

Supporting Information for:

**Luminescence properties and energy transfer of K_3LuF_6 : Tb^{3+} , Eu^{3+}
multicolor phosphors with cryolite structure**

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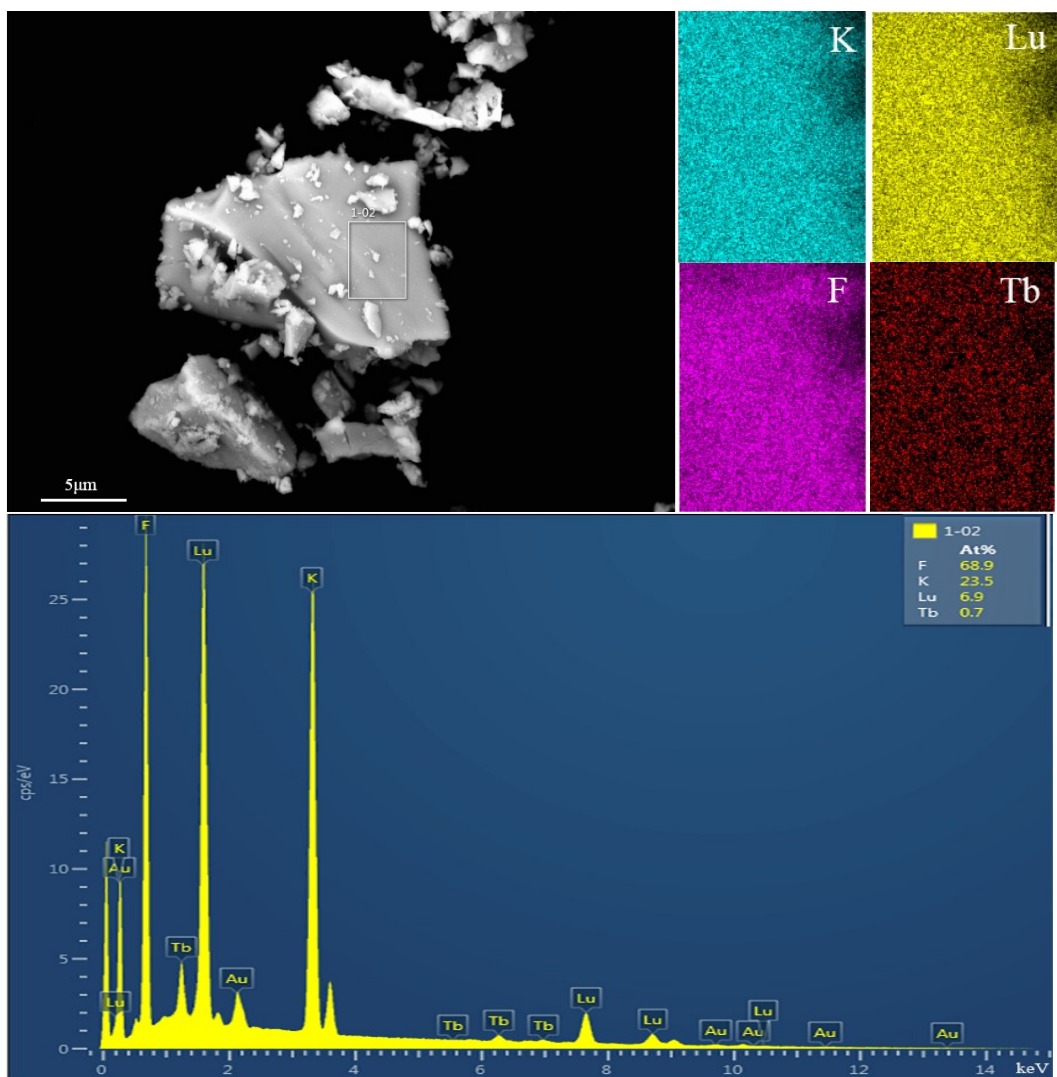


Fig. S1 SEM image, elemental mapping and EDX spectrum of $K_3LuF_6:0.12Tb^{3+}$ phosphor.

