

Phosphine-Free Synthesis of $\text{Zn}_{1-x}\text{Cd}_x\text{Se}$ / ZnSe / $\text{ZnSe}_x\text{S}_{1-x}$ / ZnS Core/Multishell Structures with Bright and Stable Blue–Green Photoluminescence

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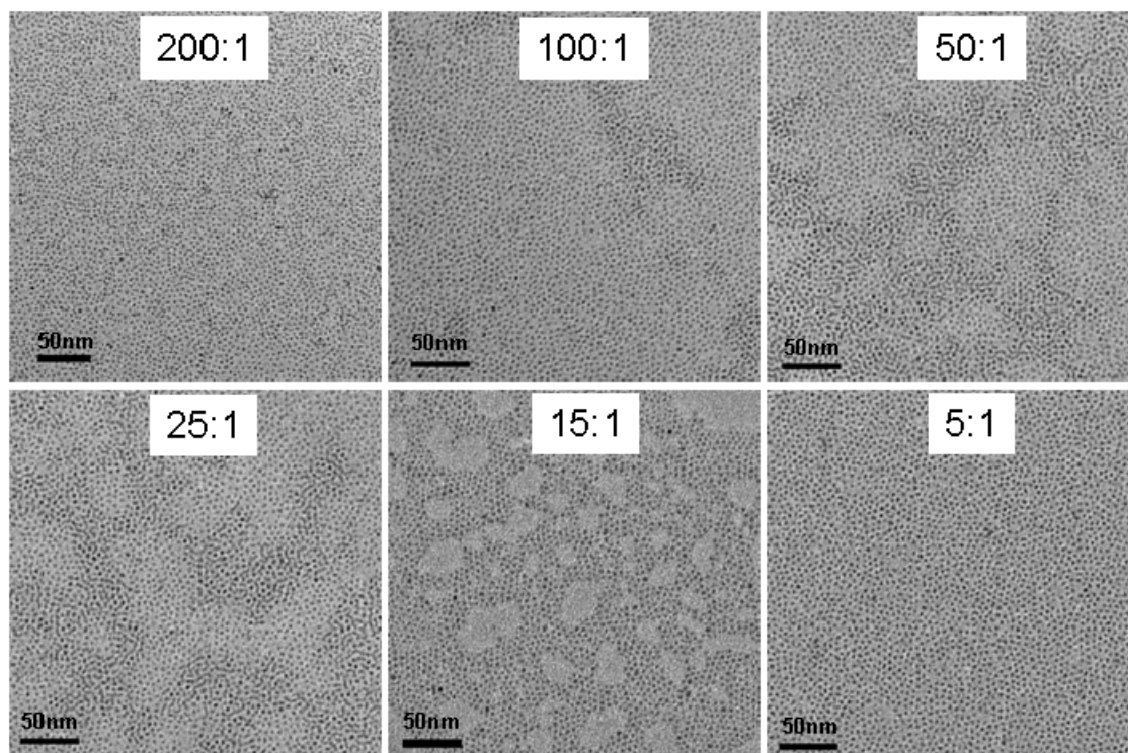


Figure S1. TEM images of a series of ~ 3.5 nm $\text{Zn}_{1-x}\text{Cd}_x\text{Se}$ nanocrystals, which correspond with Figure 1.

