

Supporting Information for:

Discovery and Evaluation of a Single Source
Selenium Sulfide Precursor for the Synthesis of
Alloy $\text{PbS}_x\text{Se}_{1-x}$ Nanocrystals

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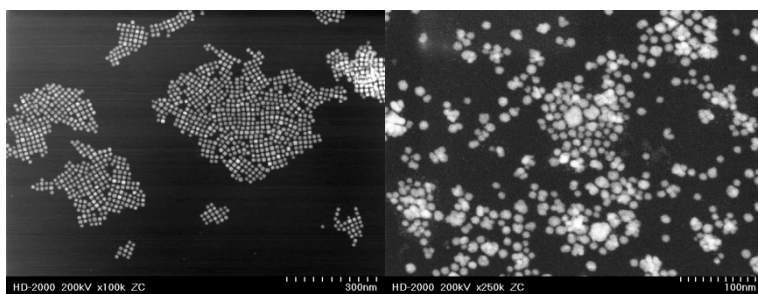


Figure S1. STEM images of $\text{PbS}_x\text{Se}_{1-x}$ nanocrystals grown at 130 °C with (L) 4:1 and (R) 1:1 (S+Se):Pb ratios.

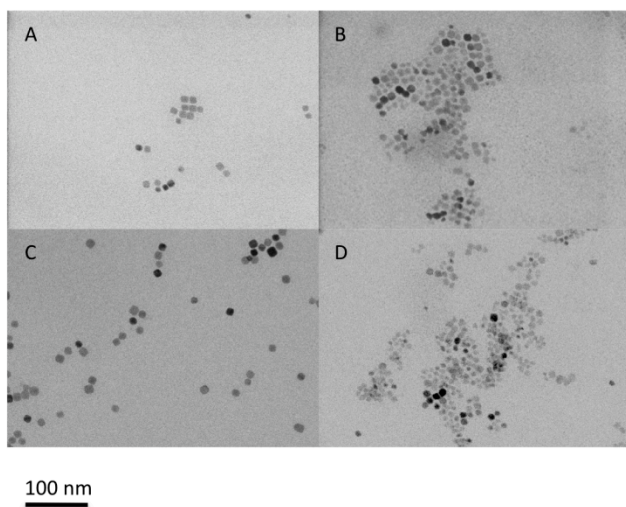


Figure S2. Selected TEM images of $\text{PbS}_x\text{Se}_{1-x}$ nanocrystals prepared from (A) S, (B) SeS_4 , (C) SeS_2 , and (D) Se_2S .

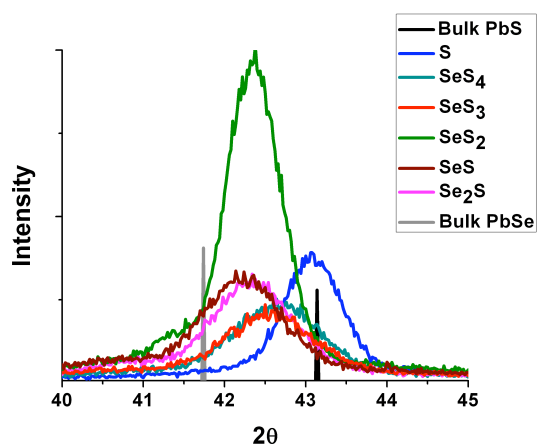


Figure S3. (220) diffraction peak for a series of $\text{PbS}_x\text{Se}_{1-x}$ nanocrystals.

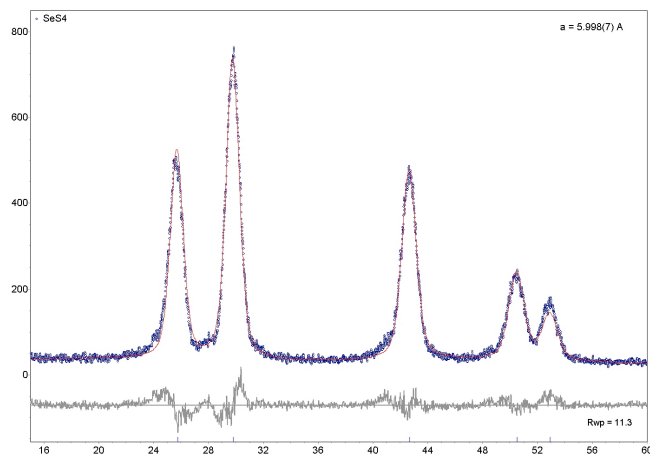


Figure S4. Rietveld refinement for $\text{PbS}_x\text{Se}_{1-x}$ sample prepared from SeS_4 .

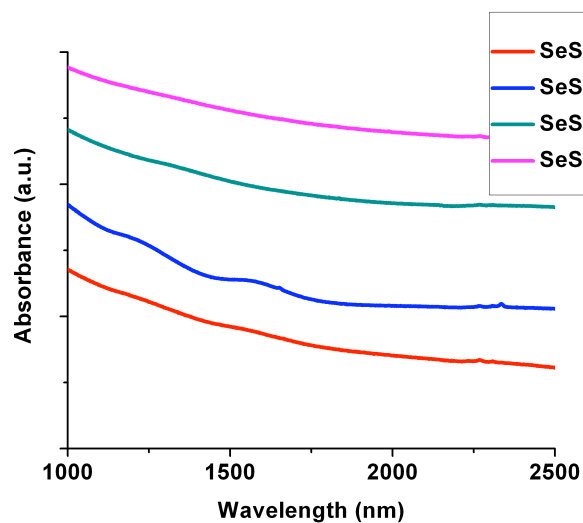


Figure S5. UV-Vis absorption edge for selected $\text{PbS}_x\text{Se}_{1-x}$ nanocrystals in tetrachloroethylene.