

Supplementary information

Transferrin-coated magnetic upconversion nanoparticles for efficient photodynamic therapy with near-infrared irradiation and luminescence bioimaging

Dan Wang,^{a,c} Lin Zhu,^b Yuan Pu,^{*a,d} Jie-Xin Wang,^{a,d} Jian-Feng Chen,^{a,d} and Liming Dai^{*c}

^a Beijing Advanced Innovation Center for Soft Matter Science and Engineering, State Key Laboratory of Organic-Inorganic Composites, Beijing University of Chemical Technology, Beijing 100029, China.

^b Institute of Advanced Materials for Nano-bio Applications, School of Ophthalmology and Optometry, Wenzhou Medical University, 270 Xueyuan Xi Road, Wenzhou, Zhejiang, China.

^c Center of Advanced Science and Engineering for Carbon (Case4Carbon), Department of Macromolecular Science and Engineering, Case Western Reserve University, Cleveland, OH 44106, USA.

^d Research Center of the Ministry of Education for High Gravity Engineering and Technology, Beijing University of Chemical Technology, Beijing 100029, China

*Correspondence should be addressed to Y. Pu (puyuan@mail.buct.edu.cn), and L. Dai. (liming.dai@case.edu).

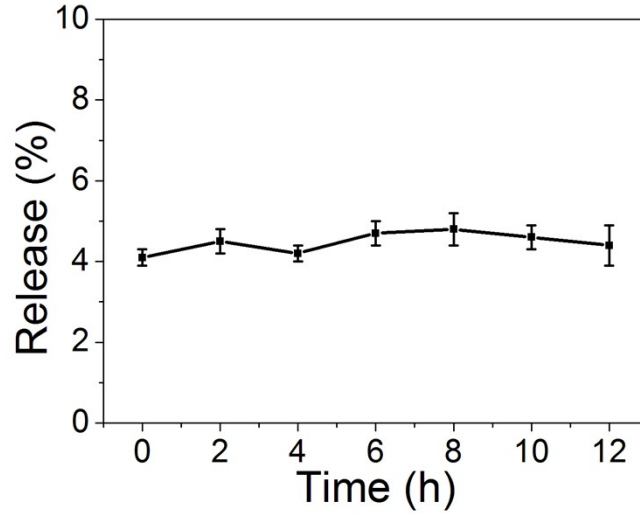


Figure S1. Release kinetics of UCNP@TRF-PpIX nanoparticles in 1% Tween-20 suspension at 37 °C.

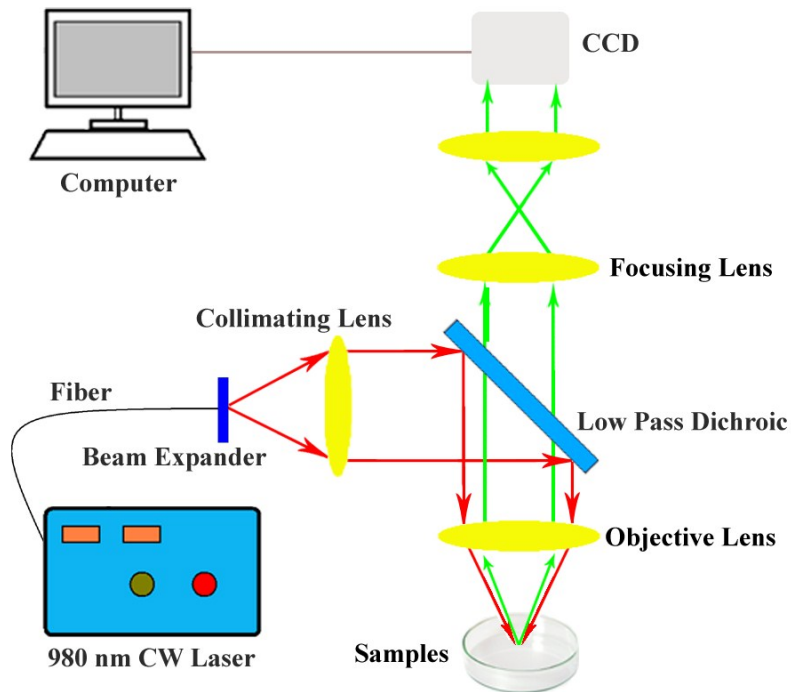


Figure S2. Upconversion luminescence imaging system.

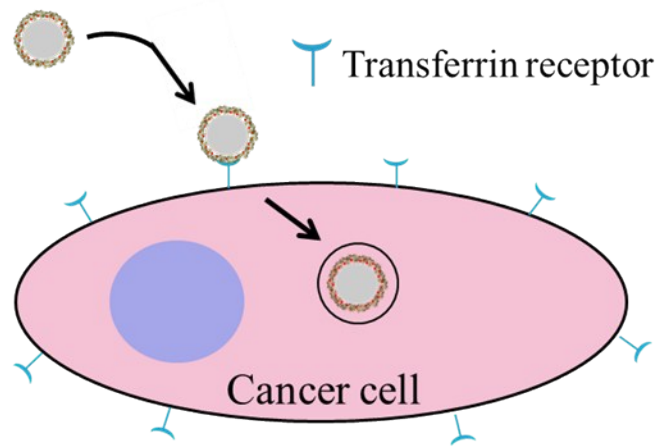


Figure S3. A schematic illustration of cellular uptake of the UCNP@TRF nanoparticles.