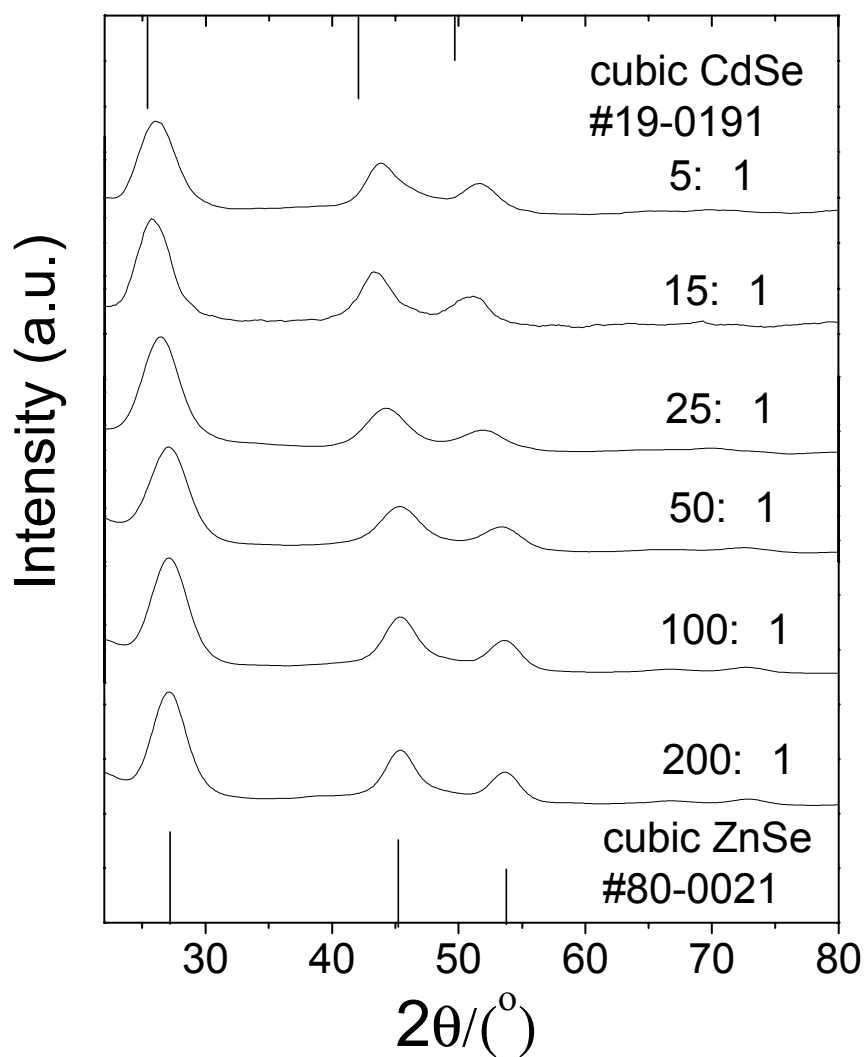


Figure S2. Powder XRD patterns of the Zn_xCd_{1-x}Se samples with different molar ratios of Zn and Cd.

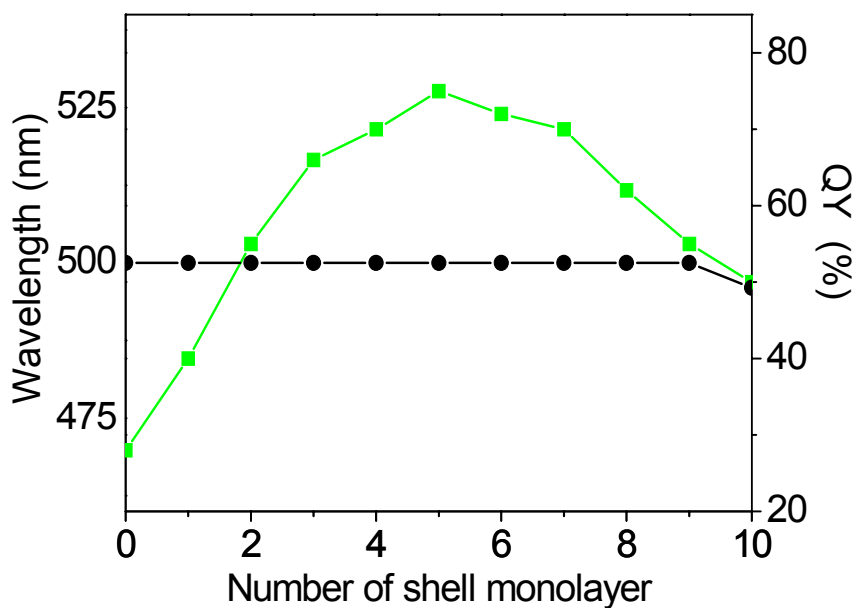


Figure S3. Evolution of the PL-peak position (black) and QYs (green) for core-shell nanocrystals.



Figure S4. A photo of purified powder $Zn_{1-x}Cd_xSe/ZnSe/ZnSe_xS_{1-x}/ZnS$ core-shell nanocrystals sample (~ 10 g).

