

Electronic Supporting Information (ESI)

Facile Hydrothermal Synthesis and Pulsed Laser Deposition of $\text{Ca}_{0.5}\text{Y}_{1-x}(\text{WO}_4)_2:x\text{Eu}^{3+}$ phosphor : Investigations on the Luminescence, Judd-Ofelt analysis and Charge Compensation Mechanism

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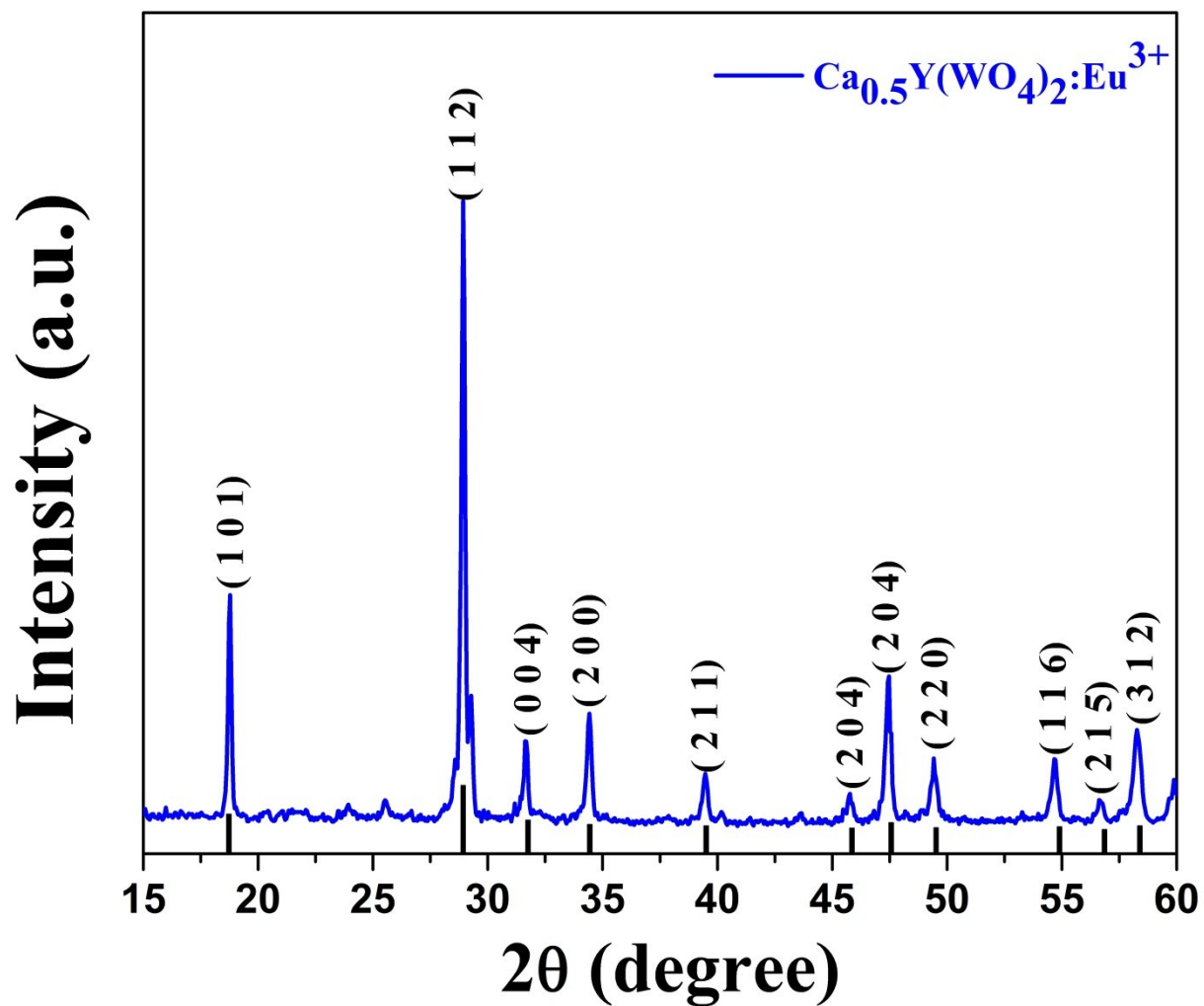


Fig. S1. Indexed XRD pattern of the $\text{Ca}_{0.5}\text{Y}_{1-x}(\text{WO}_4)_2:x\text{Eu}^{3+}$ phosphor using ammonium tungstate as one of the precursors.

