

Supplementary Materials

Chelator-Free Copper-64-Incorporated Iron Oxide Nanoparticles for PET/MR Imaging: Improved Radiocopper Stability and Cell Viability

Hye Min Jang ^{1,2}, Myung Hwan Jung ¹, Jae Sang Lee ¹, Jun Sig Lee ³, In-Cheol Lim ³, Hyunsik Im ², Sang Wook Kim ⁴, Sung-A Kang ⁵, Won-Je Cho ^{1,*} and Jun Kue Park ^{1,*}

1 Korea Multi-Purpose Accelerator Complex, Korea Atomic Energy Research Institute, 181 Mirae-ro, Gyeongju 38180, Korea

2 Division of Physics and Semiconductor Science, Dongguk University, Seoul 04620, Korea

3 Korea Atomic Energy Research Institute, Daedeok-daero 989, Daejeon 34057, Korea

4 Department of Advanced Materials Chemistry, Dongguk University, Gyeongju 38066, Korea

5 Advanced Bio Convergence, Pohang Technopark, Pohang 37668, Korea

* Correspondence: wonje59@kaeri.re.kr (W.-J.C.); jkuepark@kaeri.re.kr (J.K.P.)

X-ray photoelectron spectroscopy (XPS) results of IO@SiO₂ and Cu-IO@SiO₂ nanoparticles (NPs)

