

## **Supplementary material**

### **An activatable multimodal/multifunctional nanoprobe for direct imaging of intracellular drug delivery**

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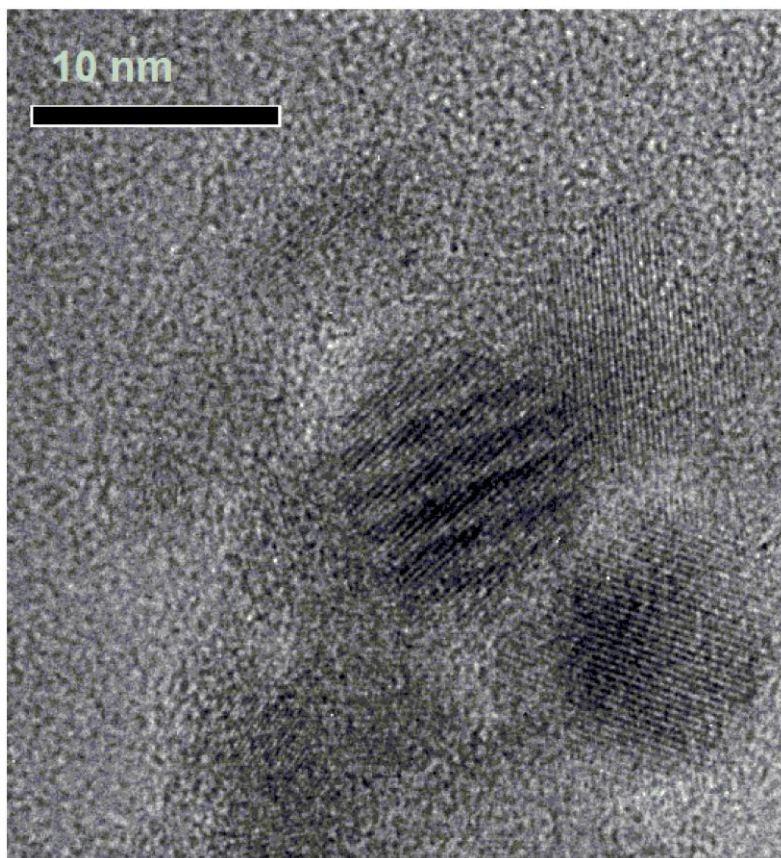
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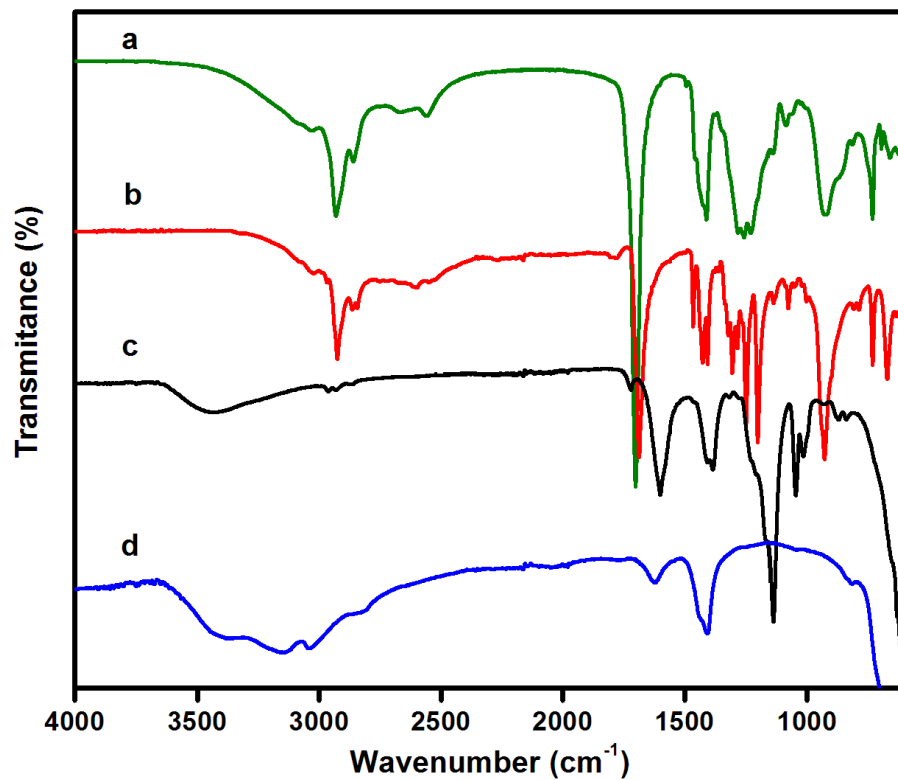
