

## **Supporting Information**

**Title:** Optical Properties and Energy Transfer of Novel  $\text{KSrSc}_2(\text{PO}_4)_3:\text{Ce}^{3+}/\text{Eu}^{2+}/\text{Tb}^{3+}$

Phosphor for White Light Emitting Diodes

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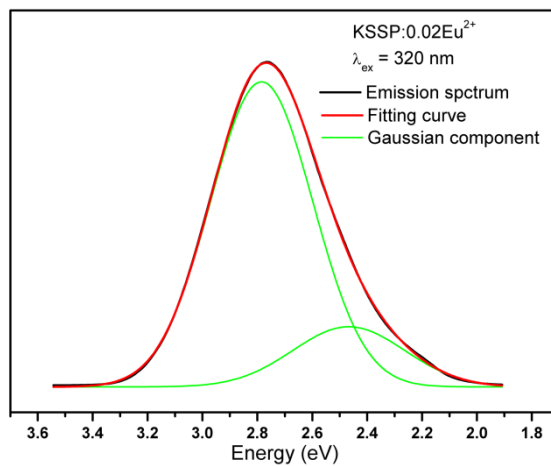


Figure S1. Emission spectrum of KSSP:0.02Eu<sup>2+</sup> and its Gaussian components on an energy scale.

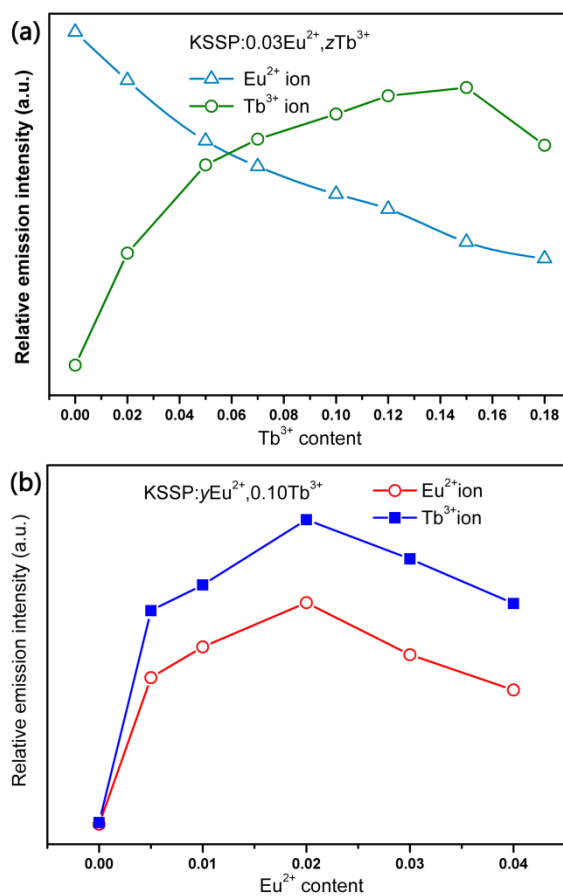


Figure S2. Dependence of Eu<sup>2+</sup> and Tb<sup>3+</sup> emission intensity on (a) Tb<sup>3+</sup> doping content in KSSP:0.03Eu<sup>2+</sup>,zTb<sup>3+</sup> (b) Eu<sup>2+</sup> doping content in KSSP:yEu<sup>2+</sup>,0.10Tb<sup>3+</sup> phosphor.

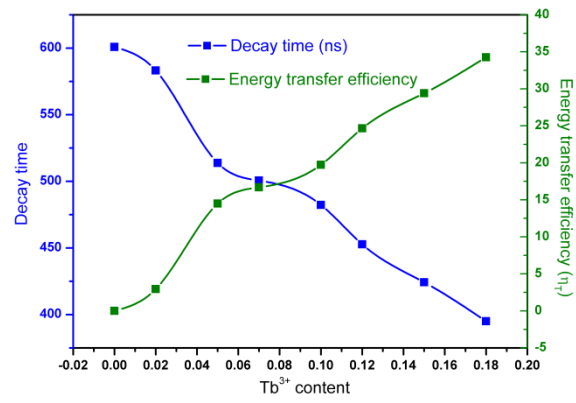


Figure S3. Decay lifetime for  $\text{Eu}^{2+}$  ions and energy transfer efficiency for  $\text{Eu}^{2+} \rightarrow \text{Tb}^{3+}$  in  $\text{KSSP}:0.03\text{Eu}^{2+},z\text{Tb}^{3+}$  ( $z = 0-0.18$ ) phosphors