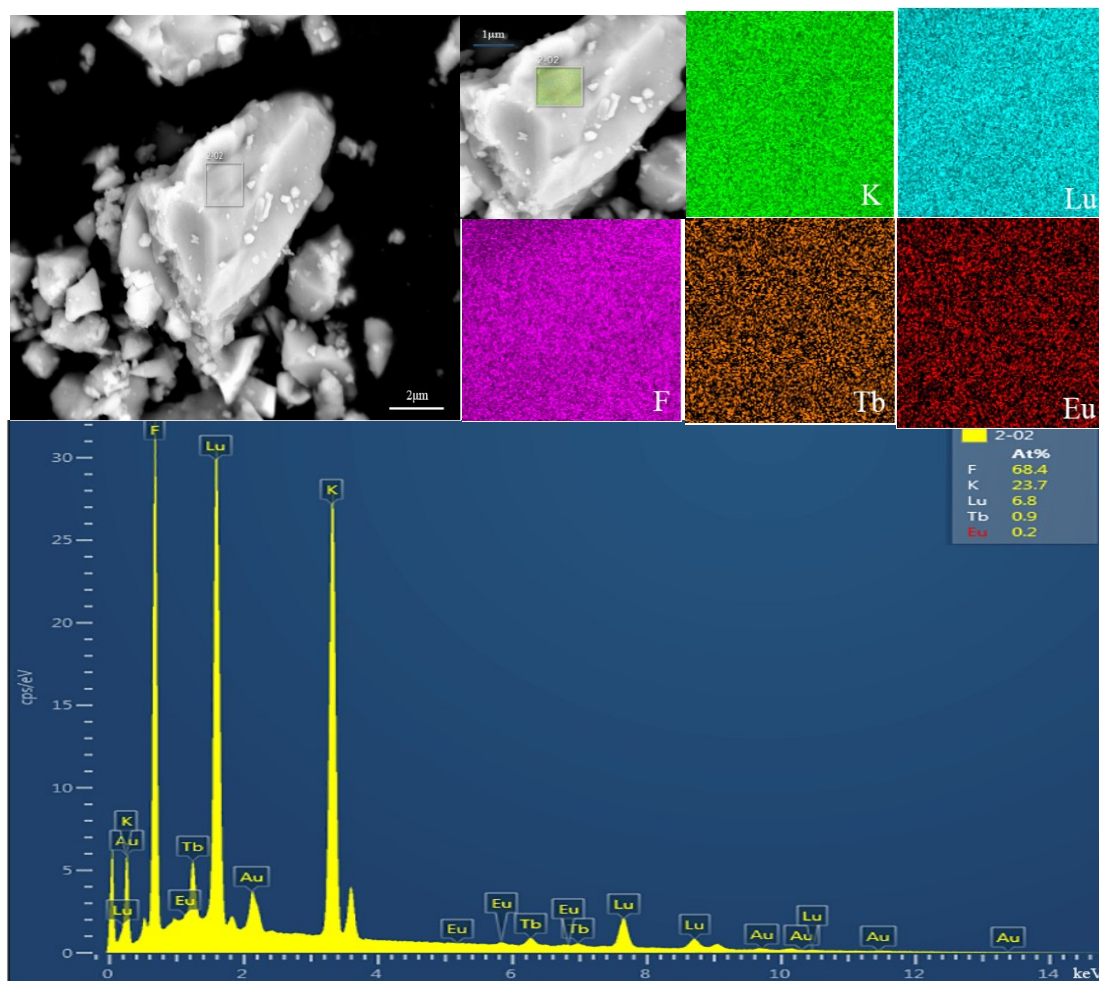


Fig. S2 SEM image, elemental mapping and EDX spectrum of $\text{K}_3\text{LuF}_6:0.12\text{Tb}^{3+}$, 0.03Eu^{3+} phosphor.