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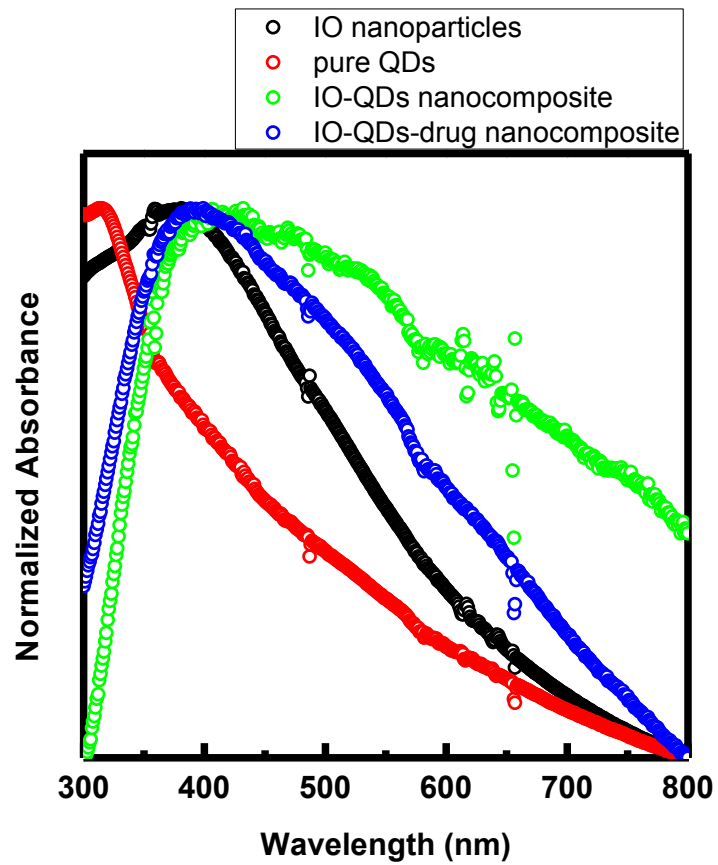
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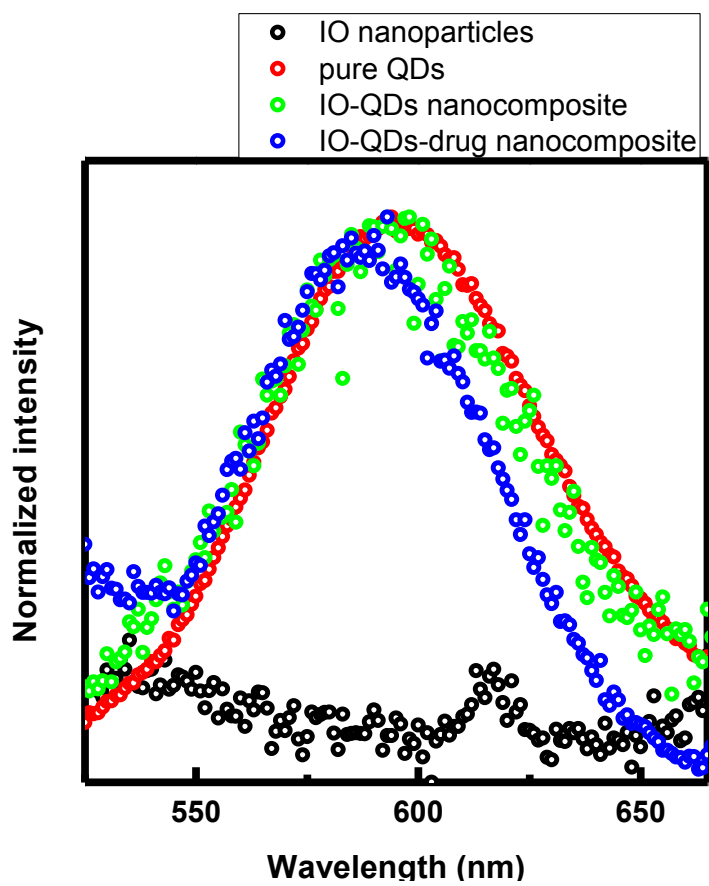
**Fig. S1.** High resolution TEM (HRTEM) image of a single MMCNP.



