

**Electronic Supplementary Information (ESI)**

**Dendritic  $\text{Y}_4\text{O}(\text{OH})_9\text{NO}_3:\text{Eu}^{3+}/\text{Y}_2\text{O}_3:\text{Eu}^{3+}$  hierarchical structures: controlled synthesis, growth mechanism, and luminescence properties**

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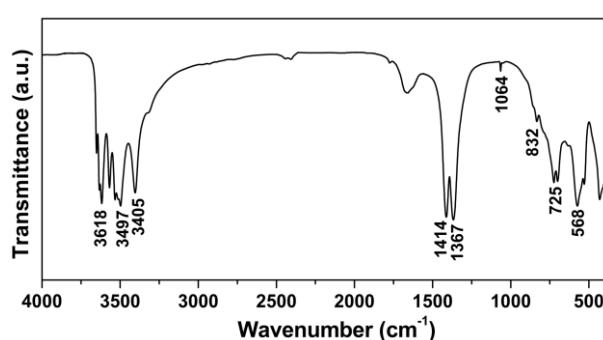
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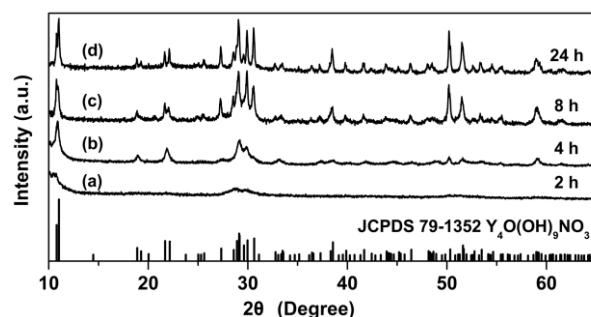
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**Table S1**

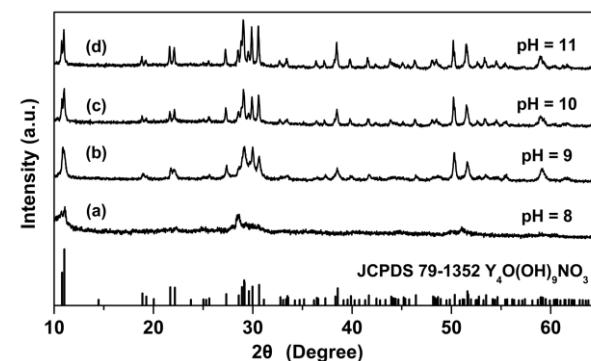
	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>	<b>S5</b>	<b>S6</b>	<b>S7</b>	<b>S8</b>
<b>Y(NO<sub>3</sub>)<sub>3</sub> (1M) (mL)</b>	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
<b>Eu(NO<sub>3</sub>)<sub>3</sub> (0.05 M) (mL)</b>	2	2	2	2	2	2	2	2
<b>Deionized water (mL)</b>	1.1	6.1	11.1	16.1	21.1	26.1	28.1	31.1
<b>Total water (mL)</b>	5	10	15	20	25	30	32	35
<b>EG (mL)</b>	30	25	20	15	10	5	3	0



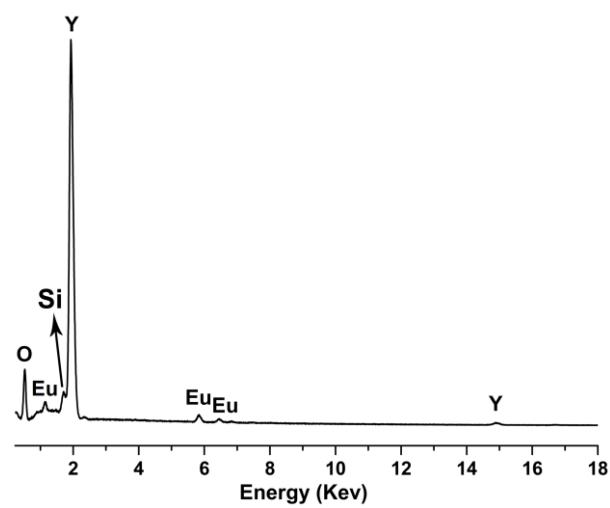
**Fig. S1** FT-IR spectrum of as-obtained Y<sub>4</sub>O(OH)<sub>9</sub>NO<sub>3</sub> (**S5**).



**Fig. S2** XRD patterns of sample **S5** after the reaction proceeded (a) 2 h, (b) 4 h, (c) 8 h, and (d) 24 h.



**Fig. S3** XRD patterns of Y<sub>4</sub>O(OH)<sub>9</sub>NO<sub>3</sub> prepared at different pH values.



**Fig. S4** The typical EDS spectrum of the  $\text{Y}_2\text{O}_3:\text{Eu}^{3+}$  (**C5**).