

Electronic Supplementary Information

Thermal stability of photoluminescence in Cu-doped Zn-In-S quantum dots for light-emitting diodes

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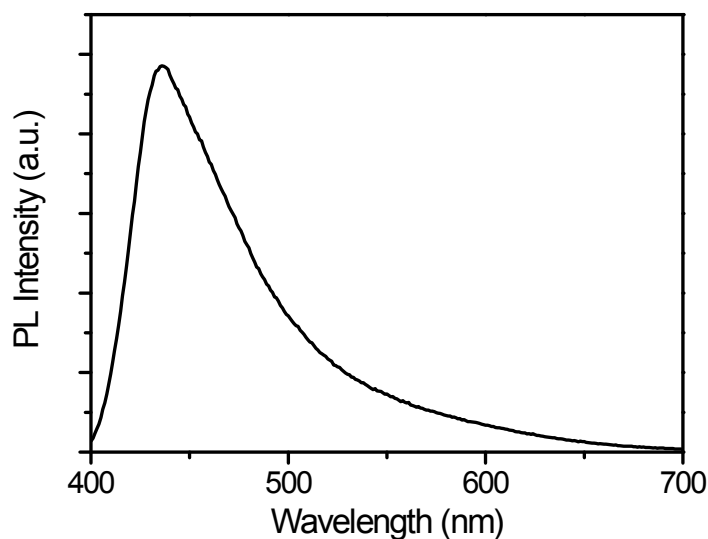


Fig. S1 PL spectrum of undoped Zn-In-S QDs in chloroform with Zn/In precursor molar ratio of 1/1.

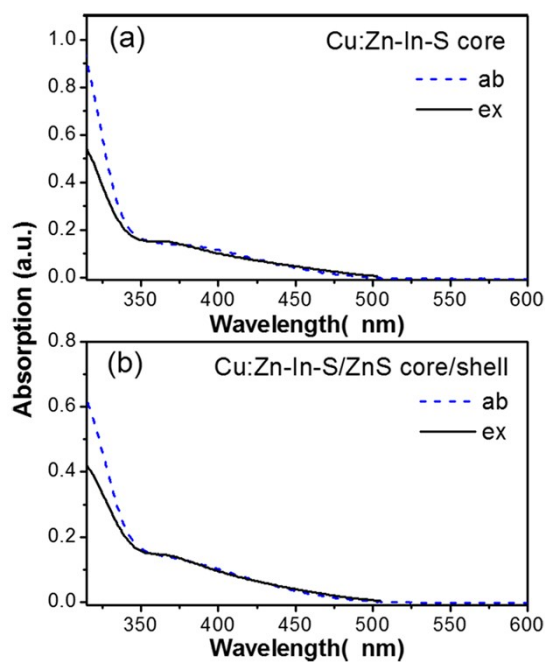


Fig. S2 UV-visible (blue dashed lines) absorption and PL excitation spectra (black solid lines) of Cu:Zn-In-S core (a) and Cu:Zn-In-S/ZnS core/shell (b) QDs with Zn/In ratios of 1/1.

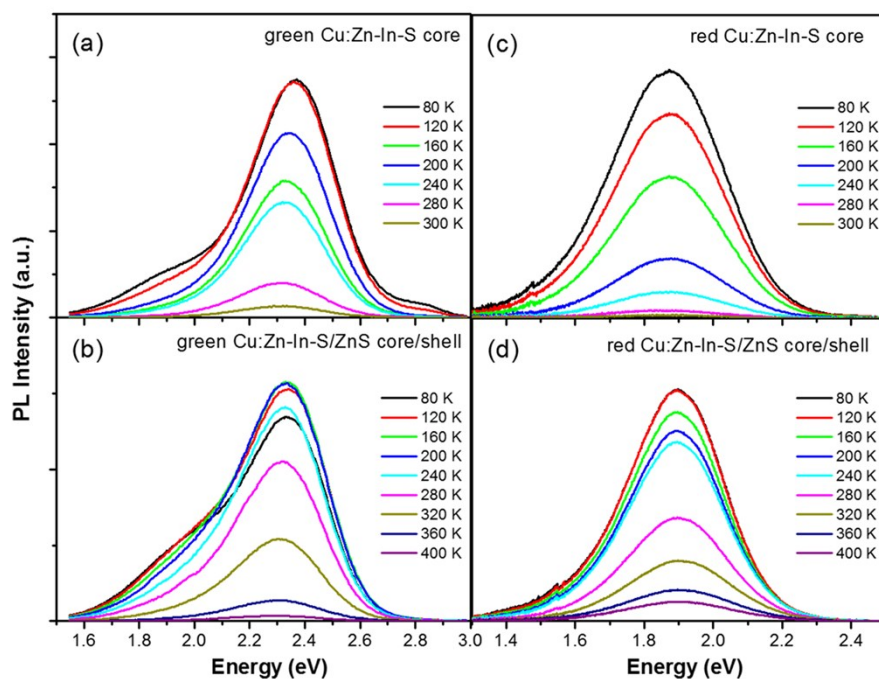


Fig. S3 PL spectra of Cu:Zn-In-S core (a, c) and Cu:Zn-In-S/ZnS core/shell (b, d) QDs with Zn/In ratios of 1/1 (a, b) and 1/4 (c, d) at different temperature from 80 to 400 K. The excitation wavelength is 405 nm.

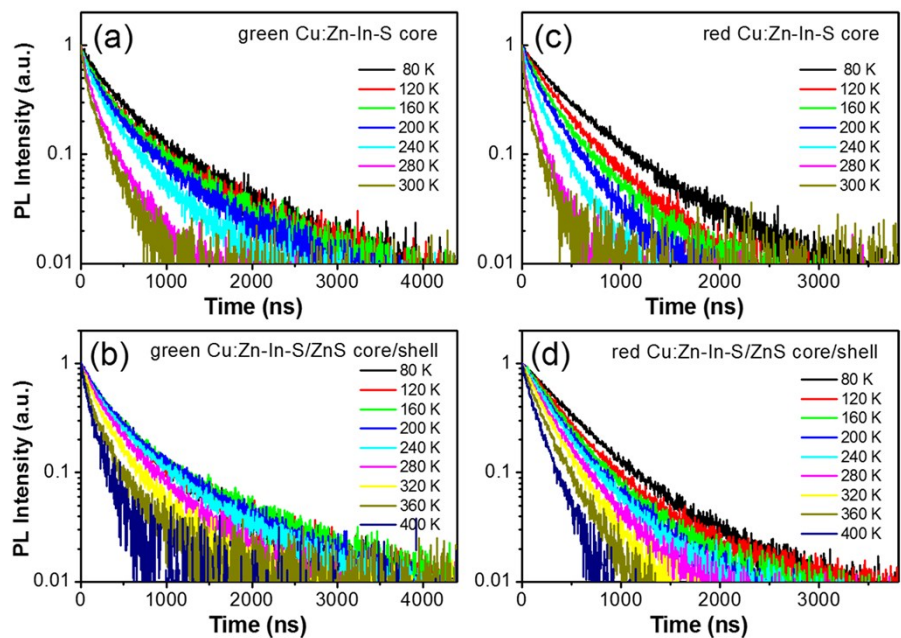


Fig. S4 The temperature-dependent decay curves of Cu:Zn-In-S core (a, c) and Cu:Zn-In-S/ZnS core/shell (b, d) QDs with Zn/In ratios of 1/1 (a, b) and 1/4 (c, d). The excitation wavelength is 405 nm.