

## Supplementary Information

### **Persistent luminescence found in Mg<sup>2+</sup> and Pr<sup>3+</sup> co-doped**

### **LiNbO<sub>3</sub> single crystal**

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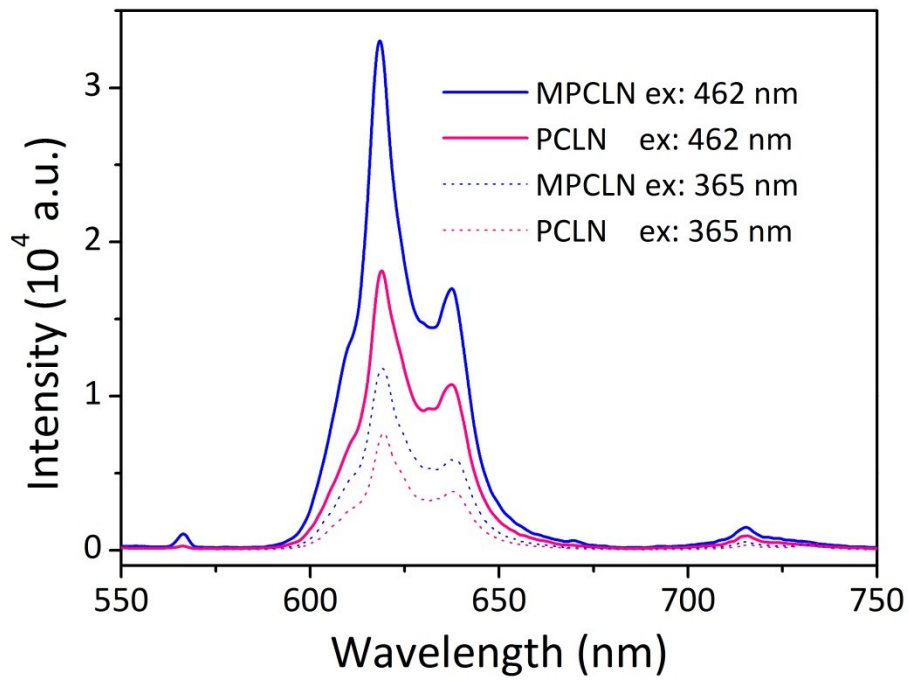


Fig. S1 Emission spectra of MPCLN and PCLN excited at 462 nm and 365 nm. All the emission peaks are at 619 nm, indicating that no shift at different excitation wavelength.

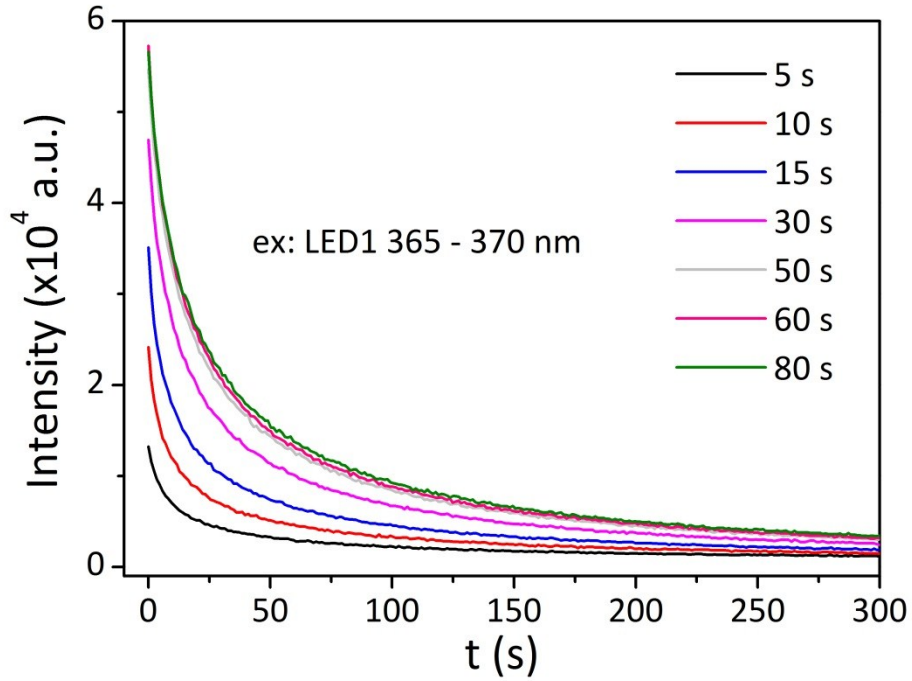


Fig. S2 Afterglow curves of MPCLN excited by LED1 (365 – 370 nm) with different excitation time from 5 to 80 seconds. It can be seen from the short time excitation results that the shallow level electron traps will be filled first and then the deeper ones with excitation time and saturation would be reached after 60 seconds.