

Supplementary Information

Facile Morphology-controllable Hydrothermal Synthesis and Color Tunable Luminescence Properties of $\text{NaGd}(\text{MoO}_4)_2: \text{Eu}^{3+}, \text{Tb}^{3+}$ Microcrystals

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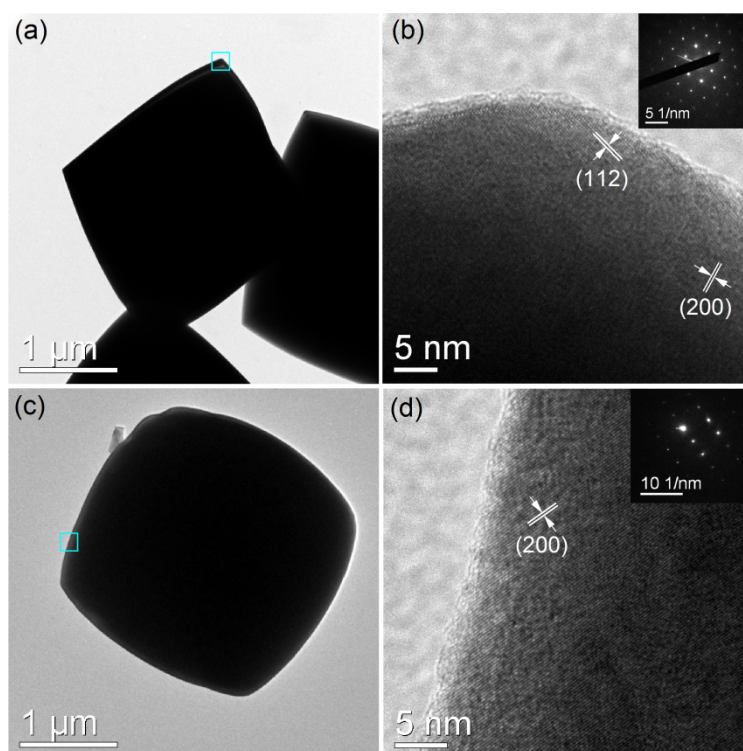


Fig. S1 TEM images, HRTEM images and SAED patterns of $\text{NaGd}(\text{MoO}_4)_2$ samples with the morphology of bipyramids and tetragonal plates: (a) and (b) bipyramids, (c) and (d) tetragonal plates.

