Supporting Information

Multifunctional manganese-doped core/shell quantum dots for magnetic resonance and fluorescence imaging of cancer cells

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**Figure S1.** Evolution of PL spectra of the resulting QDs during the growth of a ZnS shell.

**Figure S2.** EDX spectra of core QDs (A) and core/shell QDs (B).
Figure S3. XPS spectra of the core/shell QDs. (A) Mn2p, (B) Zn2p, (C) Cu2p and (D) In3d.
Figure S4. Multimodal core/shell quantum dots are detectable by MRI. (A) MR detection. Nanoparticles imaged by $T_2$-weighted MRI show increasing signal reduction as Mn$^{2+}$ concentration increases (from left to right, 0, 0.035, 0.068, 0.53, 1.81 mM). (B) $T_2$ relaxivity plot of aqueous suspension of CuInS$_2$/Zn$_{1-x}$Mn$_x$S.