

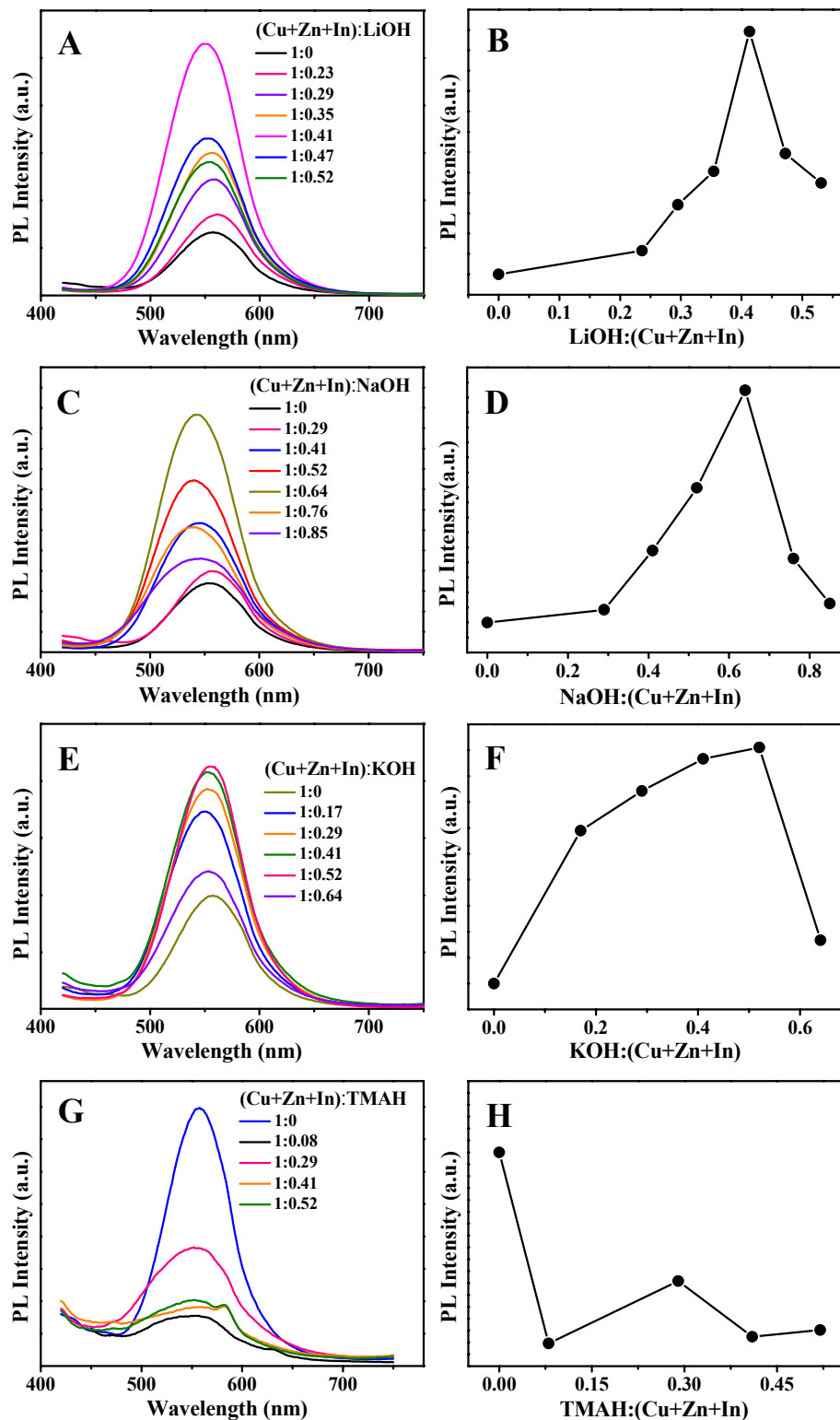
## Electronic Supplementary Information

### **Temperature-Dependent Photoluminescence of Cadmium-Free Cu-Zn-In-S Quantum Dot Thin Films as Temperature Probes**

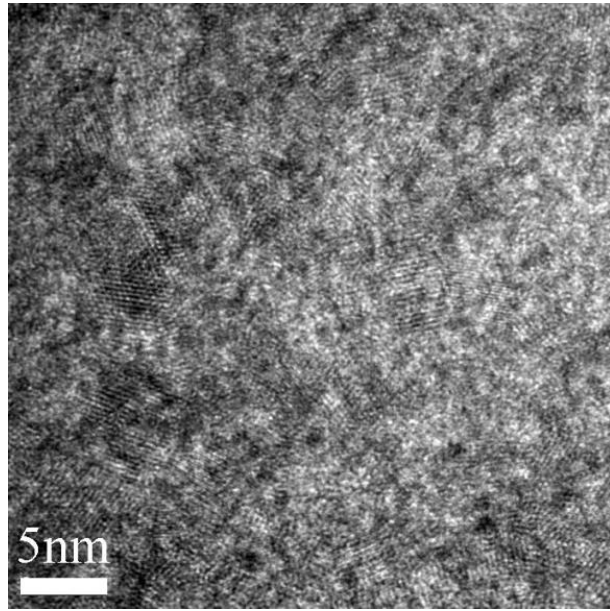
