

Electronic Supporting Information

Fabrication of Yb³⁺/Er³⁺ Co-doped Yttrium-based Coordination Polymer Hierarchical Micro/nanostructures: Upconversion Luminescence Property Study and Thermal Conversion to the Corresponding Oxide

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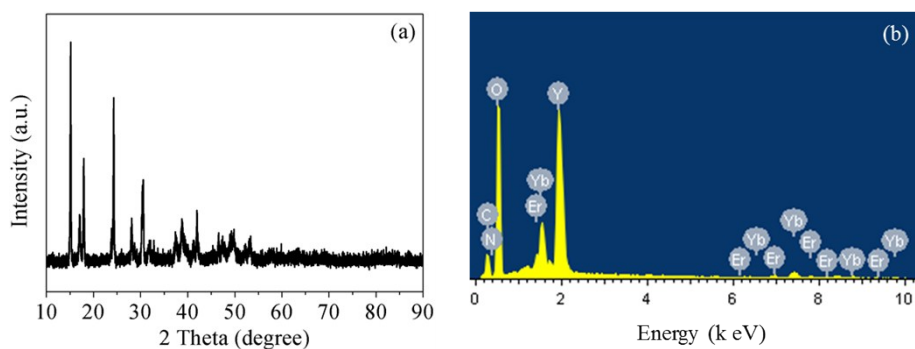
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Table S1. Samples and Corresponding Experimental Parameters.

Sample	Reaction	Reaction time	n (Ln ³⁺ , Ln=Y: Yb: Er=16:3:1)	n (allantoin)	V (H ₂ O) (mL)
	temperature (°C)		(mmol)	(mmol)	
1	200	24 h	0.1	0.3	25
2	100	24 h	0.1	0.3	25
3	120	24 h	0.1	0.3	25
4	160	24 h	0.1	0.3	25
5	200	75 min	0.1	0.3	25
6	200	1.5 h	0.1	0.3	25
7	200	3 h	0.1	0.3	25
8	200	6 h	0.1	0.3	25
9	200	12 h	0.1	0.3	25
10	200	48 h	0.1	0.3	25

**Fig.S1.** PXRD pattern (a) and the EDX spectra (b) of sample 1.

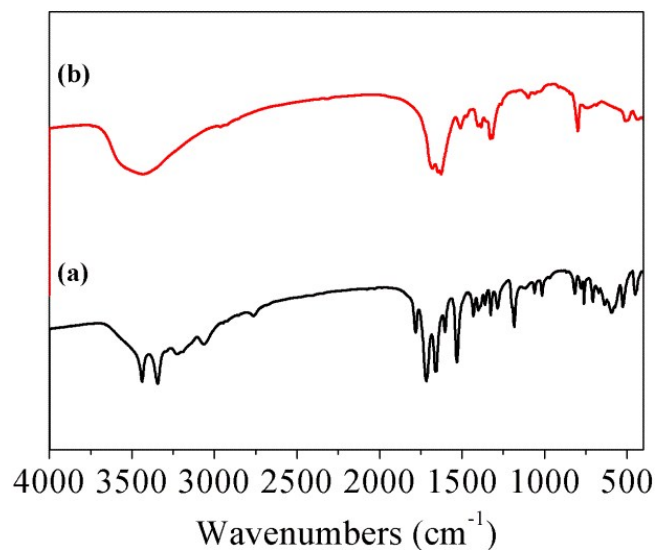


Fig.S2. FT-IR spectra of (a) pure allantoin and (b) sample **1**.

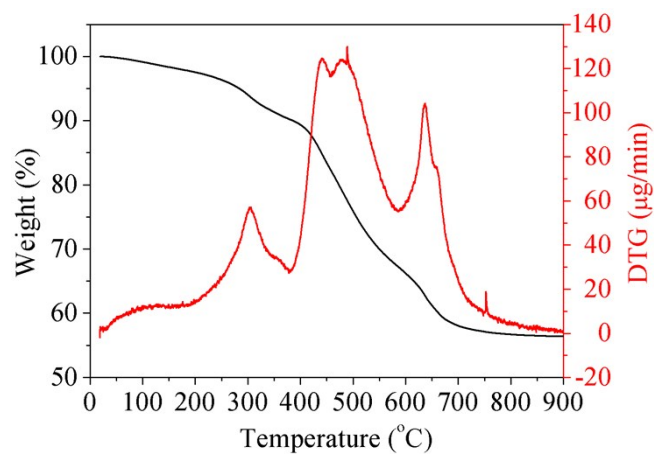


Fig.S3. TG curve (black line) and DTG curve (red line) of sample **1** in air atmosphere.

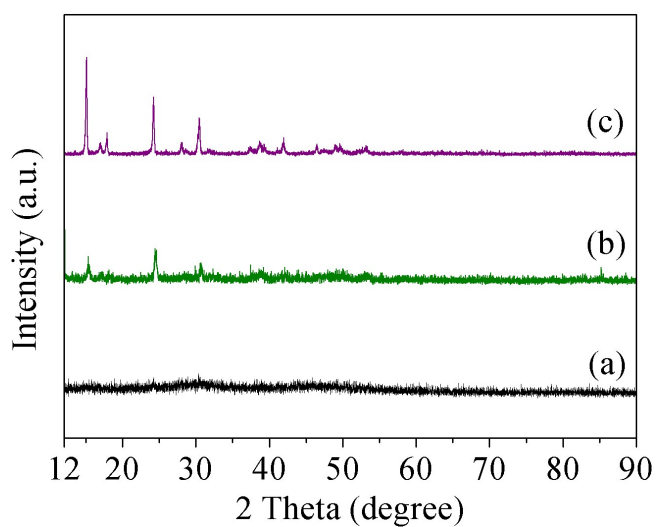


Fig.S4. XRD patterns of the samples obtained at different reaction temperature.

(a) 100 $^{\circ}\text{C}$ (sample **2**), (b) 120 $^{\circ}\text{C}$ (sample **3**), (c) 160 $^{\circ}\text{C}$ (sample **4**).

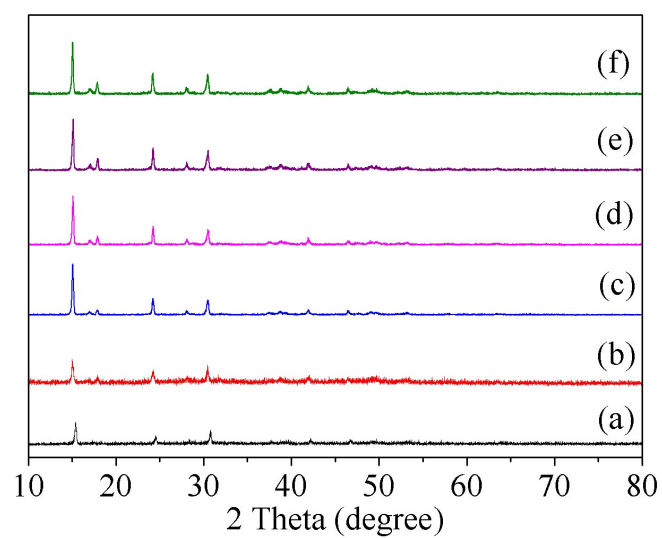


Fig.S5. XRD patterns of the samples obtained at different reaction times.

(a) 75min (sample 5), (b) 1.5 h (sample 6), (c) 3 h (sample 7), (d) 6 h (sample 8),

(e) 12 h (sample 9), (f) 48 h (sample 10).