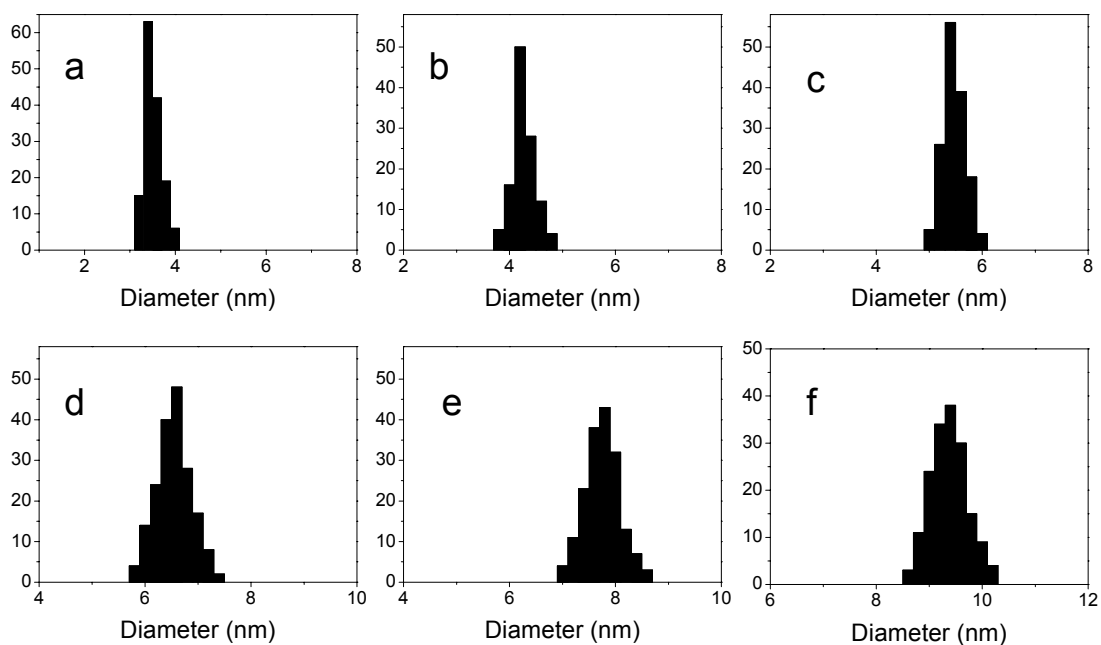


Figure S5. The corresponding size-distribution histograms of Figure 5.

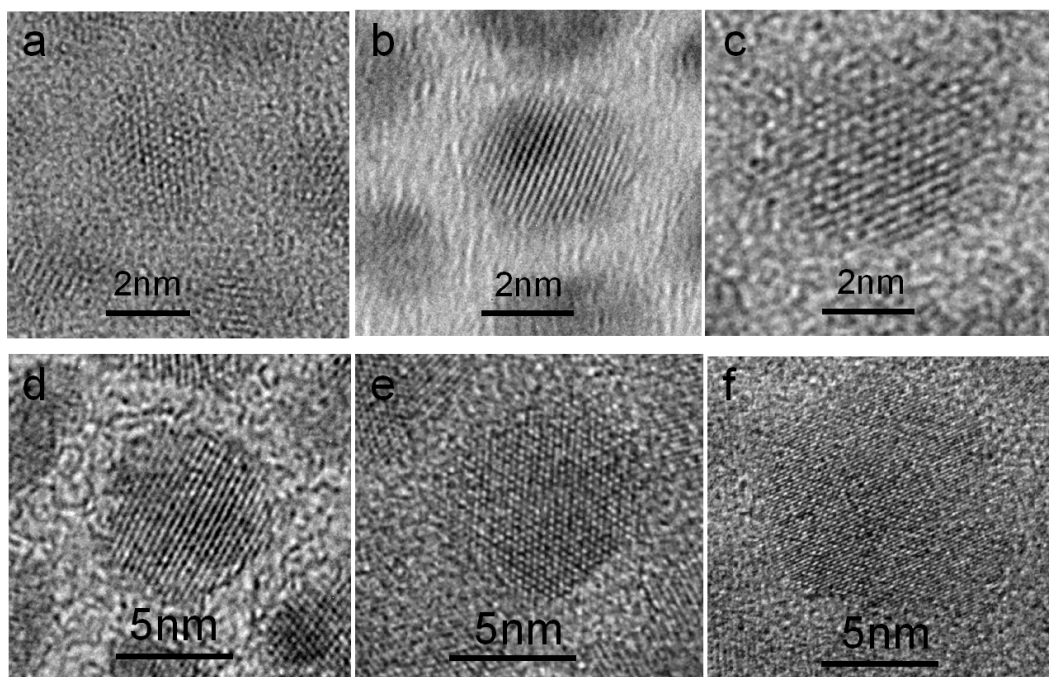


Figure S6. High resolution TEM images of Figure 5.