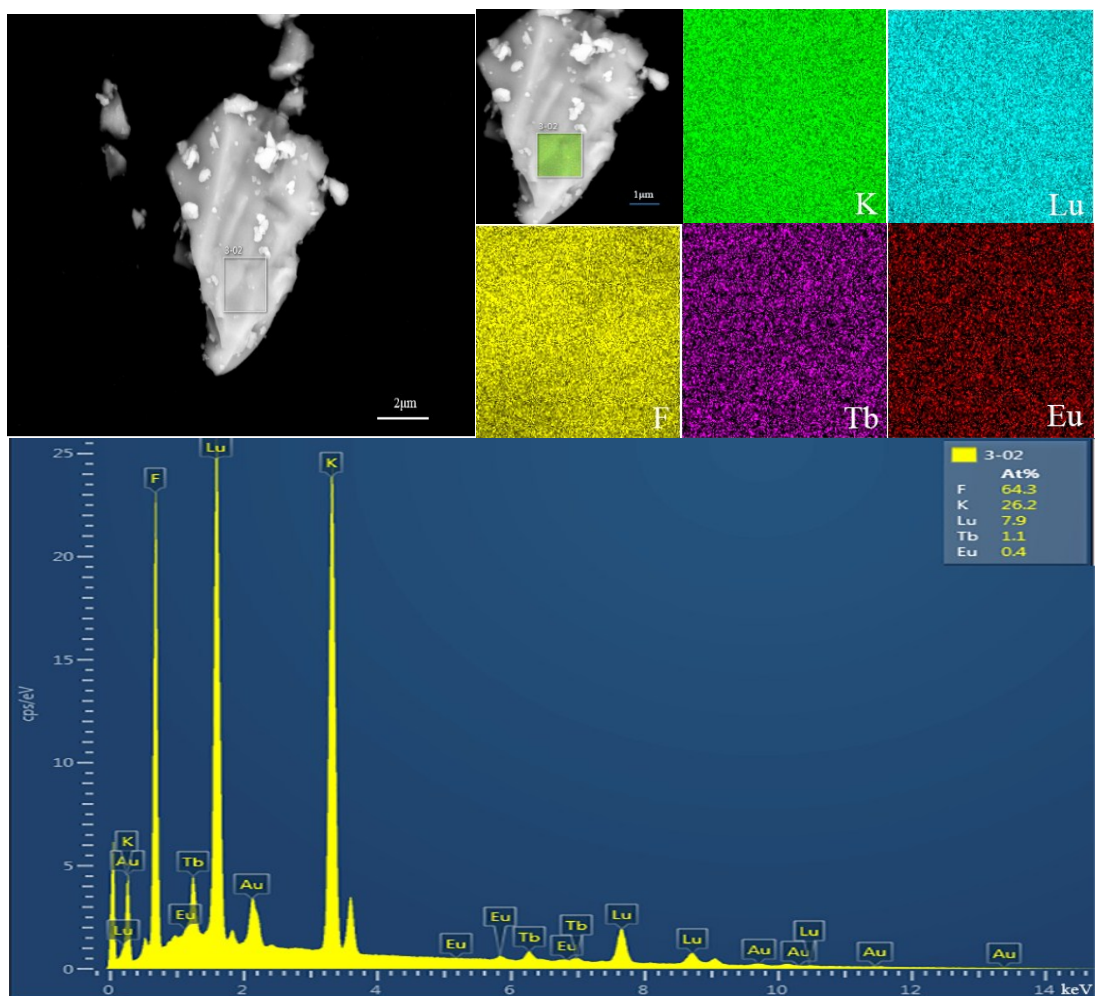


Fig. S3 SEM image, elemental mapping and EDX spectrum of $\text{K}_3\text{LuF}_6:0.12\text{Tb}^{3+}, 0.05\text{Eu}^{3+}$ phosphor.