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Chemistry, Chinese Academy of Sciences, Changchun, Jilin, 130022, China*

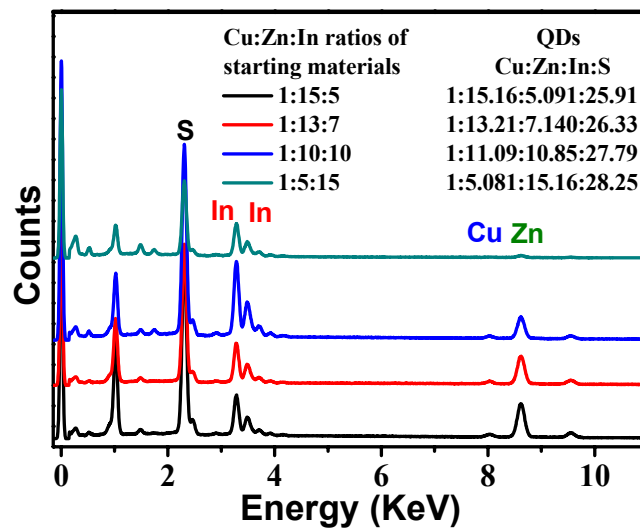
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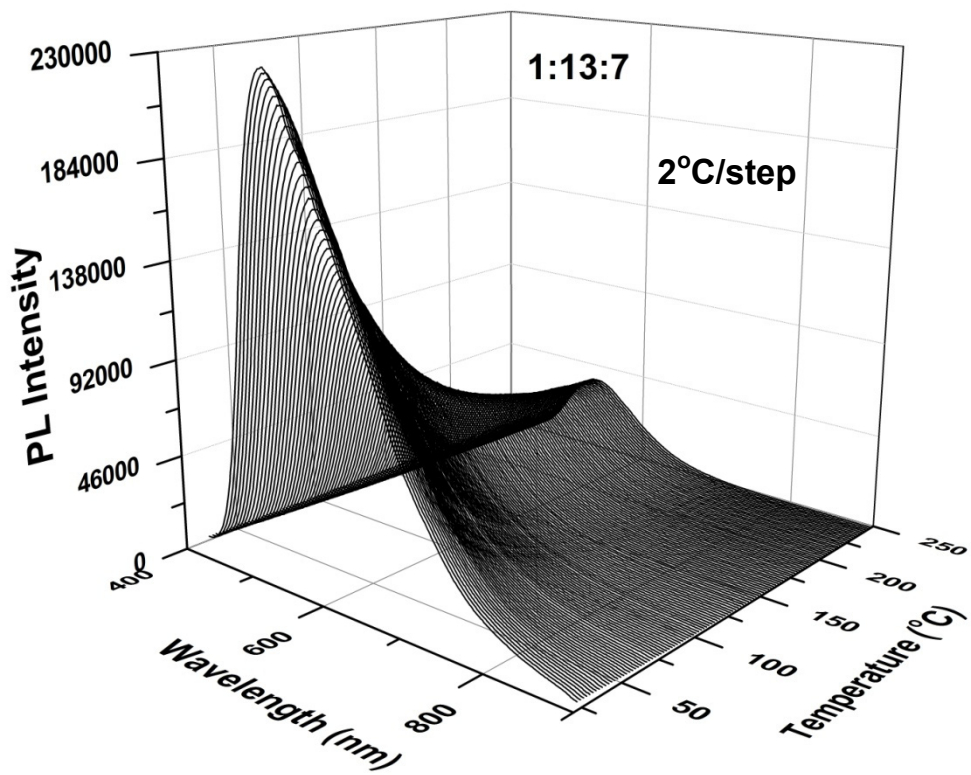
