

Supporting Information

Article

Highly Luminescent and Photostable Core/Shell/Shell ZnSeS/Cu:ZnS/ZnS Quantum Dots Prepared via a Mild Aqueous Route

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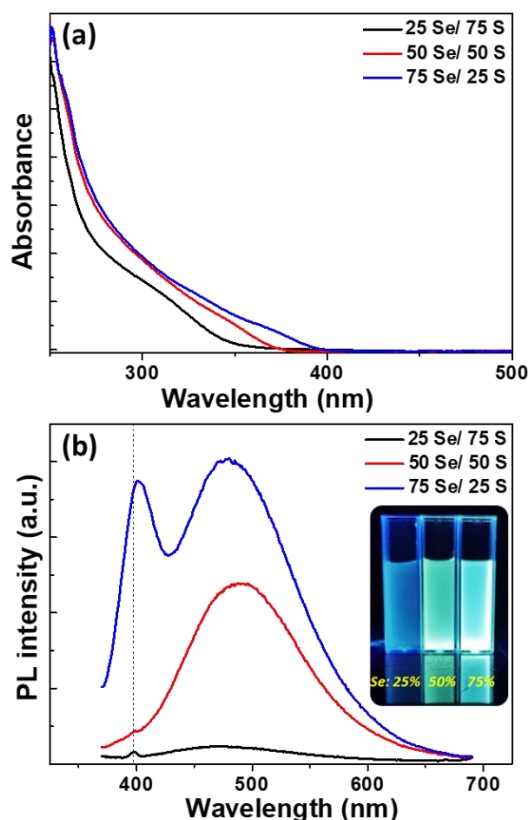


Figure S1. (a) UV-visible absorption and (b) PL emission spectra of ZnSeS QDs when varying the Se/S molar ratio. The inset of (b) is a photograph taken under UV illumination of aqueous dispersions of the dots.

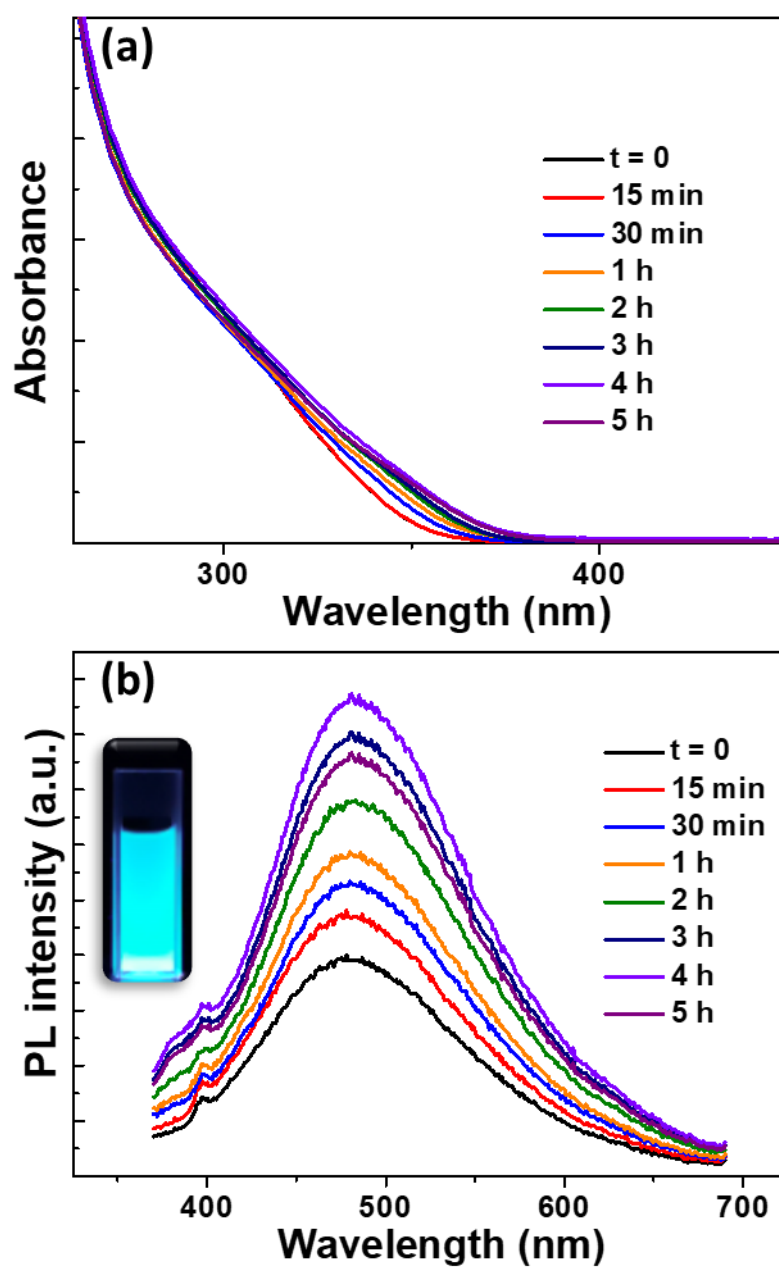


Figure S2. (a) UV-visible absorption and (b) PL emission spectra at different reaction stages. The inset of (b) is a photograph taken under UV illumination of aqueous dispersions of the dots.

