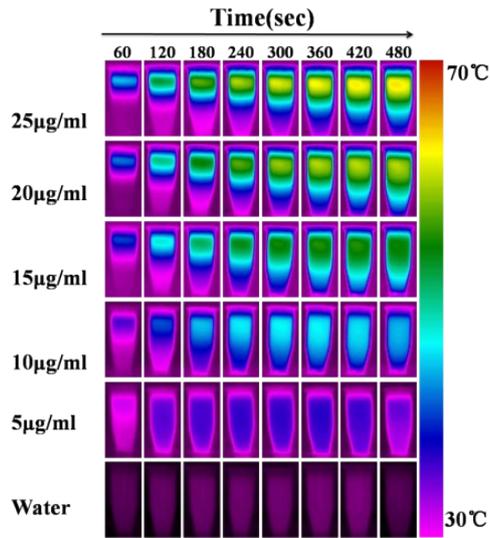


Fig. S4 Real-time thermal image of HAIR NPs and water at various concentrations with a 808nm laser irradiation (8min, 0.8W/cm²).

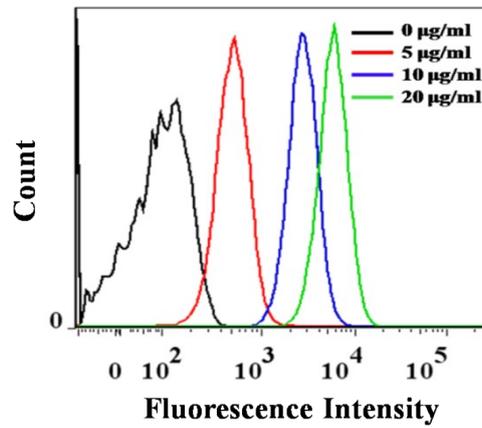


Fig. S5 Flow cytometry analysis uptake of A549 incubated with various concentration of HAIR NPs.

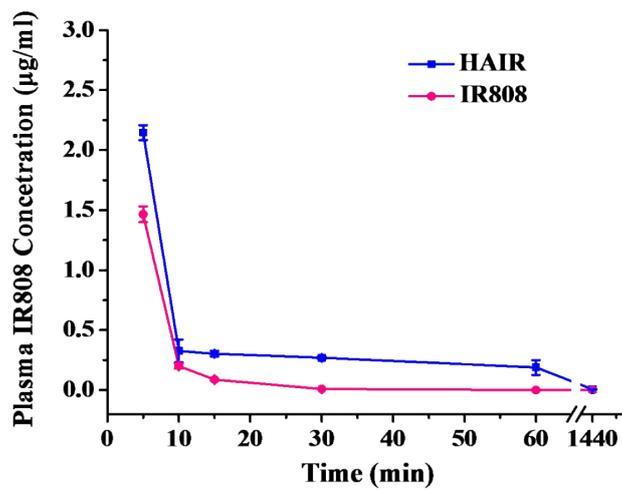


Fig. S6 The pharmacokinetic parameters of HAIR NPs *in vivo*.

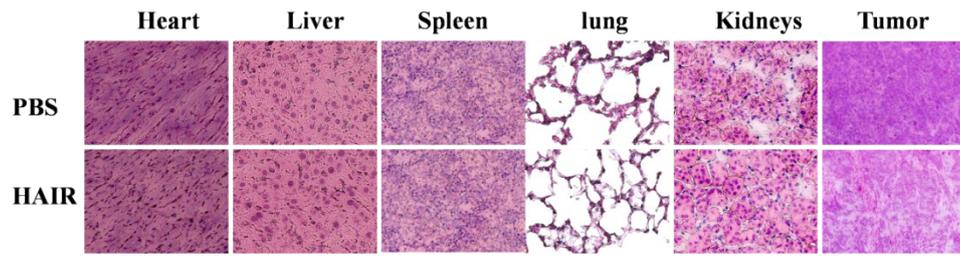


Fig. S7 H & E staining images of the major organs and tumor collected from the group treated by laser.