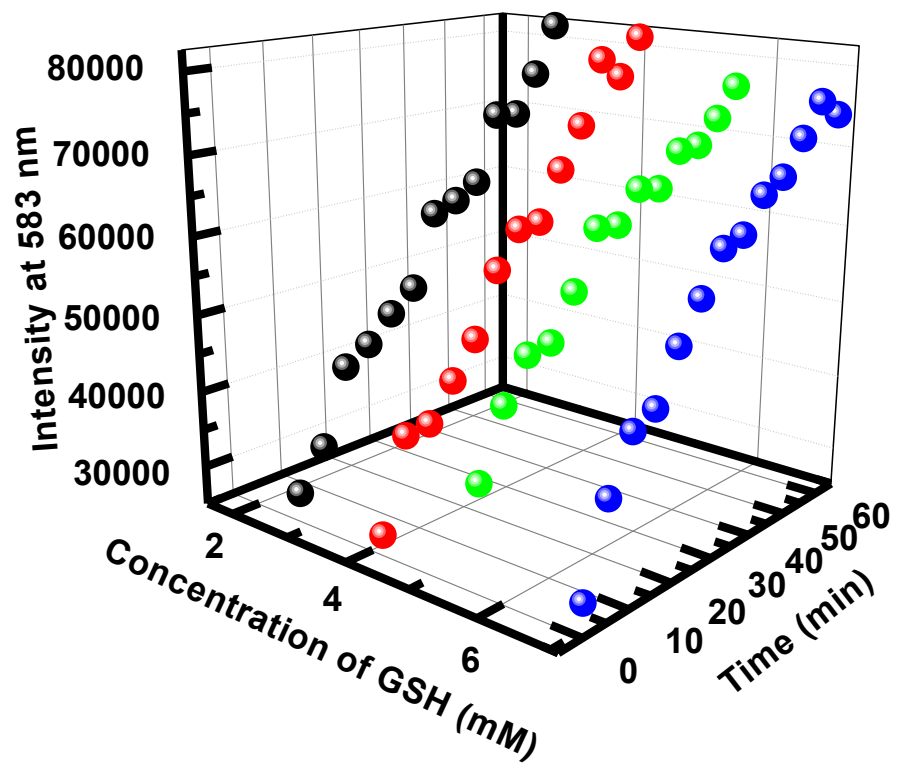
**Fig. S2.** FT-IR spectra of (a) dihydrolipoic acid, (b) lipoic acid, (c) dihydrolipoic acid coated IONPs, and (d) IONPs.



