

Supporting Information

Cu-Au alloy nanostructures coated with aptamers: a facile, stable and highly-effective platform for *in vivo* cancer theranostics

*Xiaosheng Ye, Hui Shi,[‡] Xiaoxiao He, Yanru Yu, Dinggeng He, Jinlu Tang, Yanli Lei and Kemin Wang**

State Key Laboratory of Chemo/Biosensing and Chemometrics, College of Chemistry and Chemical Engineering, College of Biology, Key Laboratory for Bio-Nanotechnology and Molecular Engineering of Hunan Province, Hunan University, Changsha 410082, P. R. China.

Table S1. List of the DNA sequences used in the experiments.

DNA	Sequence
Cy5-Sgc8c-SH	5'-ATC TAA CTG CTG CGC CGC CGG GAA AAT-Cy5-ACT GTA CGG TTA GA (T) ₁₅ -SH-3'
Cy5-Lib-SH	5'-(NNN) ₈ NNT-Cy5-(NNN) ₄ NN-(T) ₁₅ -SH-3'

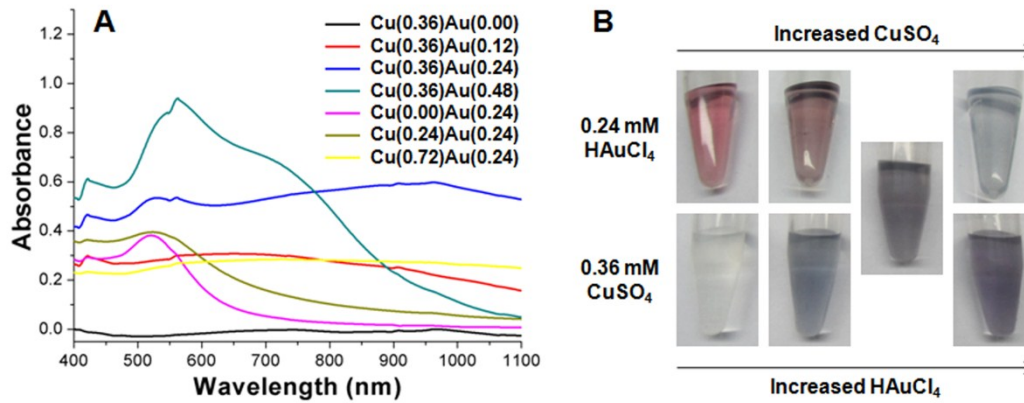


Figure S1. Optimization of the concentrations of CuSO_4 and HAuCl_4 for preparing Cu-Au alloy nanostructures. (A) Extinction spectra of Cu-Au alloy nanostructures prepared under different concentrations (mM) of CuSO_4 and HAuCl_4 . (B) The corresponding photographs showing the color variation of Cu-Au alloy nanostructures prepared with different concentrations of CuSO_4 and HAuCl_4 .

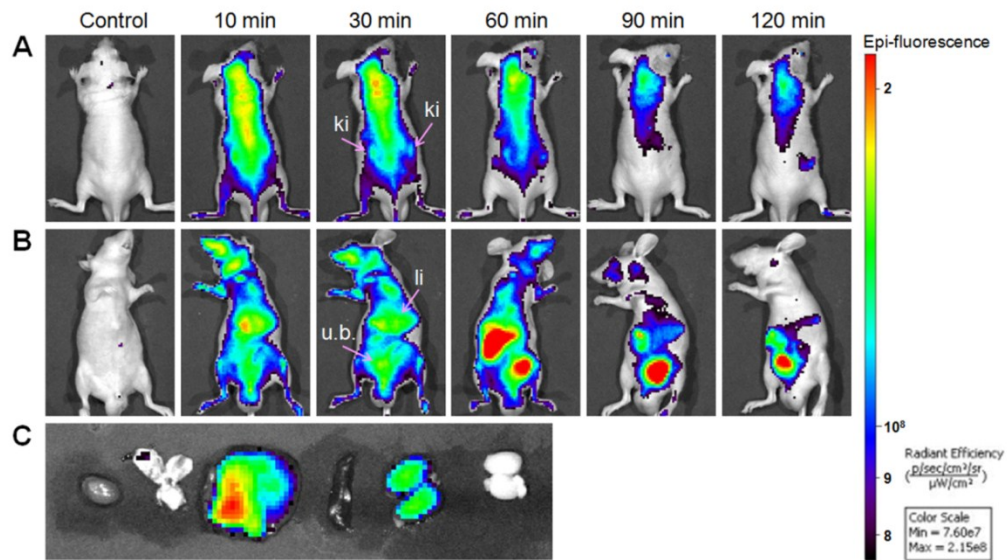


Figure S2. Time-lapse *in vivo* fluorescence imaging of Cy5-Sgc8c-coated Cu-Au alloy nanostructures in a normal nude mouse without tumors through an intravenous injection. (A) Backside imaging. (B) Abdomen imaging. (C) Image of some resected organs of a normal nude mouse without tumors after intravenous injection of Cy5-Sgc8c-coated Cu-Au alloy nanostructures for 120 min. From left to right: heart, lung, liver, spleen, kidney, spermary. (li=liver; ki=kidney; u.b.=urinary bladder.)