

34. Luminescence of Some Eu^{3+} Activated Oxy sulphate

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ABSTRACT

The Eu^{3+} activated phosphors, $\text{La}_2\text{O}_2\text{SO}_4:\text{Eu}^{3+}$ and $\text{Y}_2\text{O}_2\text{SO}_4:\text{Eu}^{3+}$, were prepared by the solid-state reaction. Photoluminescence (PL) results showed that the phosphor can be efficiently excited by UV-visible light from 250 to 410 nm, and exhibited bright red emission. The results showed that the relative PL intensity increases with Eu^{3+} concentration increasing until a maximum intensity is reached, and then it decreases due to concentration quenching. The present synthesized phosphors has higher emission intensity upon excited with 268 nm light.