Supplementary Information

Multi-stable fluorescent silica nanoparticles obtained from in situ doping with

aggregation-induced emission molecules

Yi-Feng Wang^{a1}, Jing Che^{ab1}, Yong-Chao Zheng^c, Yuan-Yuan Zhao^a*, Fei Chen^a, Shu-Bin Jin^a, Ning-Qiang Gong^a, Jing Xu^a, Zhong-Bo Hu^b, Xing-Jie Liang^a*

a. CAS Key Laboratory for Biological Effects of Nanomaterials & Nanosafety, National Center for Nanoscience and Technology of China, Beijing 100190, People's Republic of China.

- b. College of Materials Science and Opto-Electronic Technology, University of Chinese Academy of Sciences, Beijing 100049, People's Republic of China.
- c. Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing 100190, People's Republic of China.
- 1 These authors contributed equally to this work.
- * Corresponding authors. liangxj@nanoctr.cn, zhaoyuanyuan@nanoctr.cn.



Figure S1. Infrared spectra of CWQ-11, SiO₂ NPs and CWQ-11@SiO₂ NPs.



Figure S2. Fluorescence spectra of a. CWQ-11 and b. CWQ-11@SiO₂ NPs under different viscosities.



Figure S3. Fluorescence spectra of a. CWQ-11 and b. CWQ-11@SiO₂ NPs in different pH solutions.



Figure S4. Relative FL intensities of TPE@SiO₂ NPs and TPE under continuous excitations for 1 h.



Figure S5. Fluorescence spectra of a. TPE and b. TPE@SiO₂ NPs under different viscosities. c. Relative FL intensities of TPE and TPE@SiO₂ NPs under different viscosities.



Figure S6. Fluorescence spectra of a. TPE and b. TPE@SiO₂ NPs in different pH solutions. c. Relative FL intensities of TPE and TPE@SiO₂ NPs in different pH solutions.



Figure S7. Fluorescence spectra of CWQ-11, CWQ-11@SiO₂ NPs and FITC in SGF and PBS solutions.



Figure S8. Fluorescence images of mice treated with CWQ-11@SiO₂ NPs by a. gavage administration and b. intratumoral injection (Saline as control).