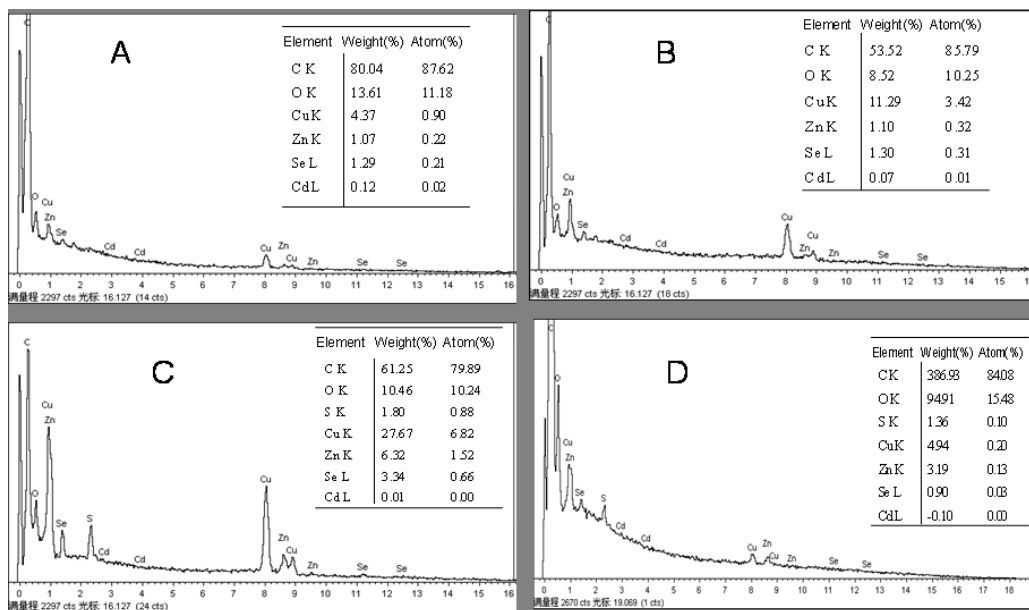


Figure S7. EDX spectra of A) $\text{Zn}_{0.94}\text{Cd}_{0.06}\text{Se}$, B) $\text{Zn}_{0.94}\text{Cd}_{0.06}\text{Se}/\text{ZnSe}$, C) $\text{Zn}_{0.94}\text{Cd}_{0.06}\text{Se}/\text{ZnSe}/\text{ZnSe}_x\text{S}_{1-x}$, D) $\text{Zn}_{0.94}\text{Cd}_{0.06}\text{Se}/\text{ZnSe}/\text{ZnSe}_x\text{S}_{1-x}/\text{ZnS}$ nanocrystals.

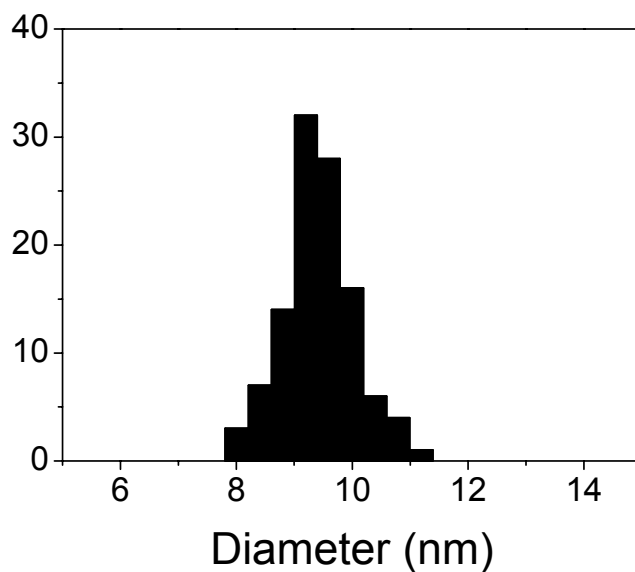


Figure S8. The corresponding size-distribution histogram of Figure 7.