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Supplementary materials

Highly bright silica-coated InP/ZnS quantum dot-embedded silica nanoparticles as biocompatible nanoprobes

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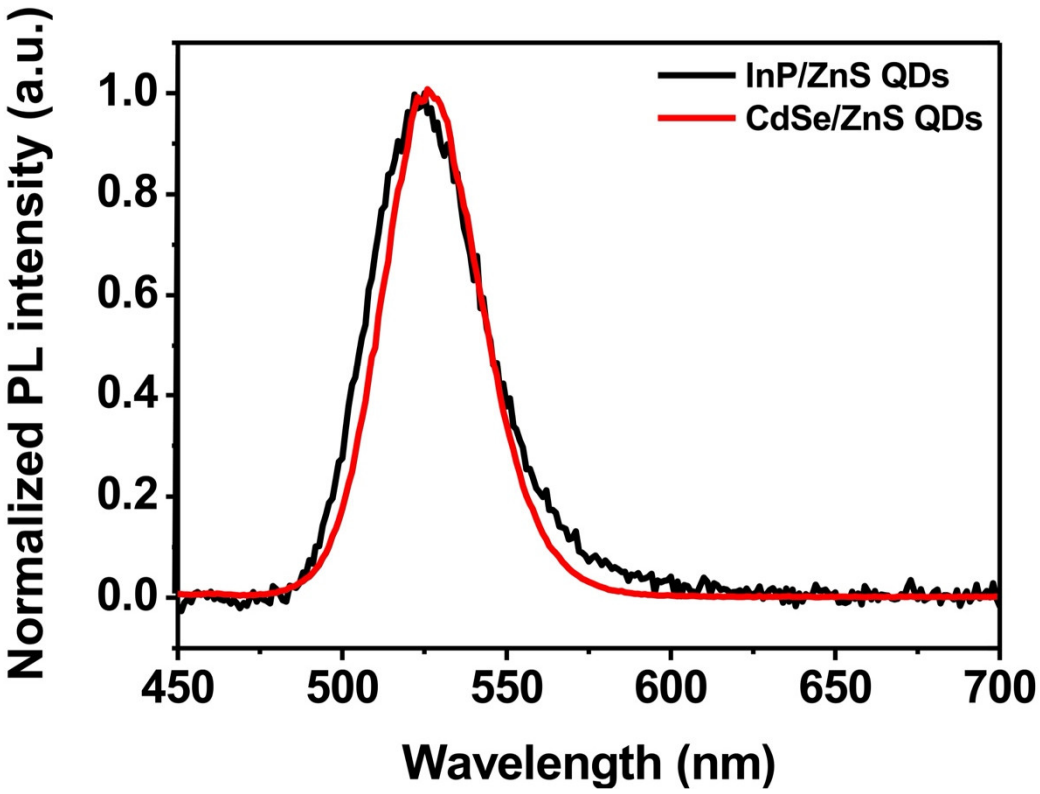

Figure S1. Comparison photoluminescence (PL) spectra between InP/ZnS QDs and CdSe/ZnS QDs.