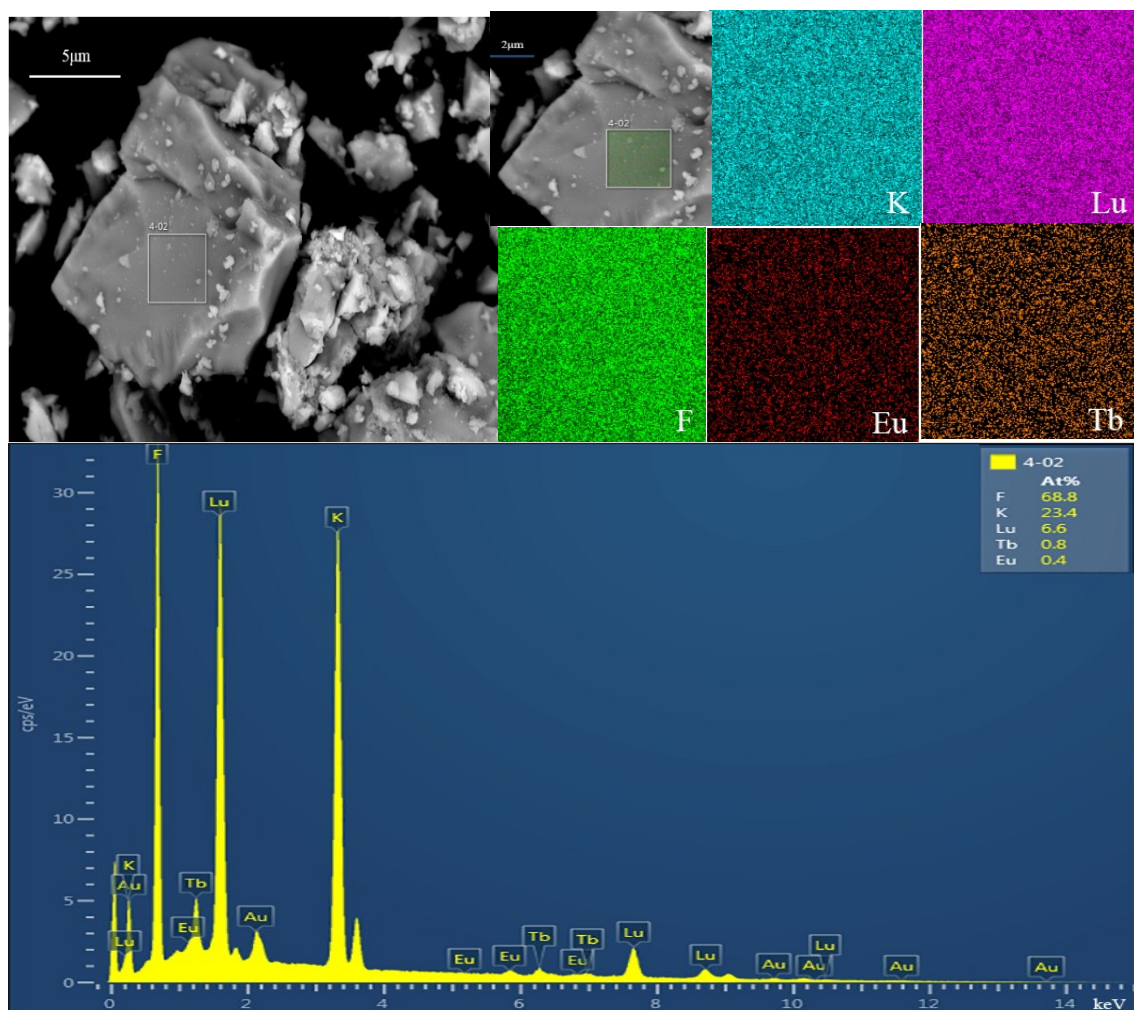


Fig. S4 SEM image, elemental mapping and EDX spectrum of $\text{K}_3\text{LuF}_6:0.12\text{Tb}^{3+}$, 0.07Eu^{3+} phosphor.

