

## Supporting Information

### Study on Fluorescence Properties of Micron-Submicron-Nano BaFBr:Eu<sup>2+</sup> Phosphor

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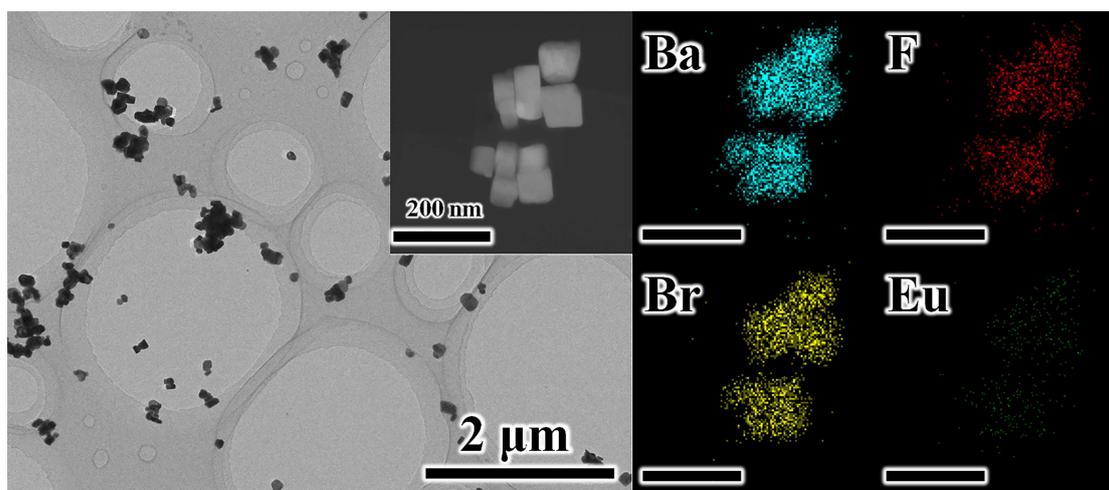


Fig. S1 TEM and HRTEM images of the as-synthesized BaFBr:Eu<sup>2+</sup> (Fig. 1h) and the corresponding elemental mapping profiles

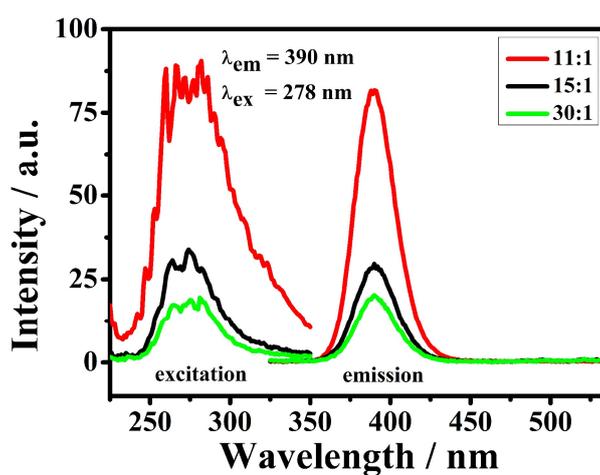


Fig. S2 PL spectrum of BaFBr:Eu<sup>2+</sup> phosphors (annealing temperature: 600 °C): C<sub>2</sub>H<sub>5</sub>OH/H<sub>2</sub>O =

11 : 1, 15 : 1, 30 : 1.

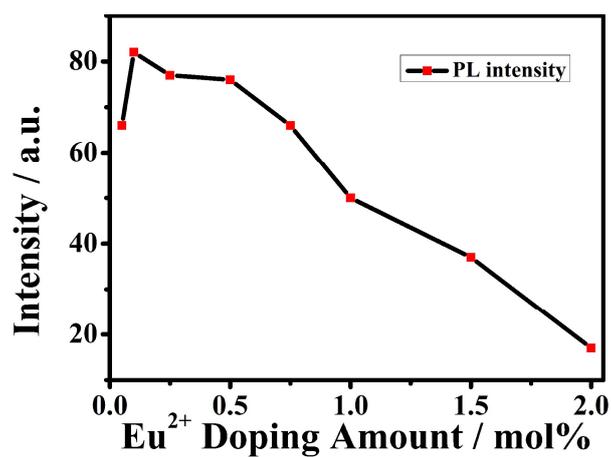


Fig. S3 Results for BaFBr:Eu<sup>2+</sup> phosphors (C<sub>2</sub>H<sub>5</sub>OH/H<sub>2</sub>O = 11 : 1, annealing temperature: 600 °C):

PL intensity of different Eu<sup>2+</sup> doping amount, 0.05, 0.1, 0.25, 0.5, 0.75, 1, 1.5, 2 mol% (Theoretical doping amount)

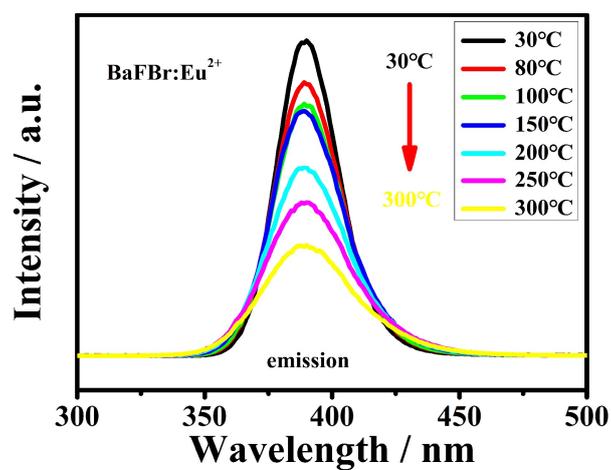


Fig. S4 Temperature dependent PL emission spectra of BaFBr:0.1mol%Eu<sup>2+</sup> phosphors within the temperature range from 30 to 300 °C.