

Electronic Supplementary Material (ESI) for Nanoscale.
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Electronic Supplementary Information

AuGd Integrated Nanoprobe for Optical/MRI/CT Triple-modal In Vivo Tumor Imaging

Chao Xu^{a,b}, Yaling Wang^{b,*}, Chunyu Zhang^b, Yanwei Jia,^c Yunjing Luo^{a,*} and Xueyun Gao^{b,*}

^aCollege of Life Science and Bioengineering, Beijing University of Technology, 100124, China.

luoyj@bjut.edu.cn; Tel: +86-10-67391667

^bKey Laboratory for Biomedical Effects of Nanomaterials and Nanosafety, Institute of High Energy Physics, Chinese Academy of Sciences, Beijing 100049, China. E-mail:

wangyaling@ihep.ac.cn, gaoxy@ihep.ac.cn; Tel: +86-10-88236709

^cState-Key Laboratory of Analog and Mixed-Signal VLSI, University of Macau, Macau, China

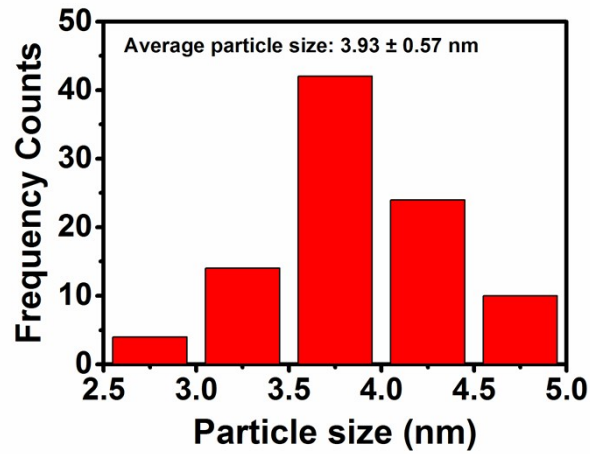


Fig. S1. The TEM statistics for AuGds diameter (100 particles were measured to determine the average diameter).

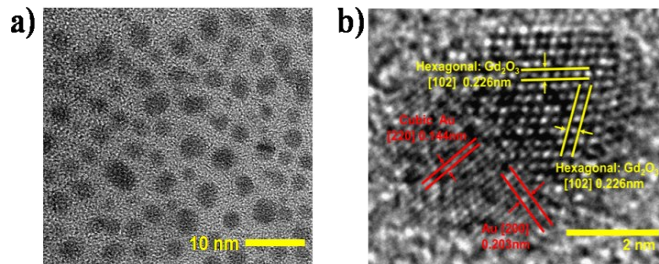


Fig. S2. (a) The high resolution-TEM images of the AuGds. (b) The crystalline image of the typical AuGds.

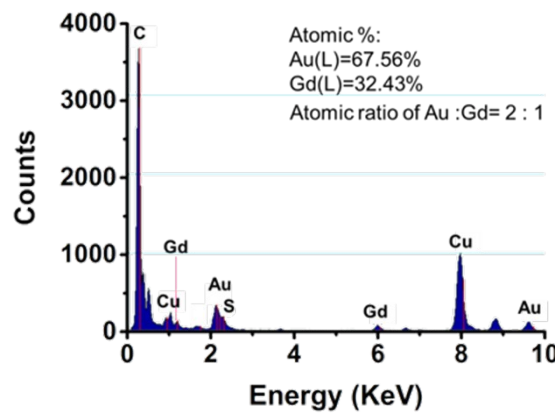


Fig. S3.The EDS spectral analyses of the AuGds.