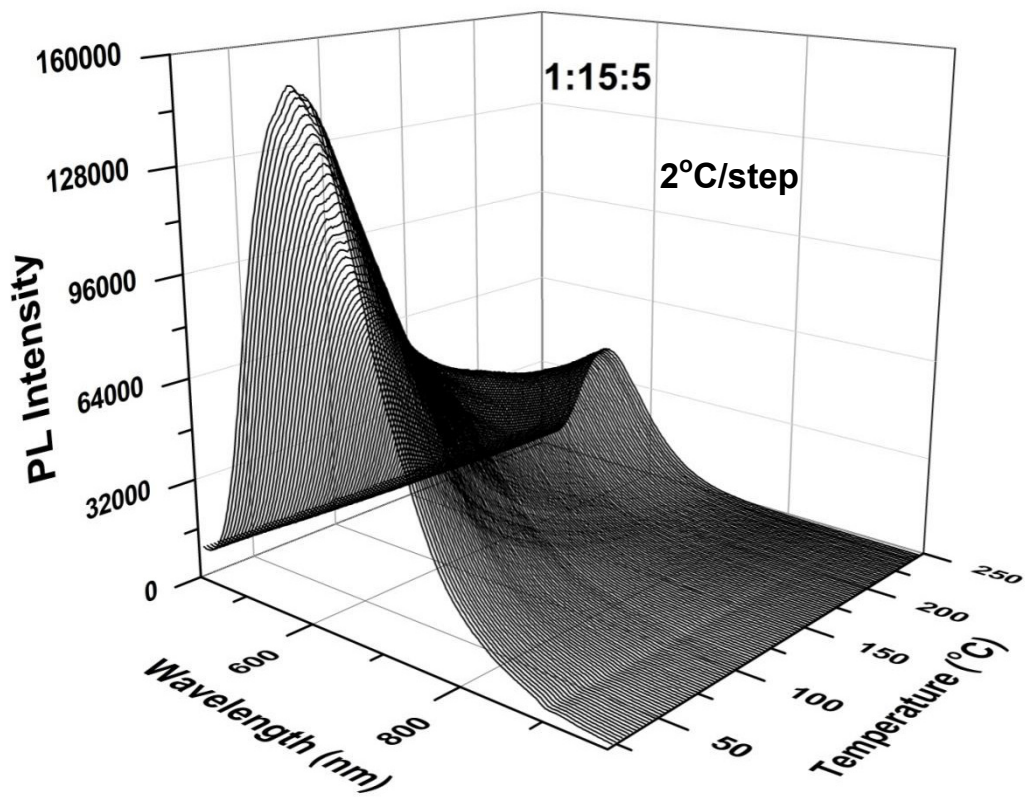
**Figure S1.** Effects of LiOH (A and B), NaOH (C and D), KOH (E and F), and TMAH (G and H) on PL spectra and PL intensity of Cu-Zn-In-S QD thin films with different Cu/Zn/In ratios.