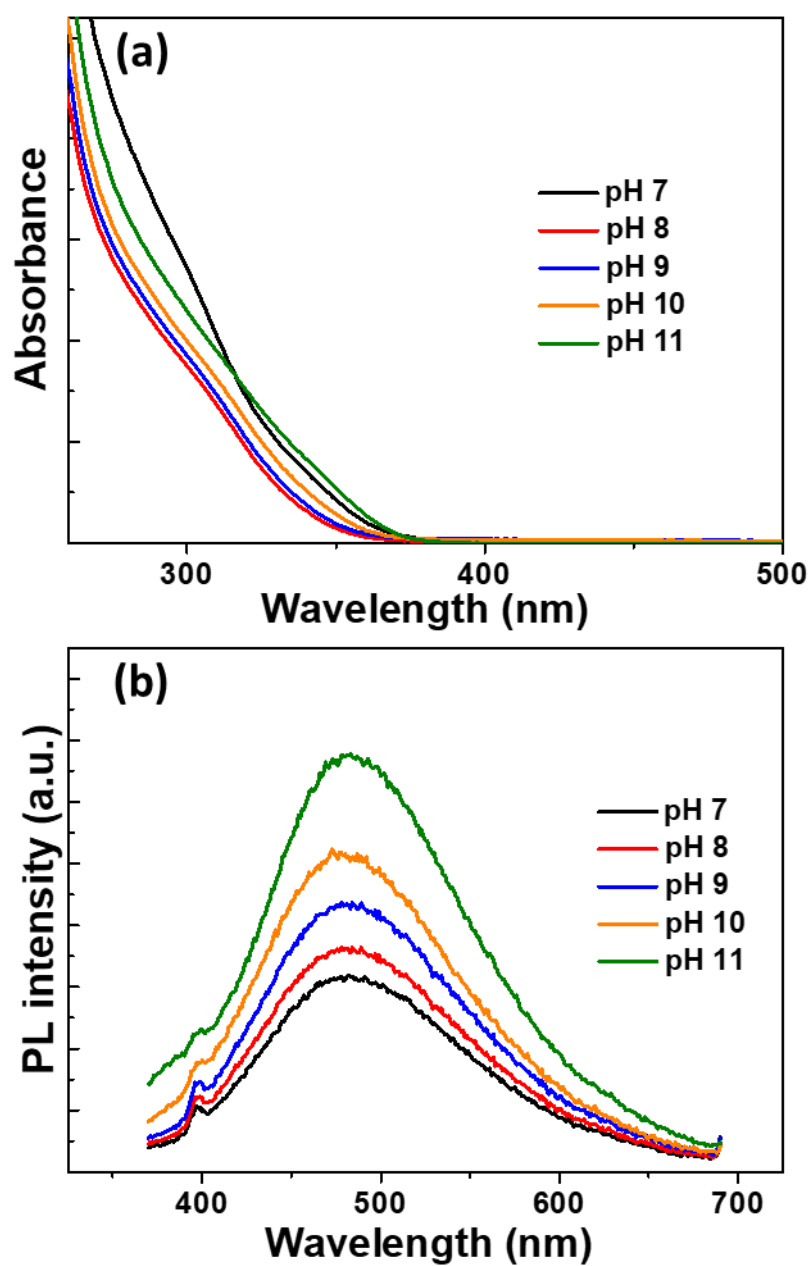


Figure S3. (a) UV-visible absorption and (b) PL emission spectra of ZnSeS QDs when varying the pH of the reaction. Reactions were conducted for 4 h using a Se/S ratio of 50/50.

