

## Supplementary Information

# Silica Shell Thickness-Dependent Fluorescence Properties of SiO<sub>2</sub>@Ag@SiO<sub>2</sub>@QDs Nanocomposites

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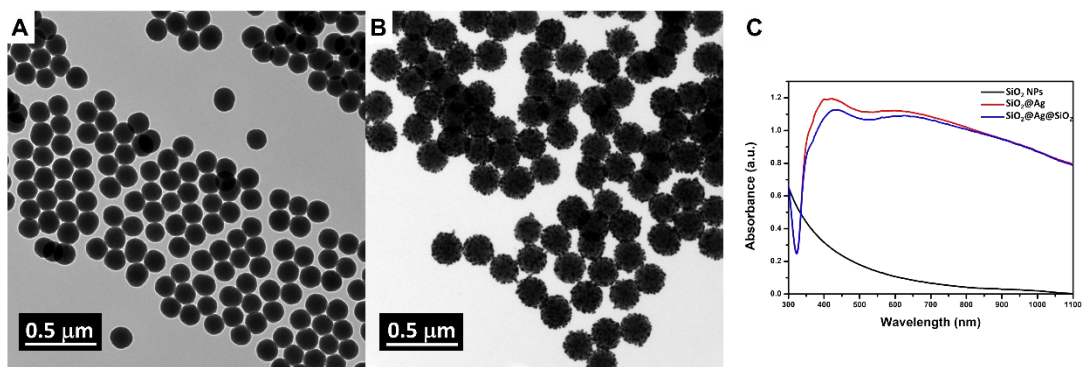
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**Figure S1.** TEM images of (A) SiO<sub>2</sub> NPs and (B) SiO<sub>2</sub>@Ag. (C) Absorbance spectra of the SiO<sub>2</sub> NPs, SiO<sub>2</sub>@Ag, and typical SiO<sub>2</sub>@Ag@SiO<sub>2</sub>.

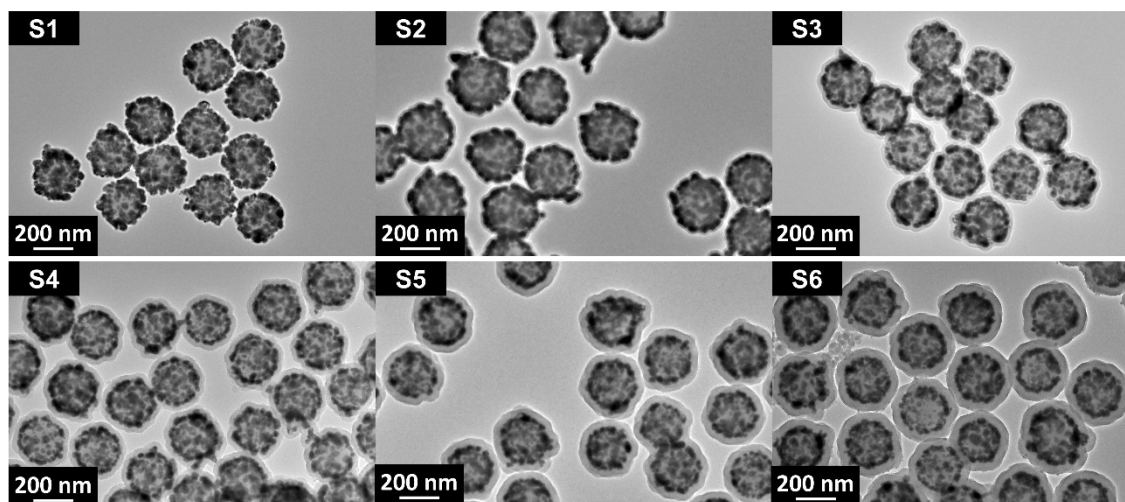


Figure S2. Low-magnification TEM images of  $\text{SiO}_2@\text{Ag}@\text{SiO}_2$  with various silica shell thicknesses on the  $\text{SiO}_2@\text{Ag}$  surface (S1:  $4 \pm 0.3$  nm, S2:  $9 \pm 1.1$  nm, S3:  $13 \pm 1.2$  nm, S4:  $16 \pm 1.0$  nm, S5:  $24 \pm 1.3$  nm, and S6:  $38 \text{ nm} \pm 2.0$  nm).

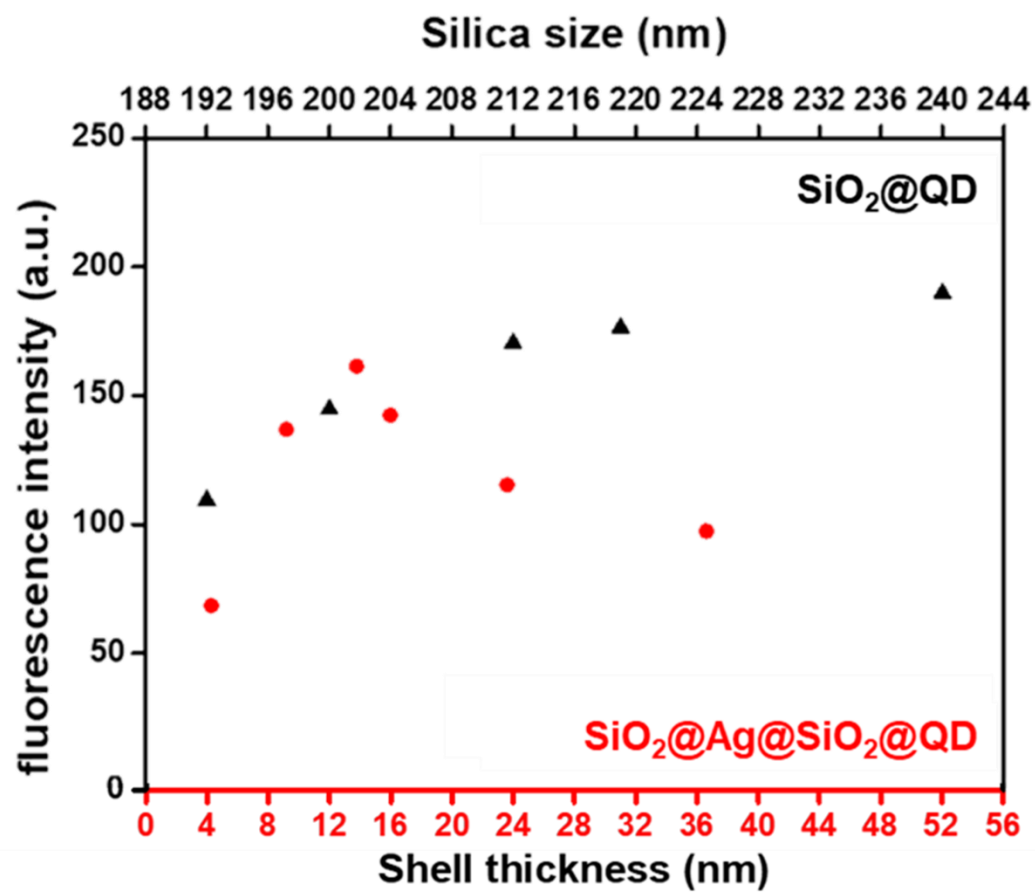


Figure S3. Comparison of the fluorescence properties of the  $\text{SiO}_2@\text{Ag}@\text{SiO}_2@\text{QDs}$  and  $\text{SiO}_2@\text{QDs}$ .