Electronic Supplementary Information

Characterization of Sm^{3+}-Activated Carbonated Calcium Chlorapatite Phosphors for Theranostic Applications: A Comparative Study of Co-precipitation and Hydrothermal Methods

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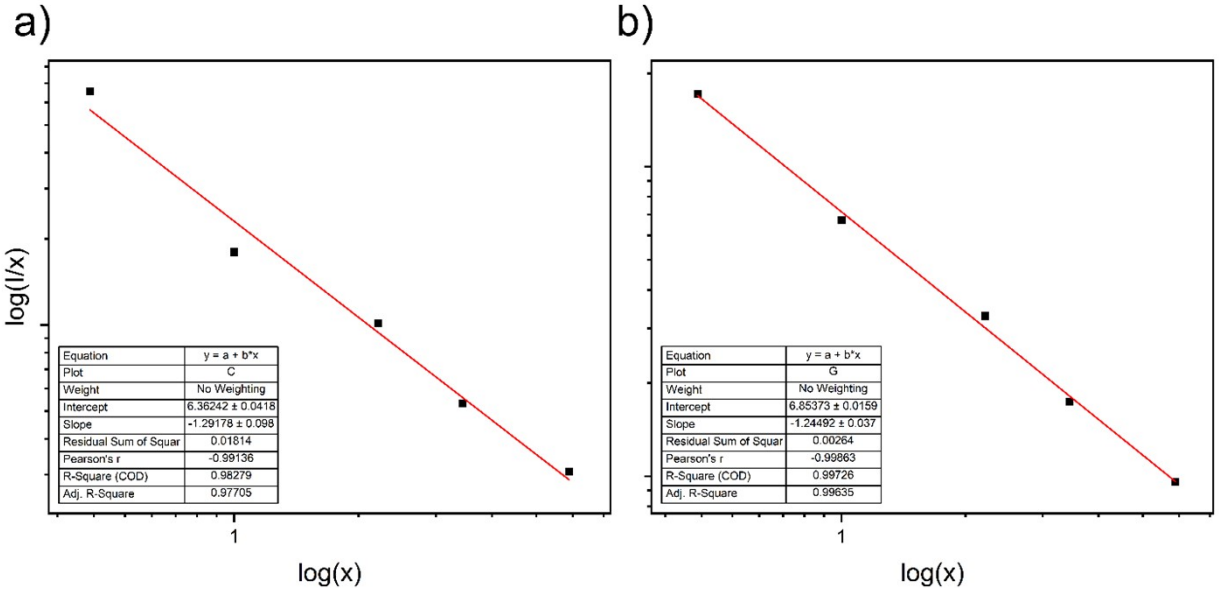

Figure S1. Relationship between log(I/x) and log(x) in co-precipitated materials **(a)** and hydrothermally synthesized **(b)** Sm^{3+}:CaClAp-CO_3 phosphors.

Table S1. The τ_1, τ_2 and average fluorescence decay time for obtained materials.

Material	Co-precipitation			Hydrothermal		
	τ_1 (ms)	τ_2 (ms)	τ_{av} (ms)	τ_1 (ms)	τ_2 (ms)	τ_{av} (ms)
0.5 mol% Sm^{3+}	0.55	2.9	2.5	0.62	2.9	2.7
1 mol% Sm^{3+}	0.44	2.7	2.2	0.73	3.3	2.9
2 mol% Sm^{3+}	0.36	2.5	1.9	0.83	3.3	2.9
3 mol% Sm^{3+}	0.31	1.9	1.3	0.65	3.0	2.5
5 mol% Sm^{3+}	0.40	2.4	1.9	0.56	2.6	2.2