

**Effects of non-luminescent center metal ions on upconversion
luminescence and temperature sensing properties of
ScVO₄:10%Yb³⁺/2%Er³⁺ nano/micro-particles**

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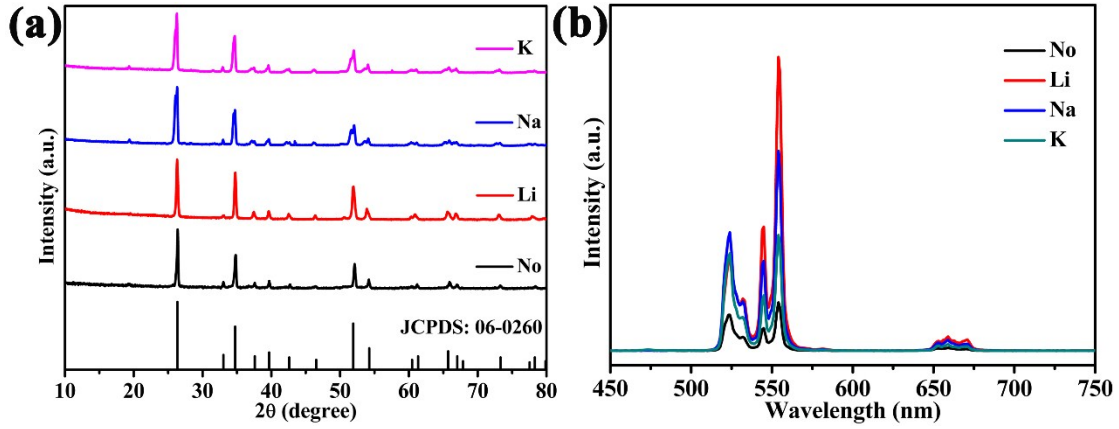


Fig. S1 XRD patterns (a), UC emission spectra (b) of alkali metal ions (Li^+ , Na^+ or K^+) doped $\text{ScVO}_4:10\%\text{Yb}^{3+}/2\%\text{Er}^{3+}$ samples

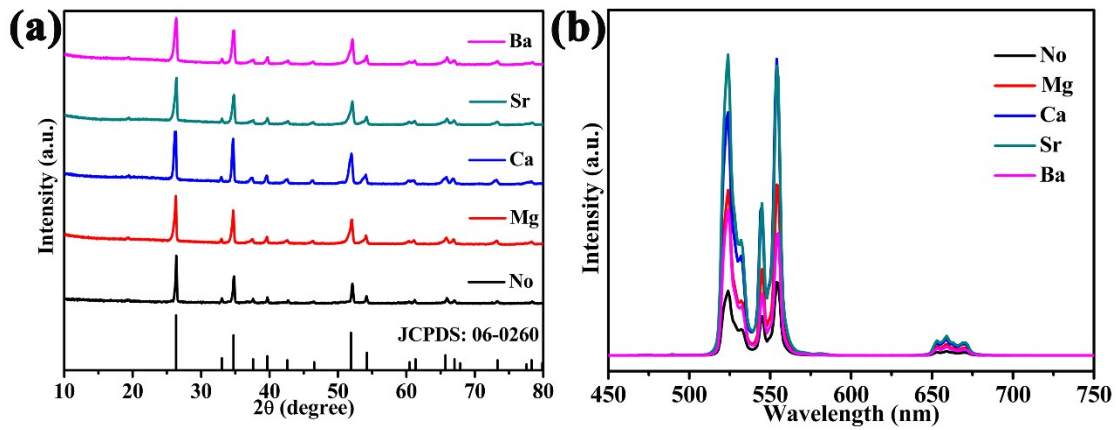


Fig. S2 XRD patterns (a), UC emission spectra (b) of alkaline earth metal ions (Mg^{2+} , Ca^{2+} , Sr^{2+} or Ba^{2+}) doped $\text{ScVO}_4:10\%\text{Yb}^{3+}/2\%\text{Er}^{3+}$ samples

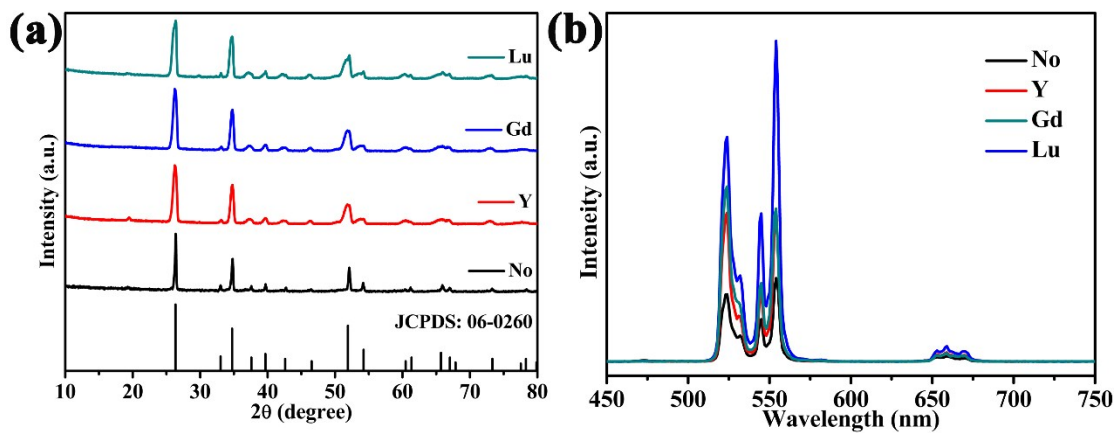


Fig. S3 XRD patterns (a), UC emission spectra (b) of (Y^{3+} , Gd^{3+} or Lu^{3+}) doped $\text{ScVO}_4:10\%\text{Yb}^{3+}/2\%\text{Er}^{3+}$ samples