Electronic Supplementary Information (ESI)

Delaminated Layered Rare-Earth Hydroxide Composites with Ortho-Coumaric Acid: Color-tunable Luminescence and Blue Emission due to Energy Transfer

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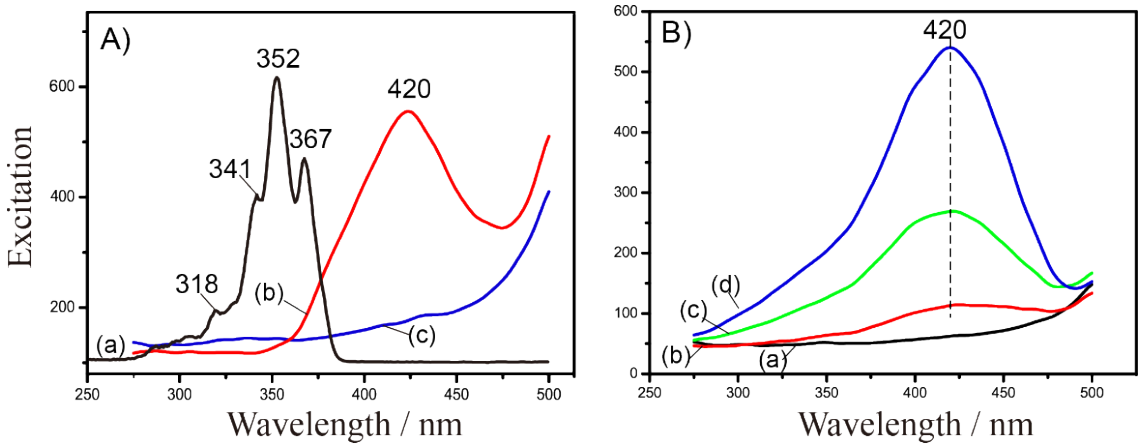

Fig. S1 Photoluminescence excitation spectra: (A) precursors of Cl-LTbH (a), CMA-Na (b), and $OS_{0.9}CMA_{0.1}$-LTbH composite (c). (B) $OS_{0.7}CMA_{0.3}$-$LTb_yY_{1-y}H$ composite: y = 1 (a), y = 0.7 (b), y = 0.3 (c), y = 0 (d).

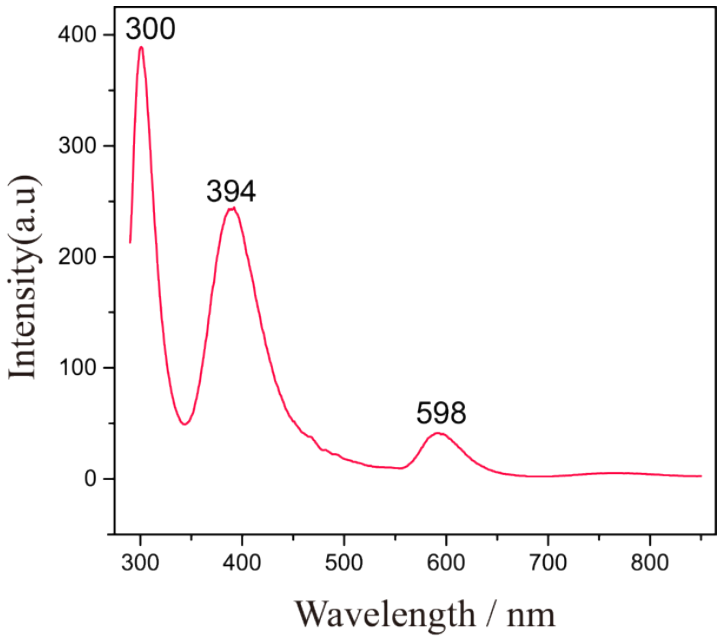

Fig. S2 Photoluminescence emission spectra of Gd(III) complex of CMA (Gd-CMA) under 240 nm excitation at room temperature.

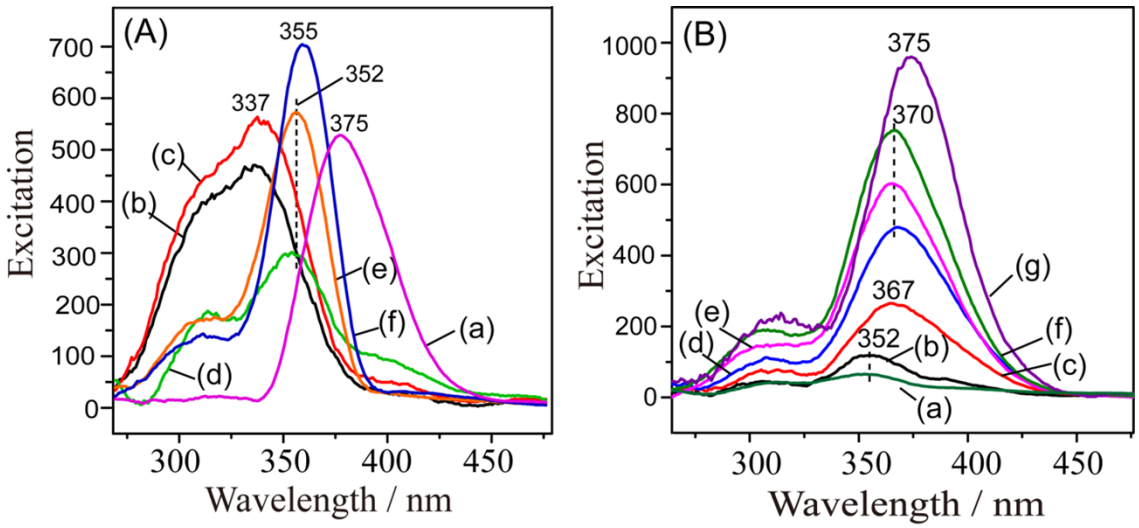

Fig. S3 (A) Photoluminescence excitation spectra of samples in FM: CMA-Na (a) and composites OS_xCMA_{1-x}-LTbH: x = 0.9 (b), 0.8 (c), 0.7 (d), 0.6 (e), 0.5 (f). (B) Excitation spectra of composites $OS_{0.7}CMA_{0.3}$-$LTb_yY_{1-y}H$ in FM: y = 1.0 (a), 0.9 (b), 0.7 (c), 0.5 (d), 0.3 (e), 0.1 (f), and 0 (g).

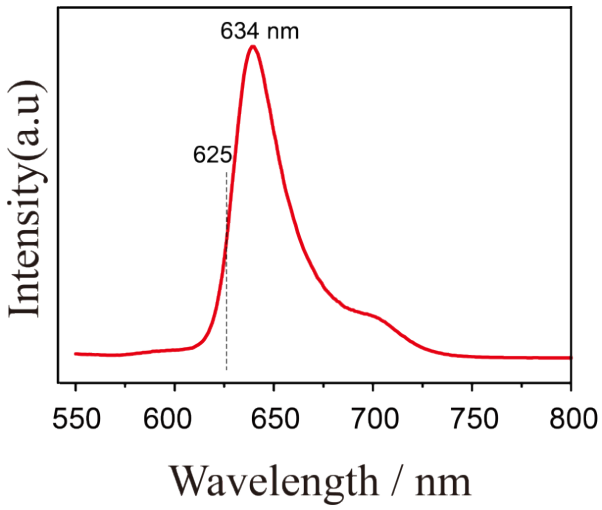

Fig. S4 Phosphorescence spectrum of Gd(III) complex of CMA (Gd-CMA) in a methanol solution (77 K).