

# Supplementary Materials: Eu, Gd-Codoped Ytria Nanoprobes for Optical and T<sub>1</sub>-Weighted Magnetic Resonance Imaging

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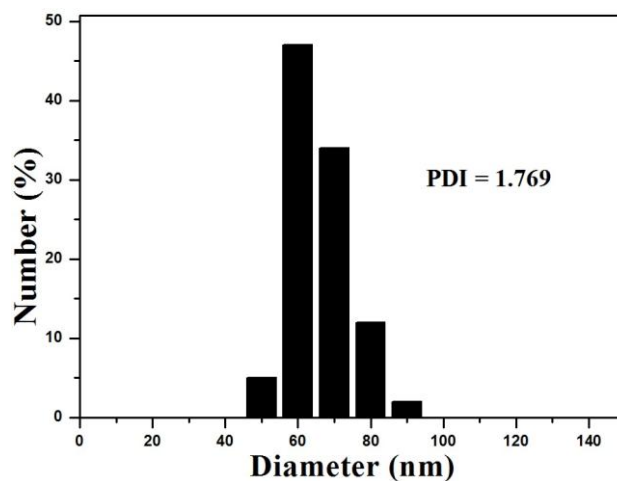


Figure S1. DLS measurements and PDI analysis of 10 mol % Gd<sup>3+</sup> codoped Y<sub>2</sub>O<sub>3</sub>:Eu<sup>3+</sup>.

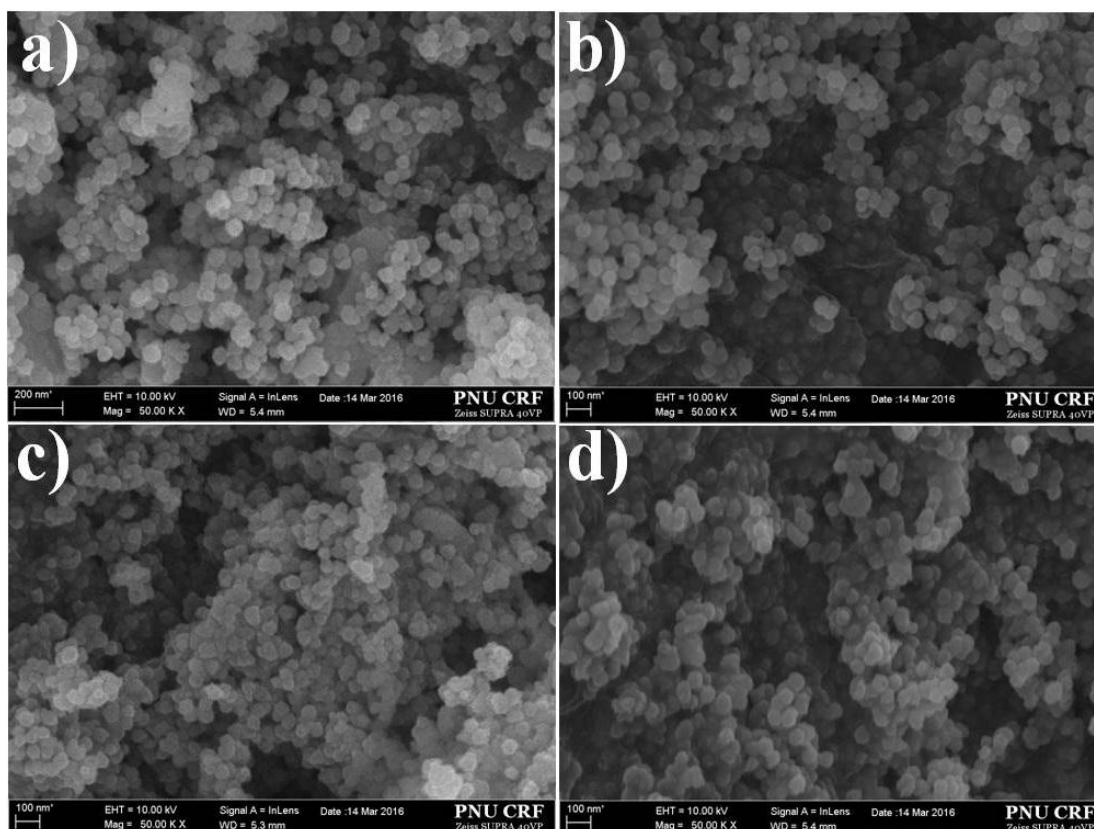


Figure S2. FESEM images of (a) bare Y<sub>2</sub>O<sub>3</sub>:Eu<sup>3+</sup>; (b) 3 mol % Gd<sup>3+</sup> codoped Y<sub>2</sub>O<sub>3</sub>:Eu<sup>3+</sup>; (c) 7 mol % Gd<sup>3+</sup> codoped Y<sub>2</sub>O<sub>3</sub>:Eu<sup>3+</sup>; and (d) 10 mol % Gd<sup>3+</sup> codoped Y<sub>2</sub>O<sub>3</sub>:Eu<sup>3+</sup>.