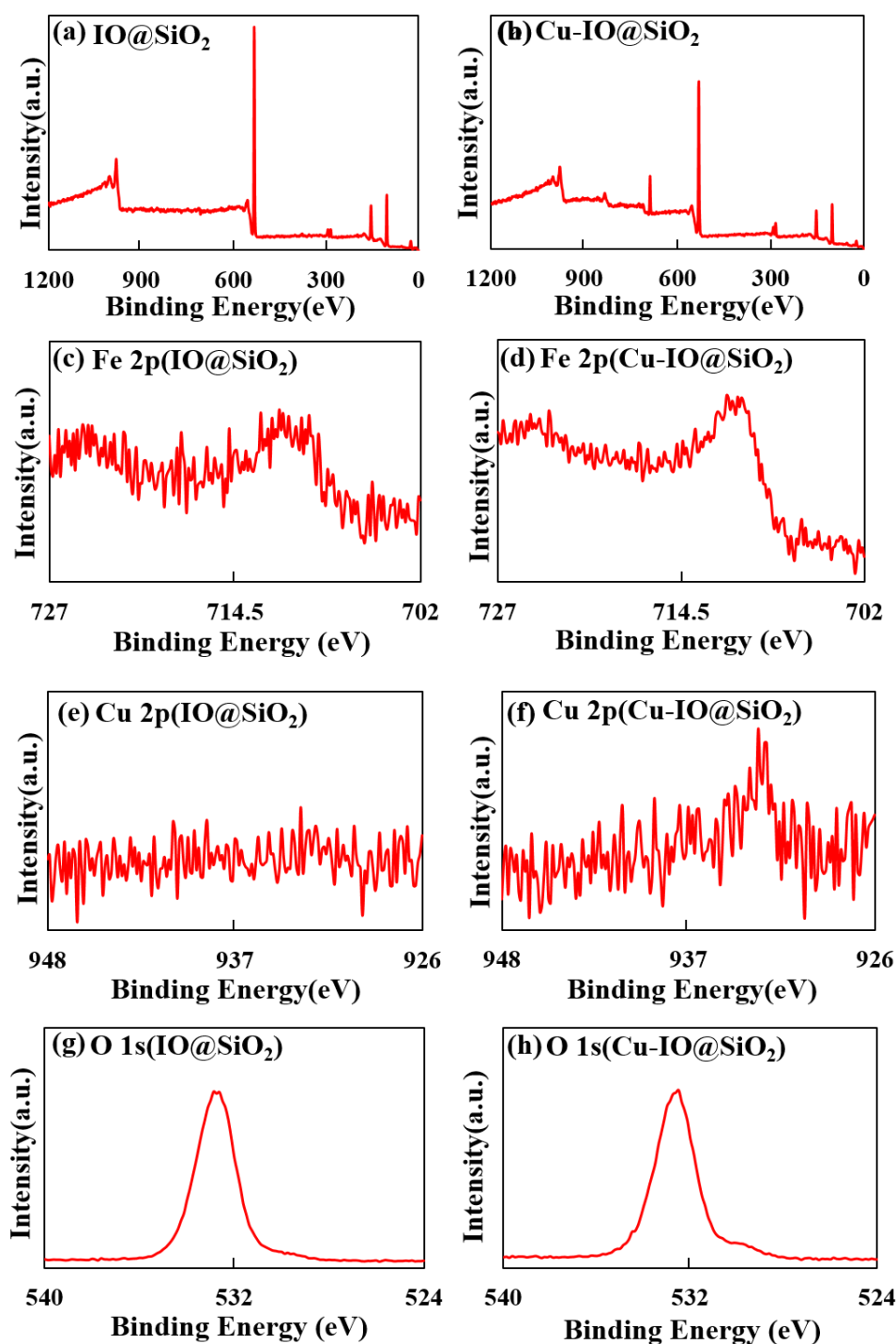


Figure S1. Survey data of (a) IO@SiO₂ and (b) Cu-IO@SiO₂. Fe 2p spectra of (c) IO@SiO₂ and (d) Cu-IO@SiO₂. Cu 2p spectra of (e) IO@SiO₂ and (f) Cu-IO@SiO₂. O 1s spectra of (g) IO@SiO₂ and (h) Cu-IO@SiO₂.

Positron Emission Tomography (PET) images of direct injection into cancer of *BALB/c* mice

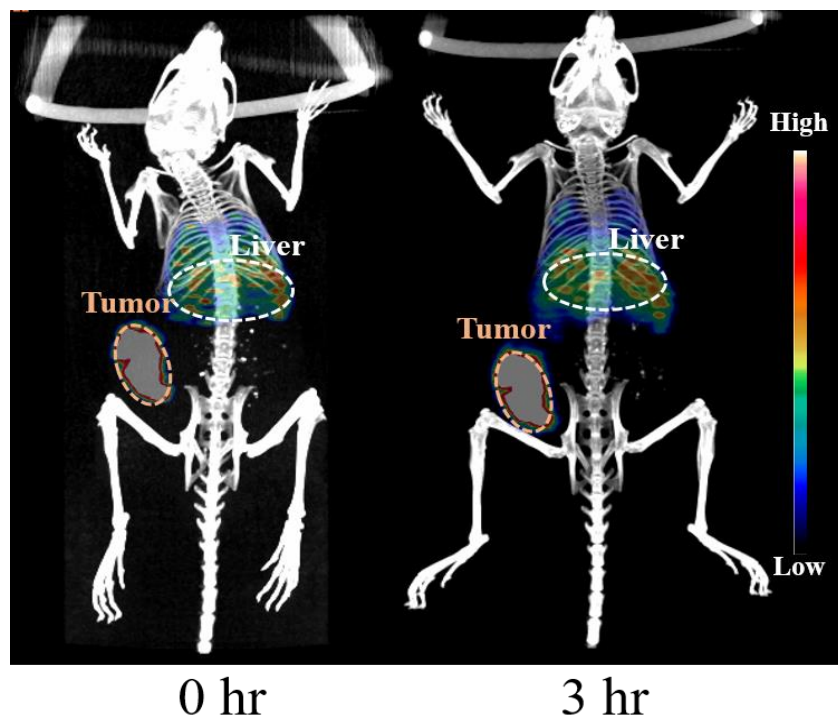


Figure S2. PET images measured immediately and in 3 h after intratumoral injection (direct injection into cancer) of the NPs for the *BALB/c* mice.