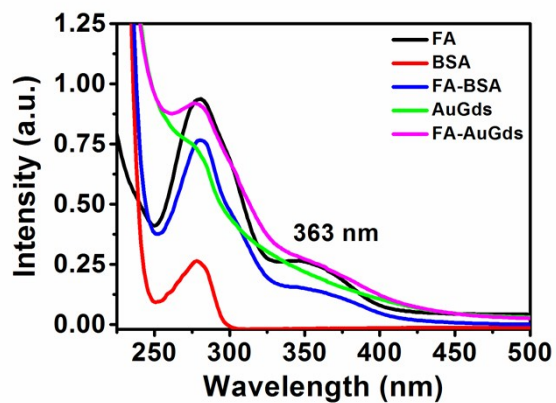


Fig. S4. The UV-vis absorption spectra of FA (black line), BSA (red line), FA-BSA solution (blue line), AuGds (green line) and FA-AuGds (magenta line) with the same protein concentration which is 0.52 mg/ml.

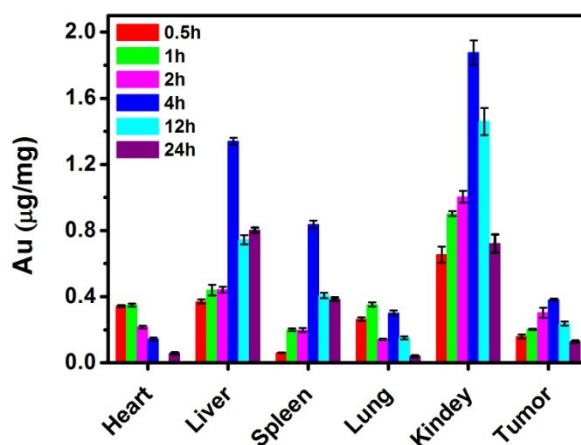


Fig. S5. Time-dependent biodistribution profiles of FA-AuGds in KB-tumor bearing mice (n=4).

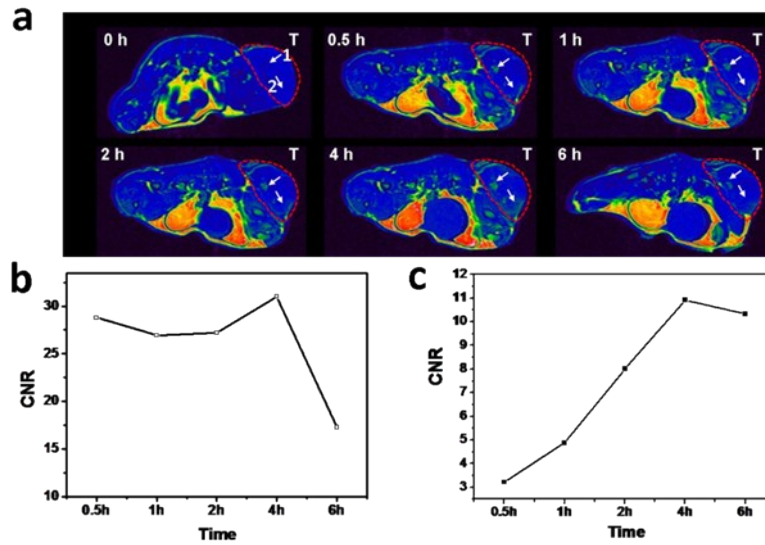


Fig. S6. (a) the transverse plane of the T_1 -weighted tumor MR images at 7 T of KB tumor-bearing mice at 0, 0.5, 1, 2, 4, 6 h after the tail intravenous injection FA-AuGds. The corresponding change of Contrast-Noise Ratio (CNR) with the time for (b) region 1 and (c) region 2. The red dashed curve marks the boundaries of the tumor (T).

The Contrast-Noise Ratio (CNR) was calculated with the following equation: The Contrast-Noise Ratio (CNR) = $((T_{\text{sample}} - T_{\text{background}}) - T_{\text{control}}) / S_{\text{background}}$ Where the T_{sample} , $T_{\text{background}}$, T_{control} , $S_{\text{background}}$ are the signal intensity value of T_1 weighted images of the choose region of tumor, the signal intensity value of T_1 weighted images of the background, The signal intensity value of T_1 weighted images of the control (the same mouse without injecting NCs) in the same region, standard deviation of the background, respectively.