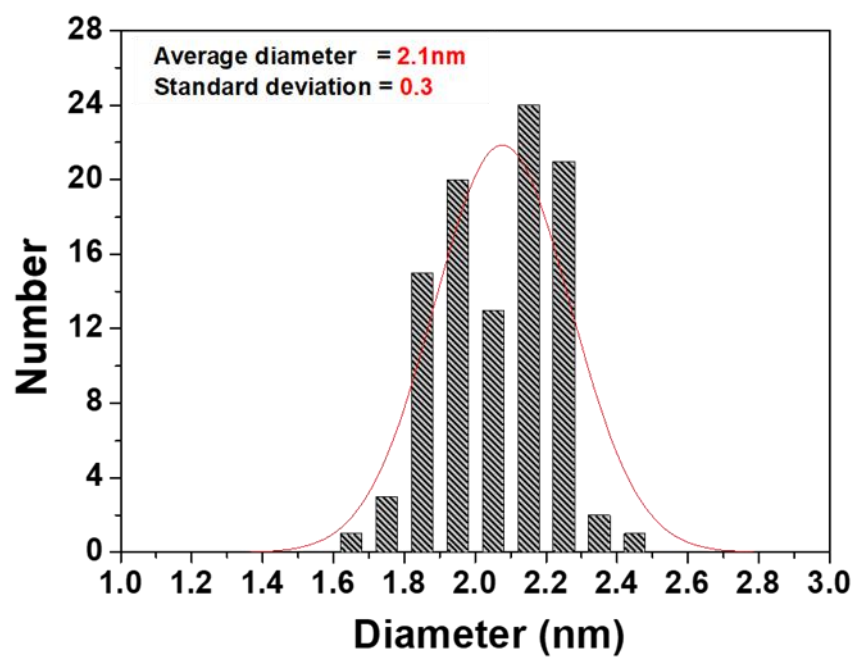


Figure S4. Particle size distribution expressed in number of ZnSeS/Cu(2.5):ZnS/ZnS (2ML) QDs determined by TEM.

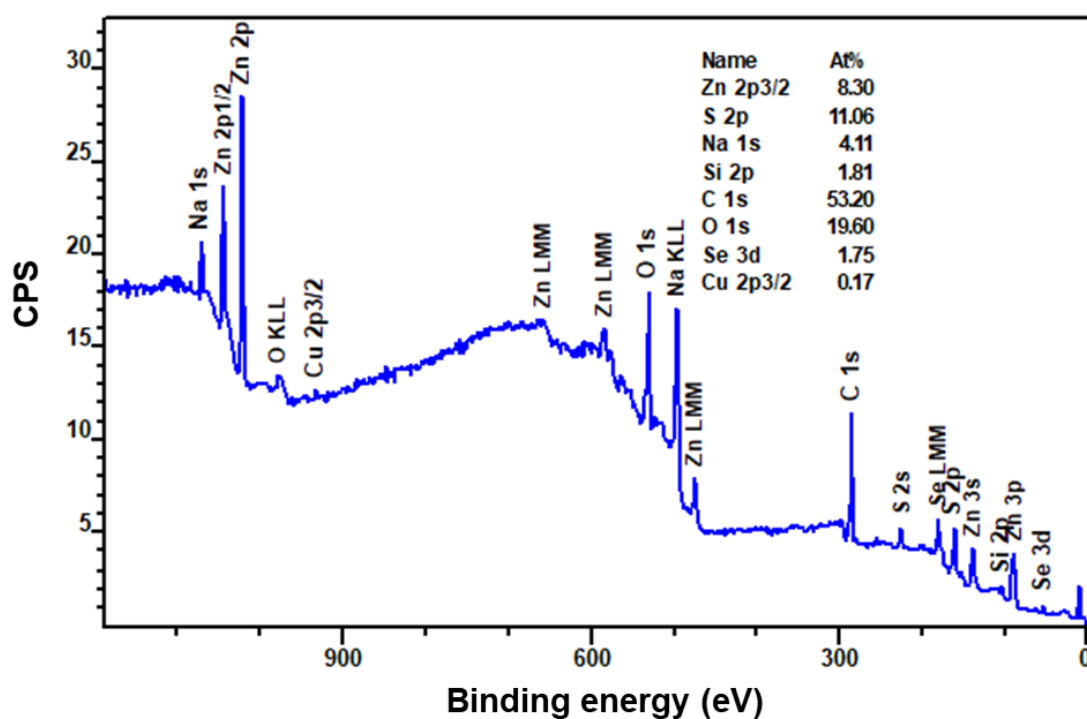


Figure S5. XPS overview spectrum of ZnSeS/Cu(2.5):ZnS/ZnS QDs.