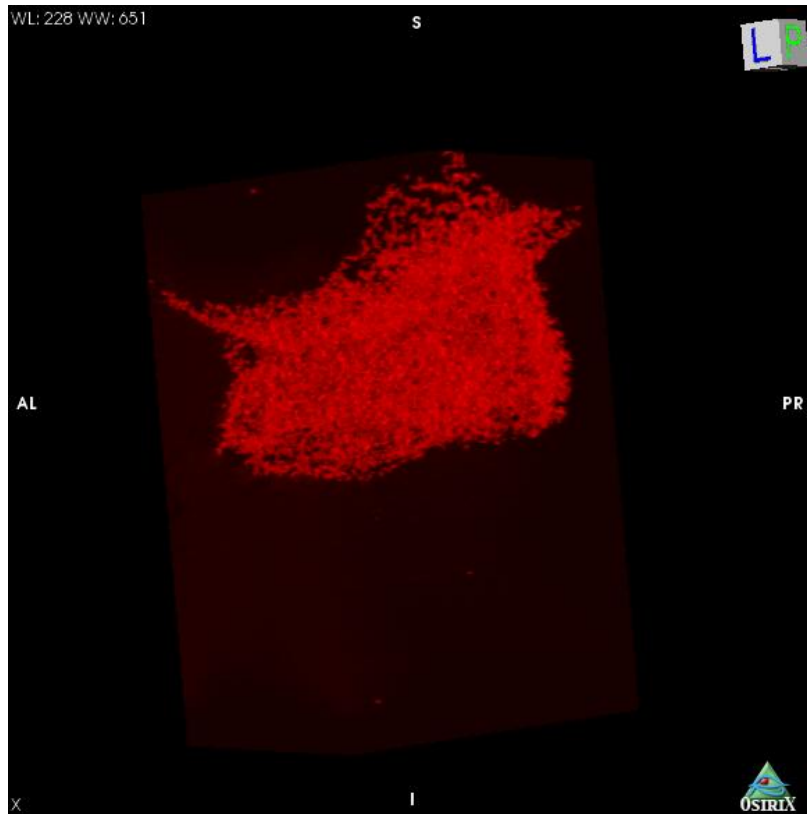
**Fig. S3(a).** Normalized UV-Vis absorbance spectra of pure Qdots (red), IONP (black), Qdots attached to IONP (green) and MMCNPs (blue).



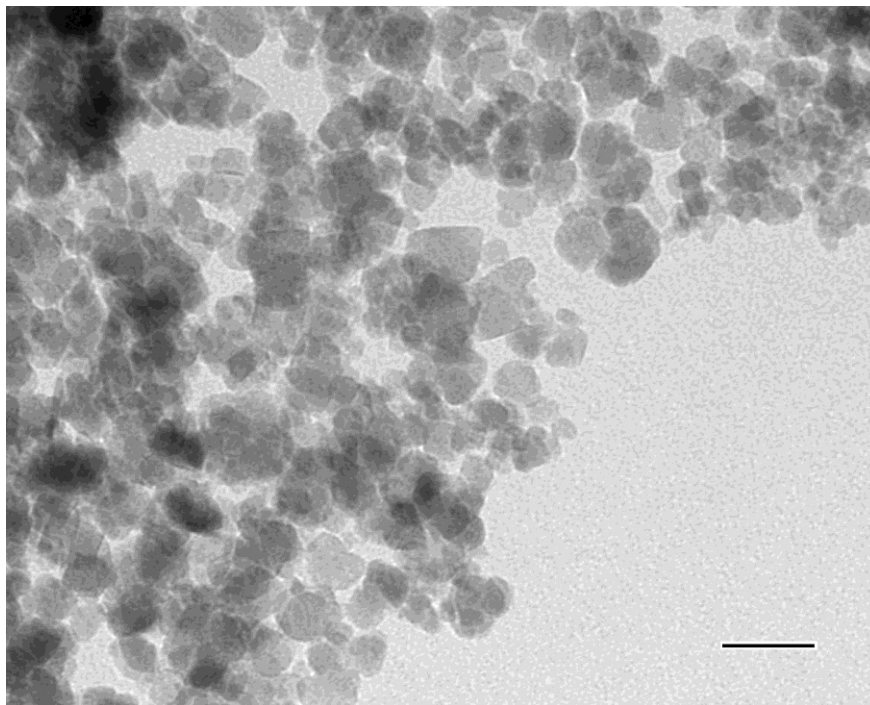
**Fig. S3(b).** Normalized emission spectra of pure Qdots (red), IONP (black), Qdots attached to IONP (green) and MMCNPs (blue).



**Fig. S4.** 3D plots of the Qdot fluorescence intensity recovery from MMCNP (“OFF state”) as a function of time for GSH concentrations of 2.8, 4.2, 5.7, and 7.0 mM.



**Fig. S5.** A snapshot of a video showing 3D reconstruction of MRI images recorded on agar phantom.



**Fig. S6.** TEM image of IONPs showing polydispersity, Bar = 20 nm.