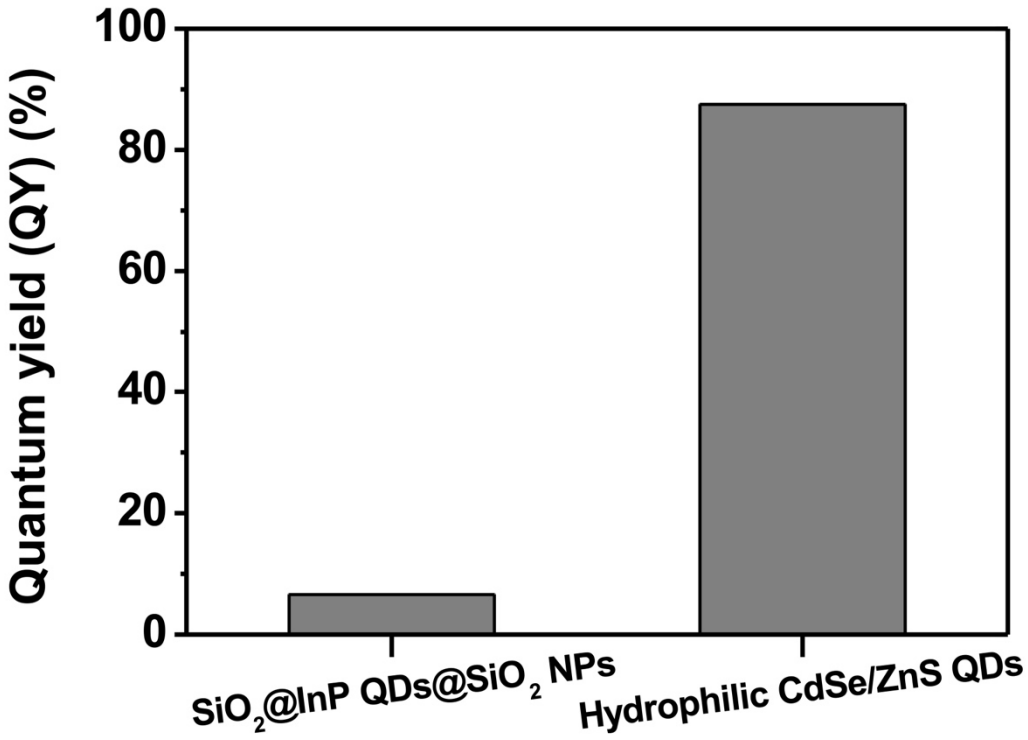

Figure S2. Comparison of quantum yield (QY) of SiO_2@InP QDs@SiO_2 NPs and hydrophilic CdSe/ZnS QDs. The QY of SiO_2@InP QDs@SiO_2 NPs and hydrophilic CdSe/ZnS QDs were 6.61% and 87.52%, respectively.

