Electronic supplementary information

Facile synthesis of highly uniform octahedral LuVO₄ microcrystals by a facile chemical conversion method

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Figure S1 (a) XRD pattern and (b, c) SEM images of the sample prepared by directly using Lu(NO₃)₃ and Na₃VO₄•12H₂O as reacting agent in one step (220 °C, 24 h).
**Figure S2** (a) Excitation spectra and (b) emission spectra of the as-prepared LuVO₄:Eu³⁺ sample (red line) and the commercial YVO₄:Eu³⁺ phosphor (black line).
**Figure S3** Decay curves for the as-prepared samples: (a) LuVO$_4$:Eu$^{3+}$, (b) LuVO$_4$:Dy$^{3+}$, (c) LuVO$_4$:Sm$^{3+}$, (d) LuVO$_4$:Er$^{3+}$. 