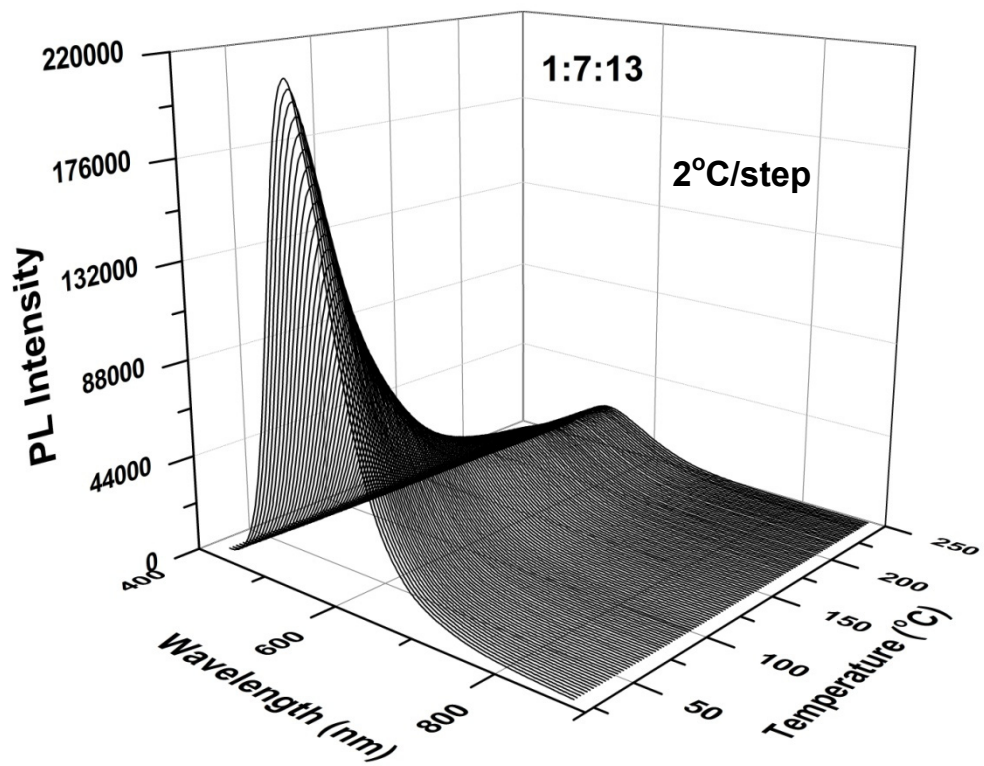
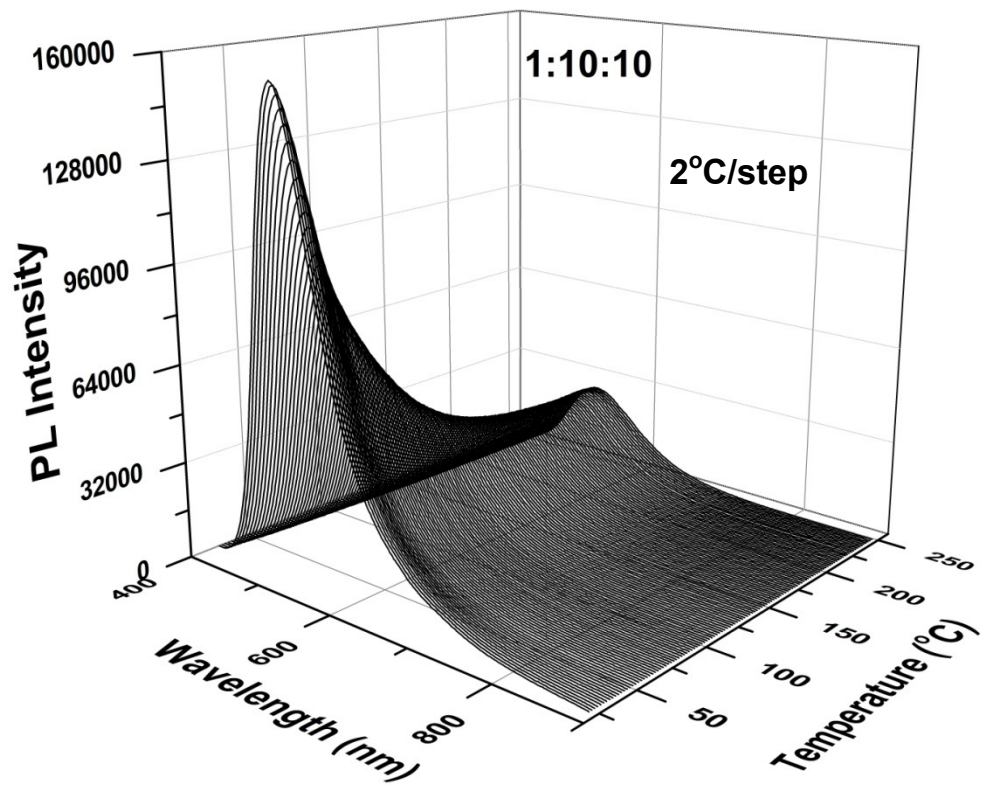


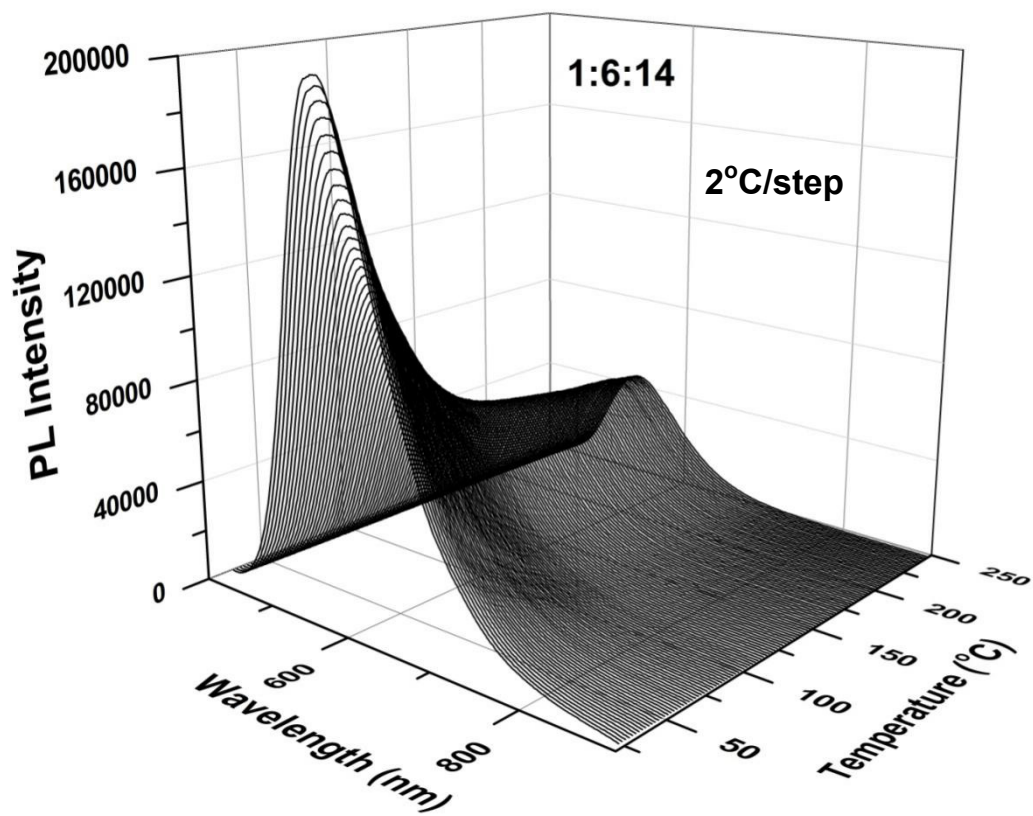
**Figure S2.** HRTEM image of Cu-Zn-In-S QDs (Cu:Zn:In=1:10:10)



**Figure S3.** EDS spectra and chemical compositions of Cu-Zn-In-S QD thin films with different Cu:Zn:In ratios







**Figure S4.** Temperature-dependent PL spectra of Cu-Zn-In-S QD thin films with different Cu/Zn/In ratios.