Supporting Information

Folic acid-conjugated silica-coated gold nanorods and quantum dots for dual-modality CT and fluorescence imaging and photothermal therapy

Hong-Xing Xia[§], Xiao-Quan Yang[§], Ji-Tao Song, Jun Chen, Ming-Zhen Zhang, Dong-Mei Yan, Lin Zhang, Meng-Yao Qin, Ling-Yu Bai, Yuan-Di Zhao*, Zhi-Ya Ma*

Britton Chance Center for Biomedical Photonics at Wuhan National Laboratory for Optoelectronics-Hubei Bioinformatics & Molecular Imaging Key Laboratory, Department of Biomedical Engineering, College of Life Science and Technology, Huazhong University of Science and Technology, Wuhan 430074, P. R. China.



Fig. S1 FTIR spectra of $GNRs@SiO_2$ (a), $GNRs@SiO_2@QDs$ (b), $GNRs@SiO_2@QDs$ -FA (c) and FA (d).



Fig. S2 Fluorescence spectra of (a) QDs, (b) GNRs@SiO₂@QDs in ethanol excited at 480 nm. Inset shows the digital photograph of GNRs@SiO₂@QDs illuminated by 365 nm UV-light.



Fig. S3 Fluorescence spectra of GNRs@SiO₂@QDs at various concentrations (0.025, 0.05, 0.1, 0.2, 0.3, 0.4 mg Au/mL). Inset shows the fluorescence intensity of various concentrations of GNR@QDs@SiO₂ at 620nm.



Fig. S4 Photostability comparison of GNRs@SiO2@QDs-FA to FITC



Fig. S5 The numbers of cell colonies treated with various concentrations of $GNRs@SiO_2@QDs-FA$ (0-300 µg Au/mL). Results are shown as colonies per 400 cells plated (n=3, mean±S.D). Student's t test demonstrated no significance difference between control and NPs treated groups.



Fig. S6 Bright-field, confocal fluorescence and merged images of HeLa cells which were cultured with FA first and then treated with GNRs@SiO₂@QDs-FA.