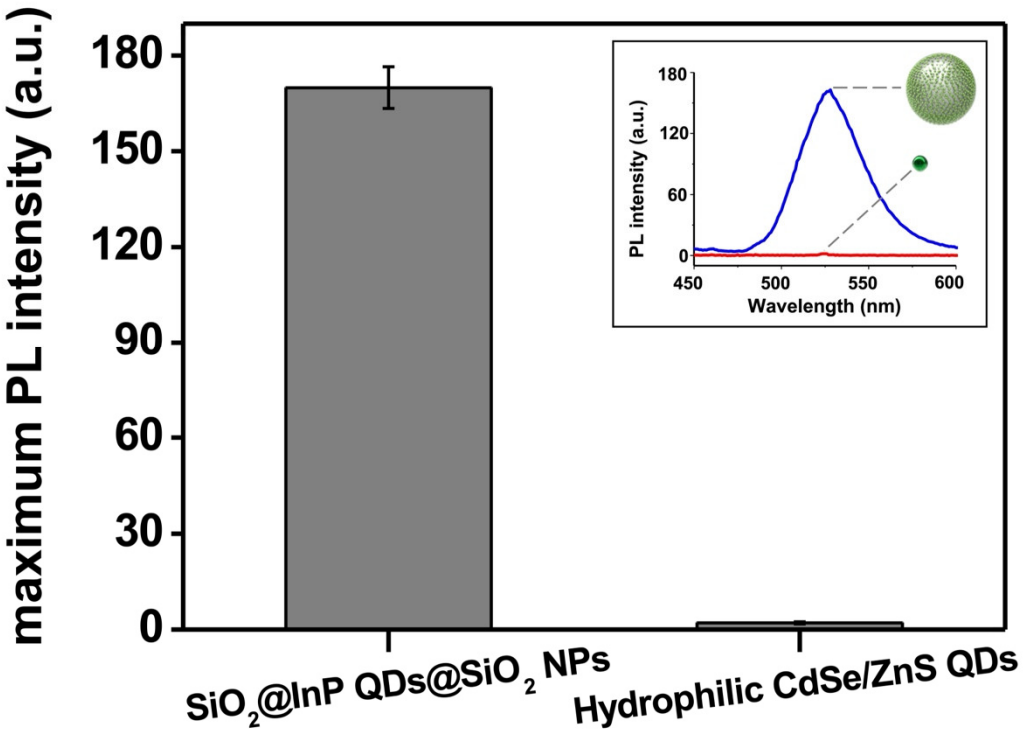

Figure S3. Comparison of PL intensity between SiO_2@InP QDs@SiO_2 NPs and hydrophilic CdSe/ZnS QDs. The maximum PL intensity of each particle at 527 nm emission wavelength was measured at the same concentration (2.66×10^{12} particles/mL). (**Inset**: PL intensity spectra of SiO_2@InP QDs@SiO_2 NPs and hydrophilic CdSe/ZnS QDs).

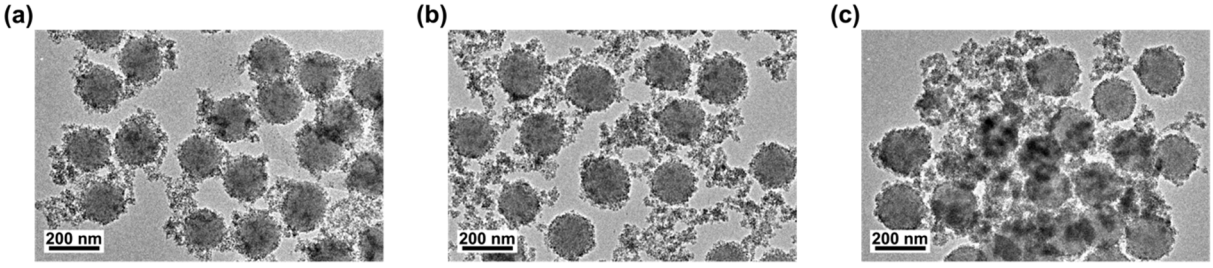

Figure S4. TEM images of SiO_2@InP QDs@SiO_2 NPs by amount of added QDs. The amount of added QDs were **(a)** 1.4 mg, **(b)** 2.8 mg and **(c)** 5.6 mg per 1mg of SiO_2 NPs.

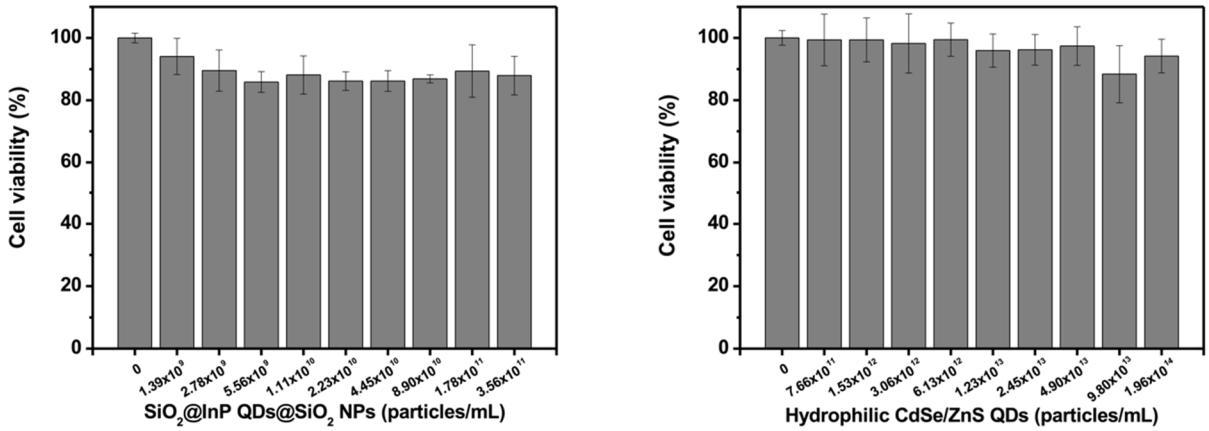

Figure S5. Cytotoxicity investigation of SiO_2@InP QDs@SiO_2 NPs and hydrophilic CdSe/ZnS QDs. Cell viability of A549 cells in DMEM after 24 hours incubation with SiO_2@InP QDs@SiO_2 NPs and hydrophilic CdSe/ZnS QDs.