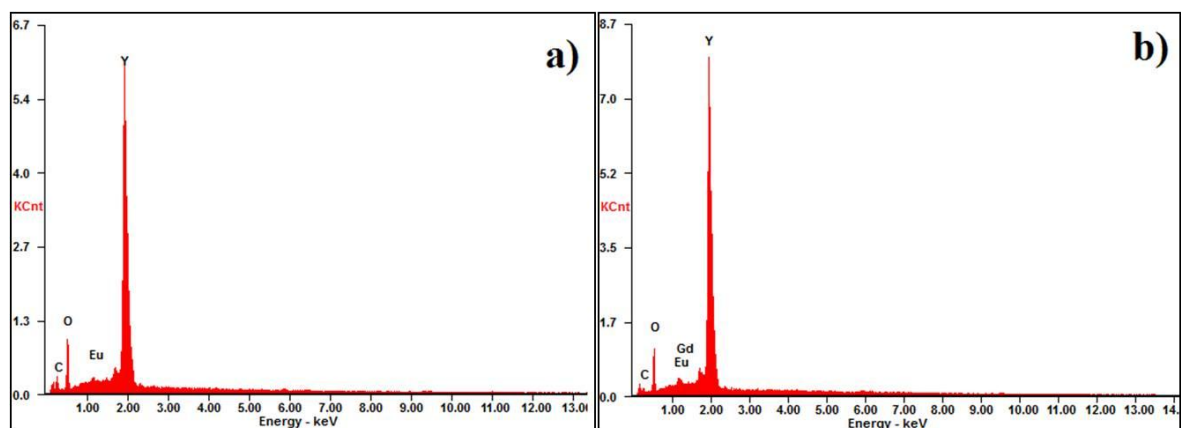


Figure S3. EDX analysis of (a) bare  $\text{Y}_2\text{O}_3:\text{Eu}^{3+}$ ; and (b) 3 mol %  $\text{Gd}^{3+}$  codoped  $\text{Y}_2\text{O}_3:\text{Eu}^{3+}$ .

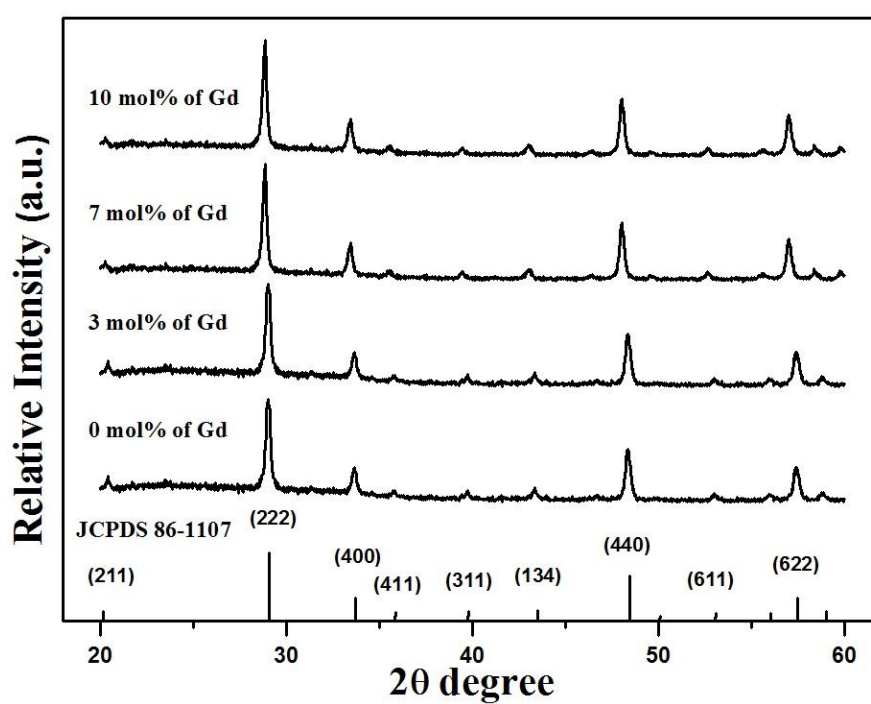


Figure S4. XRD patterns of prepared samples.