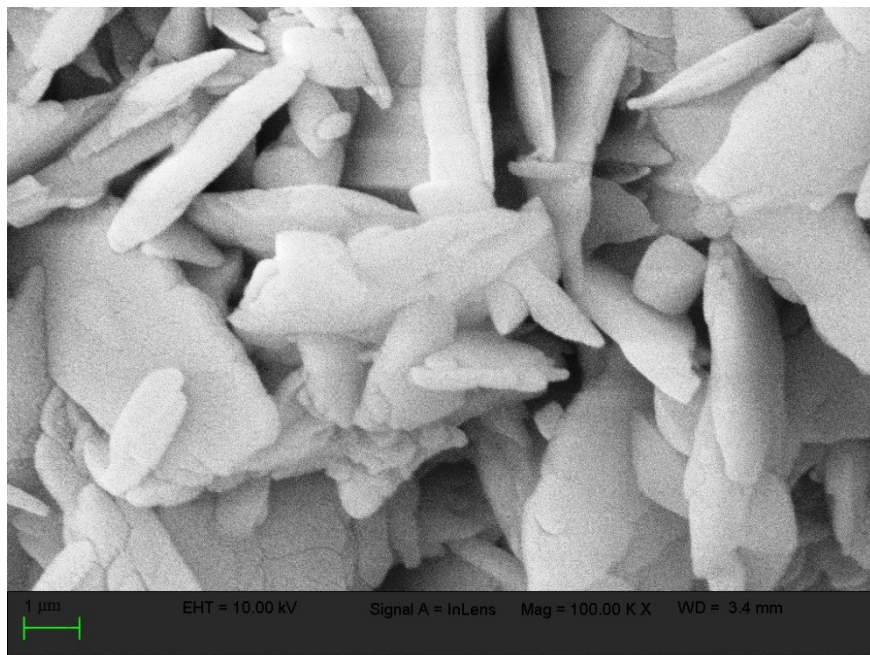


Fig. S2. FESEM image of the $\text{Ca}_{0.5}\text{Y}_{1-x}(\text{WO}_4)_2:x\text{Eu}^{3+}$ phosphor at 24 h reaction time prepared without using the surfactant EDTA.

