

## Near-infrared downshifting luminescence of $\text{Ca}_2\text{LaTaO}_6:\text{Nd}^{3+}/\text{Yb}^{3+}/\text{K}^+$

phosphor and their application: solar cell and anti-counterfeiting

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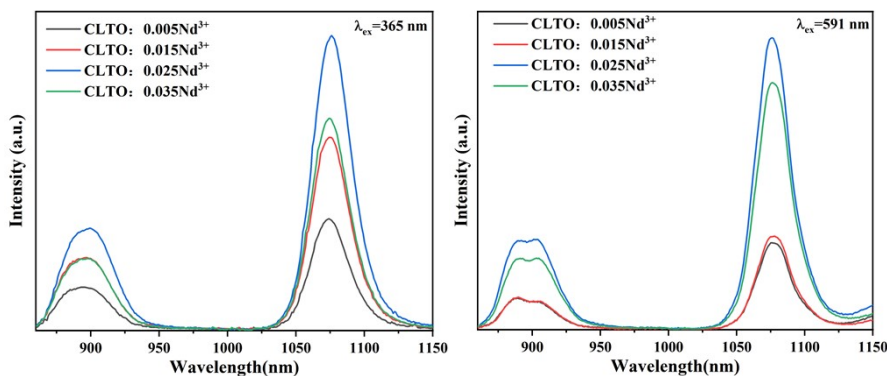
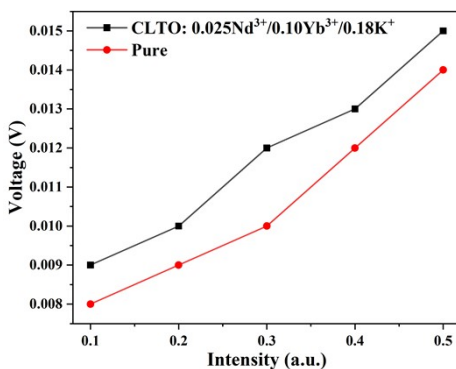


Fig.S1 PL spectra of CLTO: $x\text{Nd}^{3+}$  sample ( $x=0.005,0.015,0.025,0.035$ ) (a) under 365 nm excitation;(b) under 591 nm excitation.



FS2. Optical-voltage curve of the solar panel with and without CLTO: $\text{Nd}^{3+}/\text{Yb}^{3+}/\text{K}^+$  phosphor