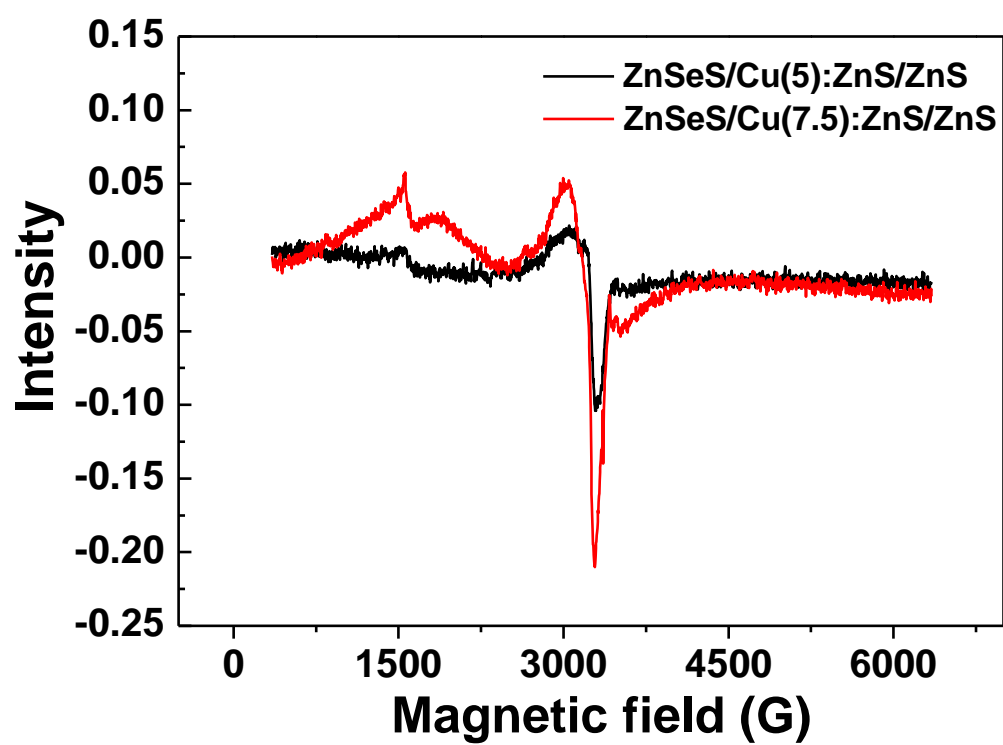


Figure S6. EPR spectra of ZnSeS/Cu(5 and 7.5):ZnS/ZnS QDs recorded at room temperature.