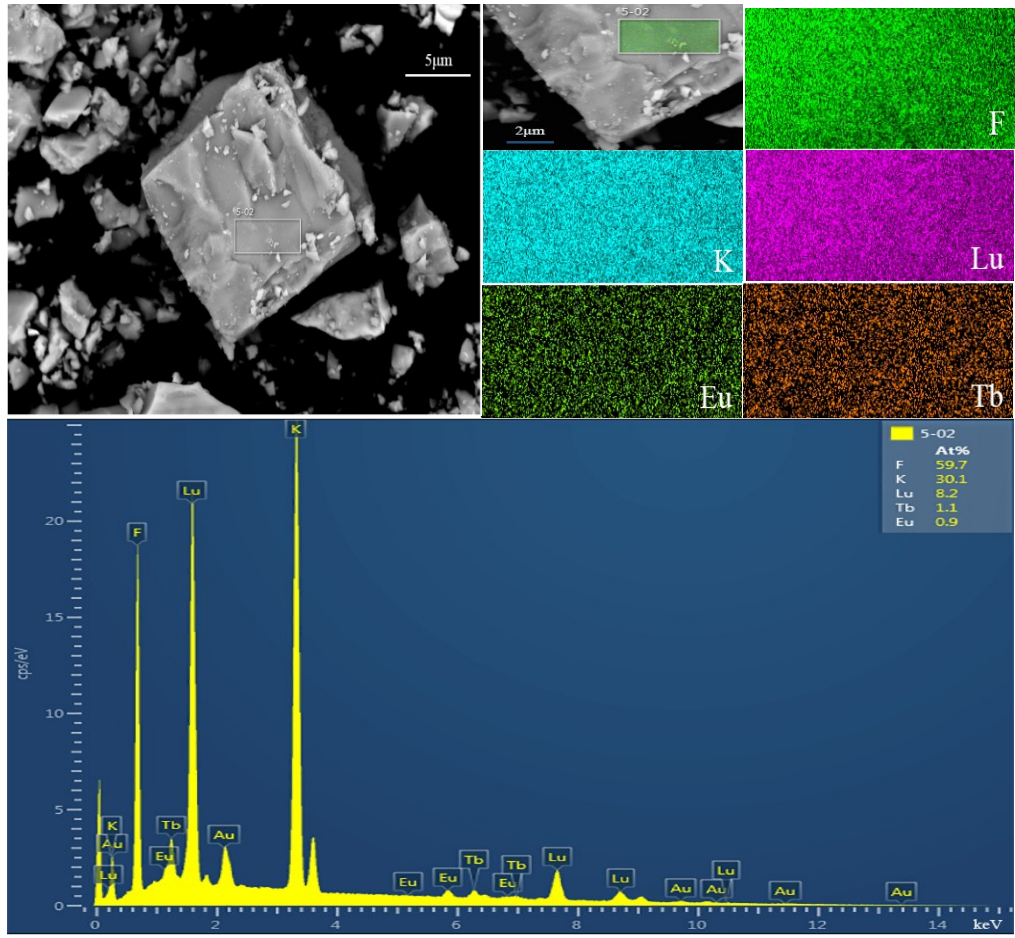


Fig. S5 SEM image, elemental mapping and EDX spectrum of $\text{K}_3\text{LuF}_6:0.12\text{Tb}^{3+}, 0.10\text{Eu}^{3+}$ phosphor.

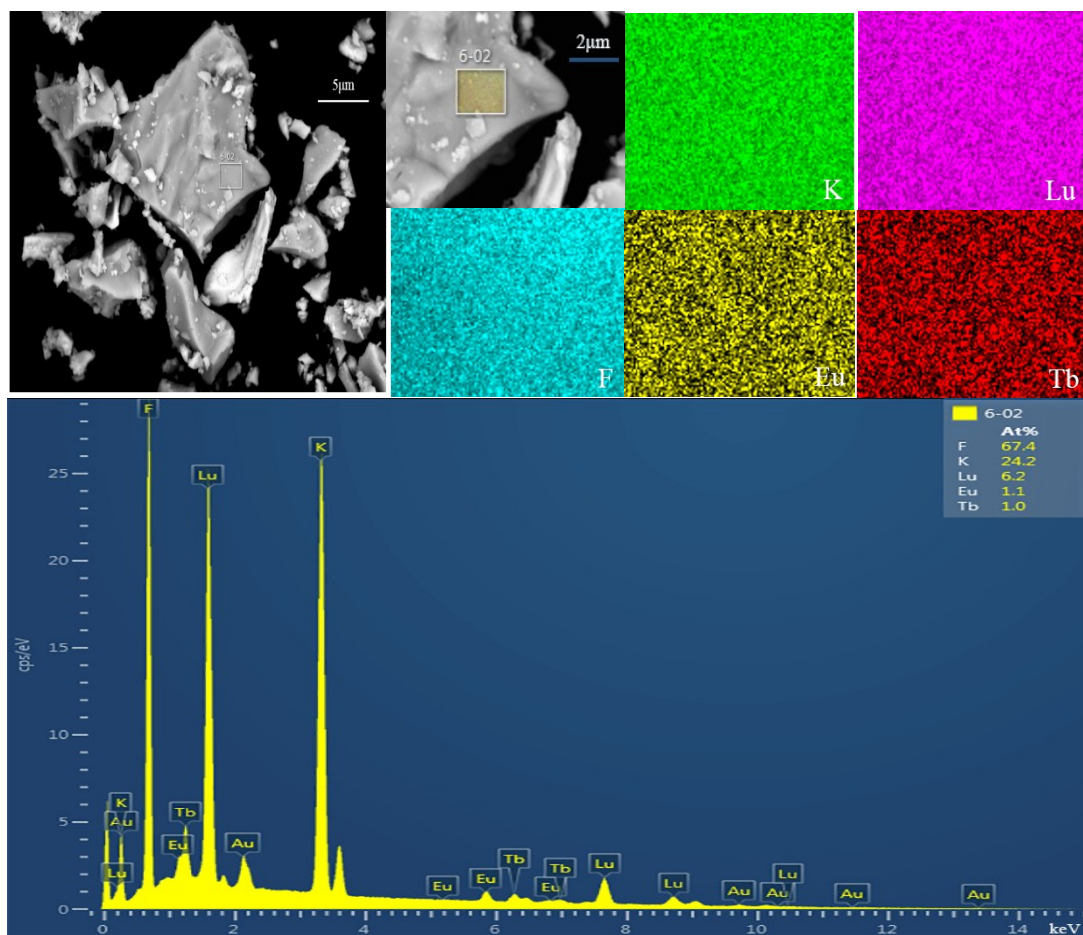


Fig. S6 SEM image, elemental mapping and EDX spectrum of $\text{K}_3\text{LuF}_6:0.12\text{Tb}^{3+}, 0.13\text{Eu}^{3+}$ phosphor.