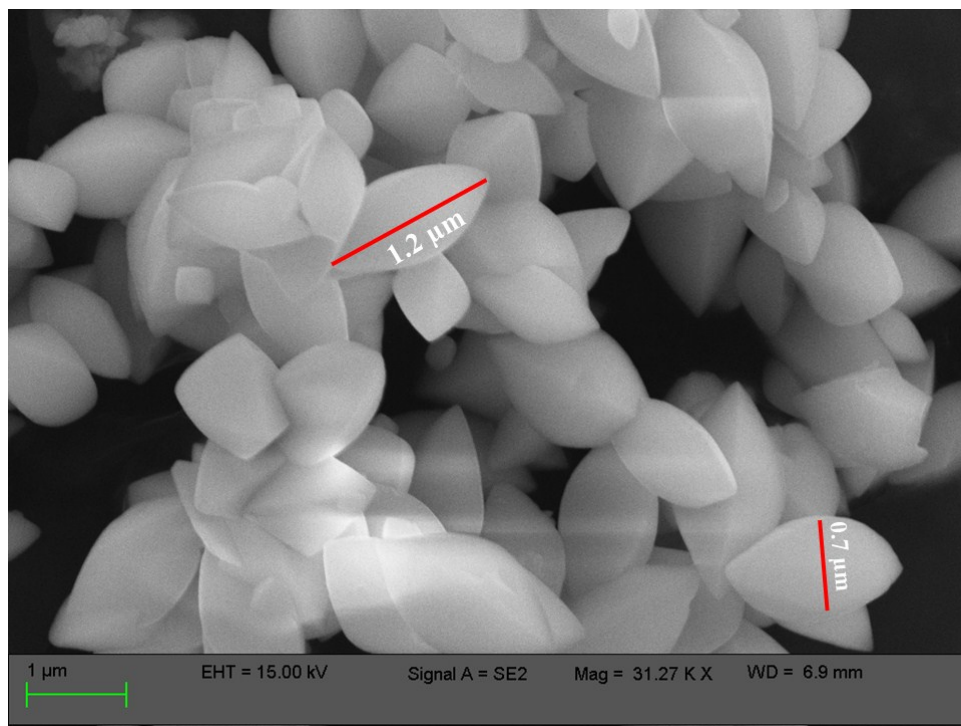


Fig. S3. FESEM image of the phosphor $\text{Ca}_{0.5}\text{Y}_{1-x}(\text{WO}_4)_2:\text{xEu}^{3+}$ phosphor at 24 h reaction time showing particle size.

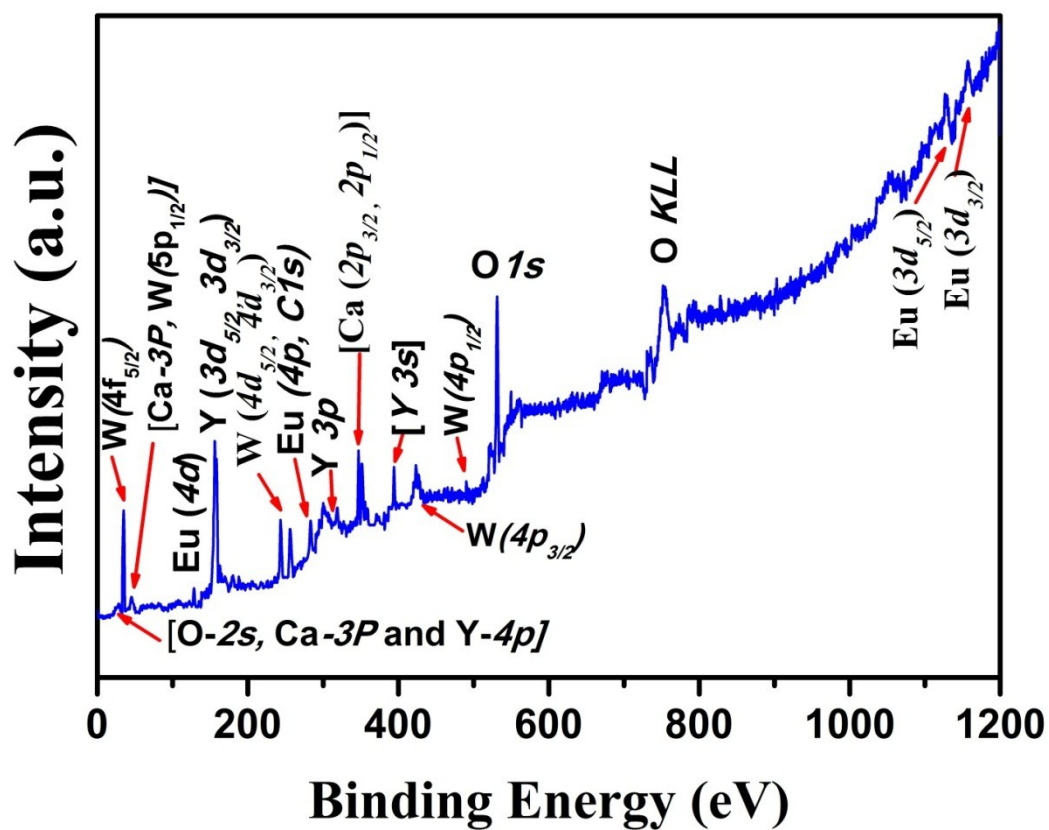


Fig. S4. XPS survey spectrum for $\text{Ca}_{0.5}\text{Y}_{1-x}(\text{WO}_4)_2:\text{xEu}^{3+}$ phosphor.