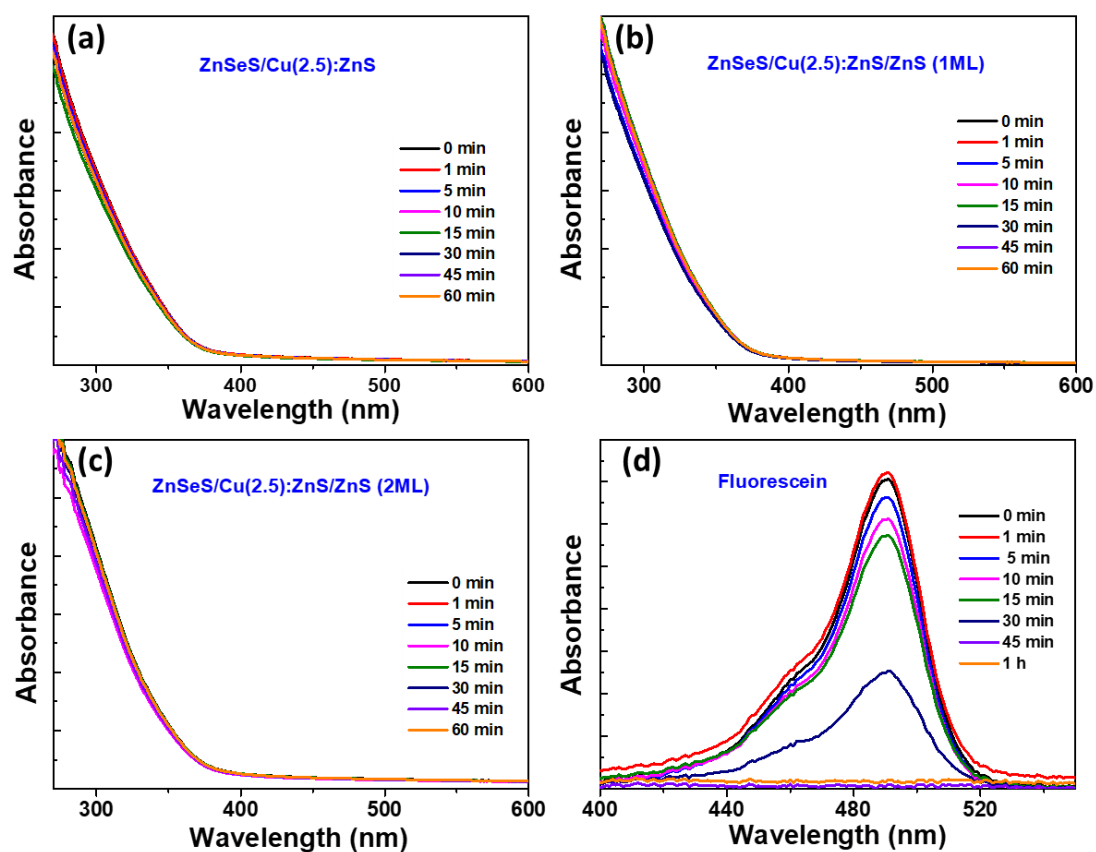


Figure S7. Evolution of UV-visible absorption spectra of (a) ZnSeS/Cu(2.5):ZnS, (b-c) of ZnSeS/Cu(2.5):ZnS/ZnS QDs and of (d) fluorescein during the continuous irradiation of a Hg/Xe lamp.

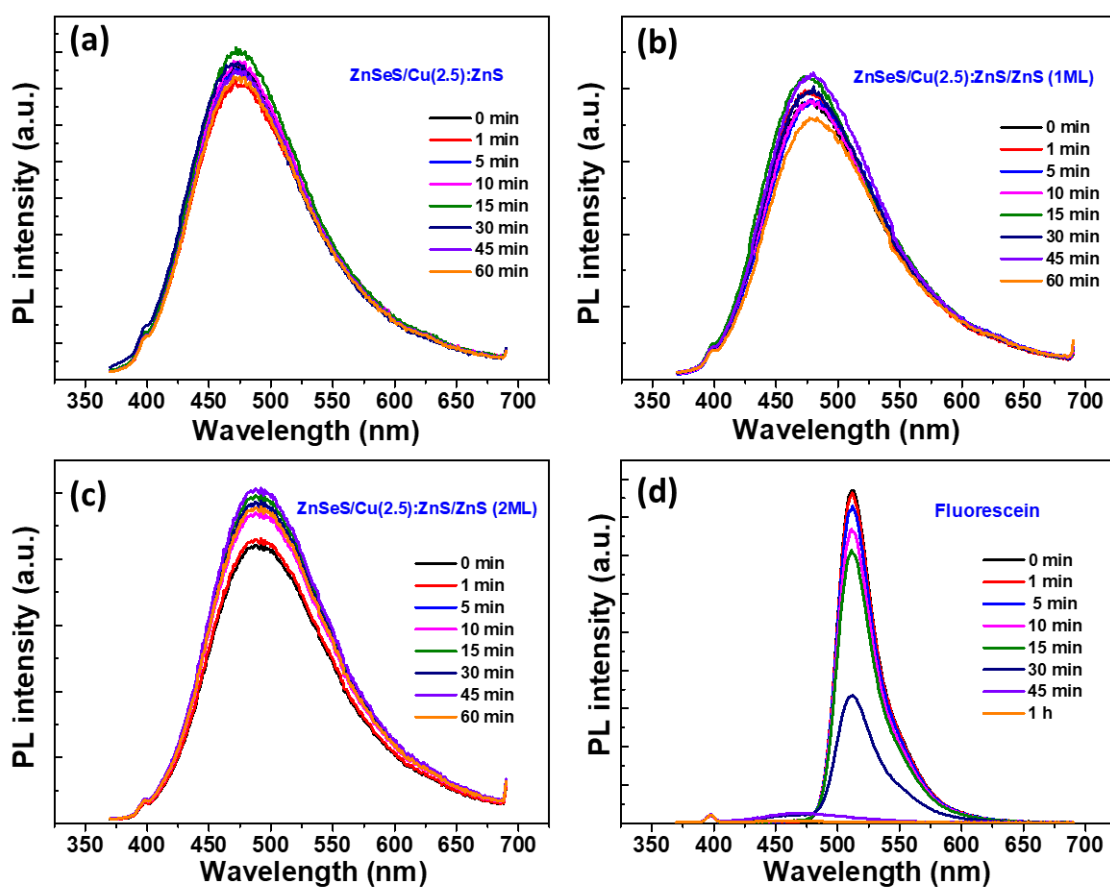


Figure S8. Evolution of PL emission spectra of (a) ZnSeS/Cu(2.5):ZnS, (b-c) of ZnSeS/Cu(2.5):ZnS/ZnS QDs and of (d) fluorescein during the continuous irradiation of a Hg/Xe lamp.