

## Structure, luminescence and energy transfer in Ce<sup>3+</sup> and Mn<sup>2+</sup> codoped $\gamma$ -AlON phosphors

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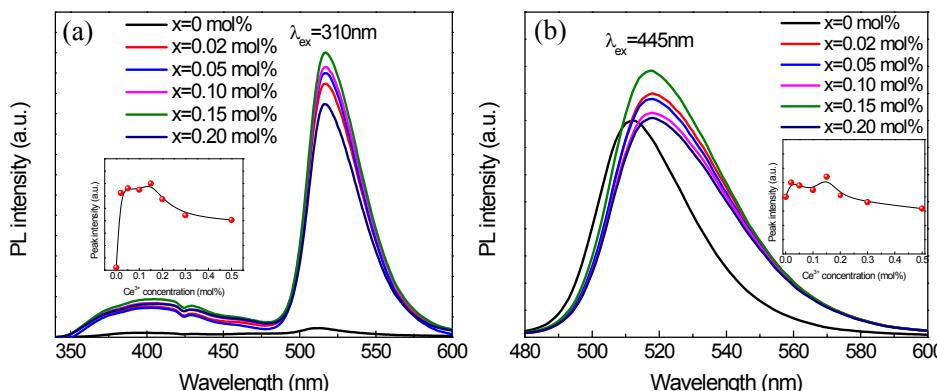


Fig.S1 PL spectra and the luminescence intensity of  $\gamma$ -AlON:xCe<sup>3+</sup>, 7mol% Mn<sup>2+</sup> under the excitation of (a) 310 nm, and (b) 445 nm. The insets show the PL intensity of  $\gamma$ -AlON:xCe<sup>3+</sup>, 7mol% Mn<sup>2+</sup> as a function of the Ce<sup>3+</sup> concentration.

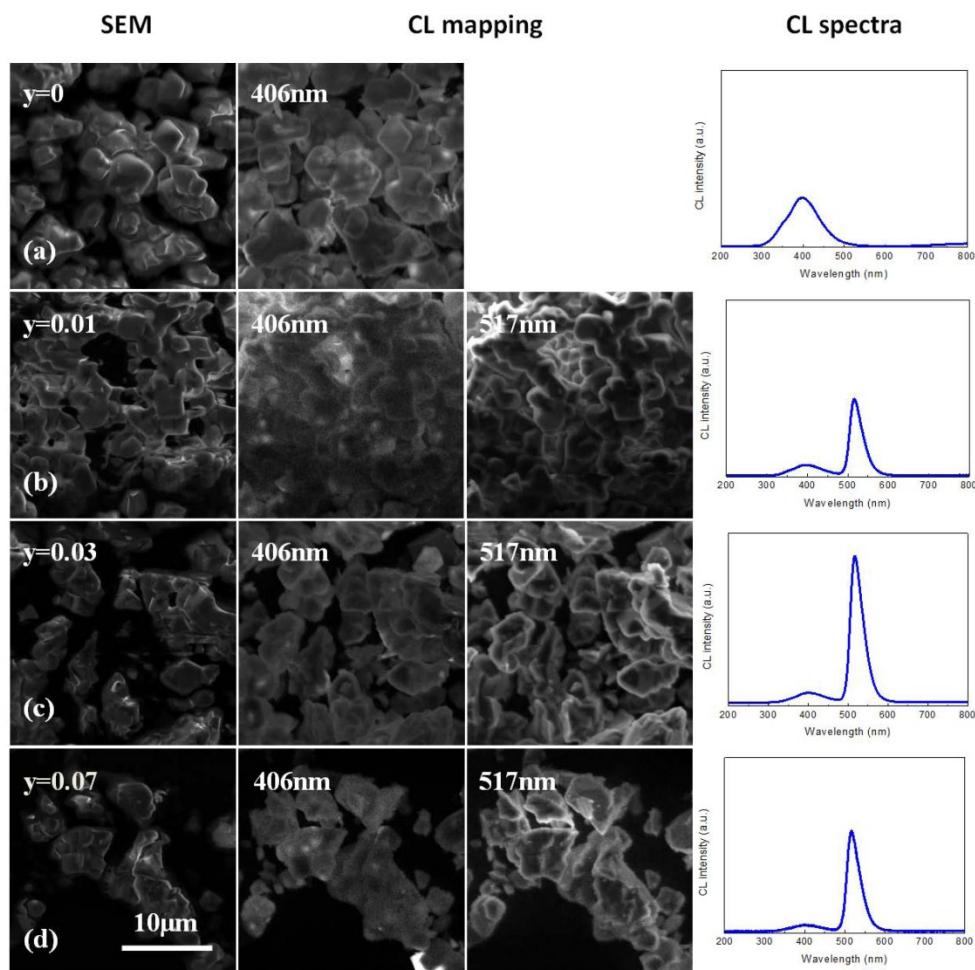


Fig.S2 CL mapping and corresponding CL spectra of  $\gamma$ -AlON:0.15mol% Ce<sup>3+</sup>, yMn<sup>2+</sup> for (a) y = 0, (b) y = 1 mol%, (c) y = 3 mol%, and (d) y = 7 mol%.