

Supplementary Material (ESI) for Journal of Materials Chemistry  
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### Supporting Information

#### Nanoscale $\text{CaF}_2$ doped with $\text{Eu}^{3+}$ and $\text{Tb}^{3+}$ through fluorolytic sol-gel-synthesis

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DLS measurements of the samples:  $\text{CaF}_2\text{:Eu/Tb0.1}$ ,  $\text{CaF}_2\text{:Eu/Tb2}$ ,  $\text{CaF}_2\text{:Eu/Tb10}$

Absorption spectra of  $\text{CaF}_2\text{:Eu/Tb10}$

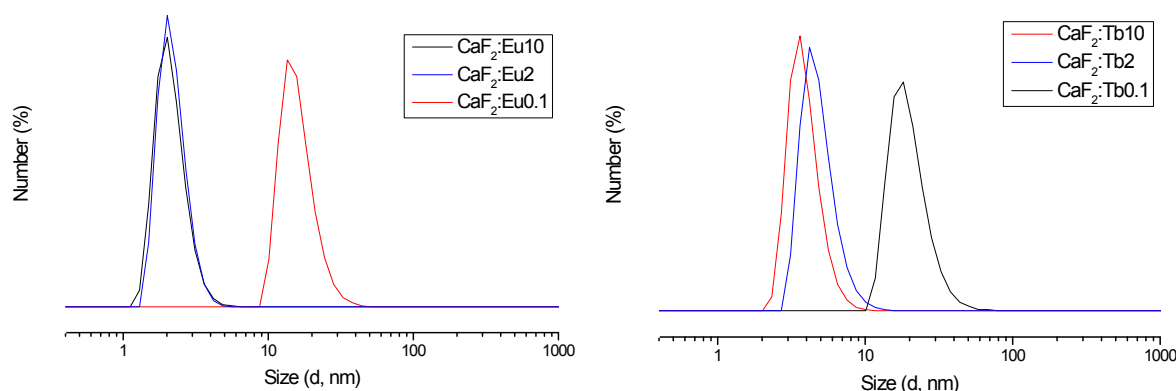


Fig. S1 Particle size distributions of  $\text{CaF}_2\text{:Eu0.1}$ ,  $\text{CaF}_2\text{:Eu2}$ ,  $\text{CaF}_2\text{:Eu10}$  (left) and  $\text{CaF}_2\text{:Tb0.1}$ ,  $\text{CaF}_2\text{:Tb2}$ ,  $\text{CaF}_2\text{:Tb10}$  (right) by DLS measurement.

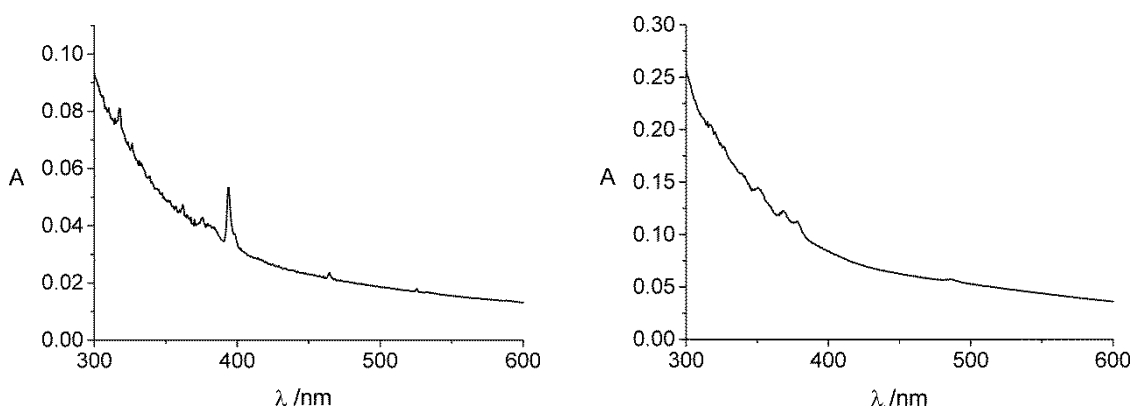


Fig. S2 Representative absorption spectra of clear sols of  $\text{CaF}_2\text{:Eu10}$  (left) and  $\text{CaF}_2\text{:Tb10}$  (right).