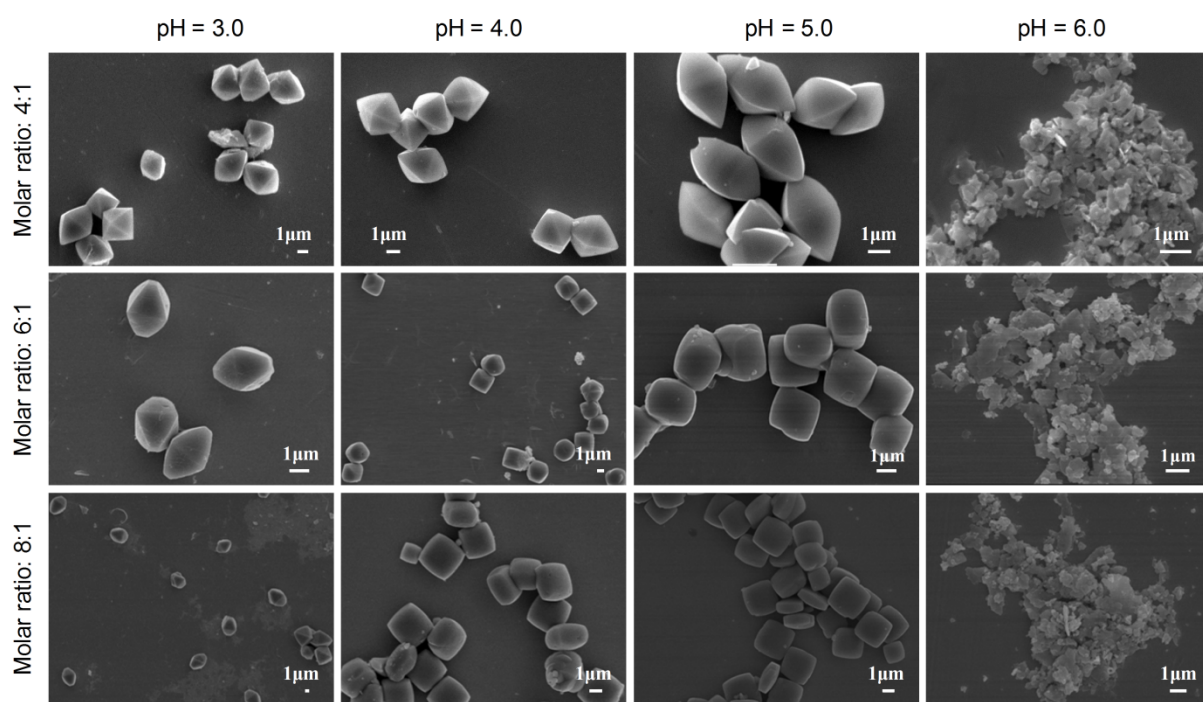


Fig. S2 SEM images of the $\text{NaGd}(\text{MoO}_4)_2$ samples synthesized at different $\text{Na}_2\text{MoO}_4/\text{Re}(\text{NO}_3)_3$ molar ratios (4:1, 6:1 and 8:1) and different pH values (pH = 3.0, 4.0, 5.0 and 6.0).

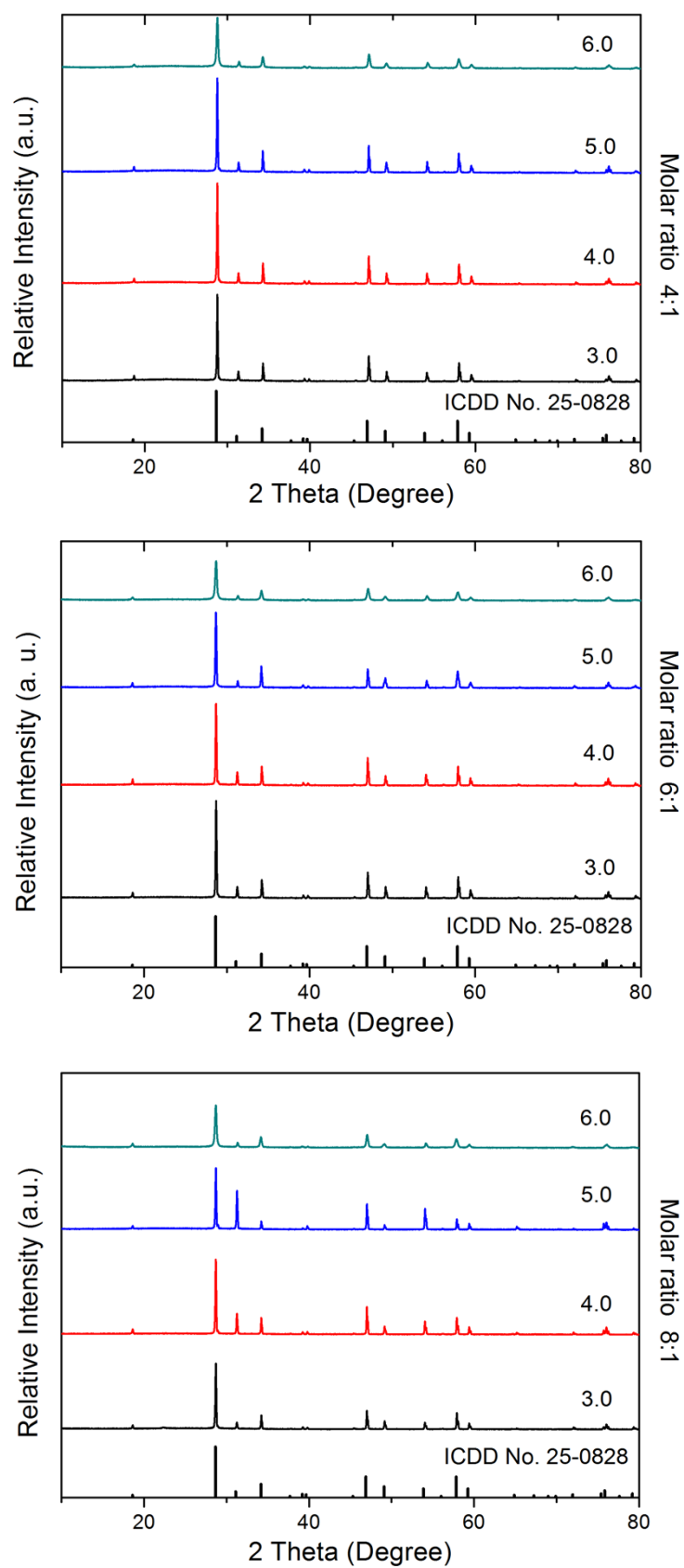


Fig. S3 XRD patterns of the $\text{NaGd}(\text{MoO}_4)_2$ samples synthesized at different $\text{Na}_2\text{MoO}_4/\text{Re}(\text{NO}_3)_3$ molar ratios (4:1, 6:1 and 8:1) and different pH values (pH = 3.0, 4.0, 5.0 and 6.0).

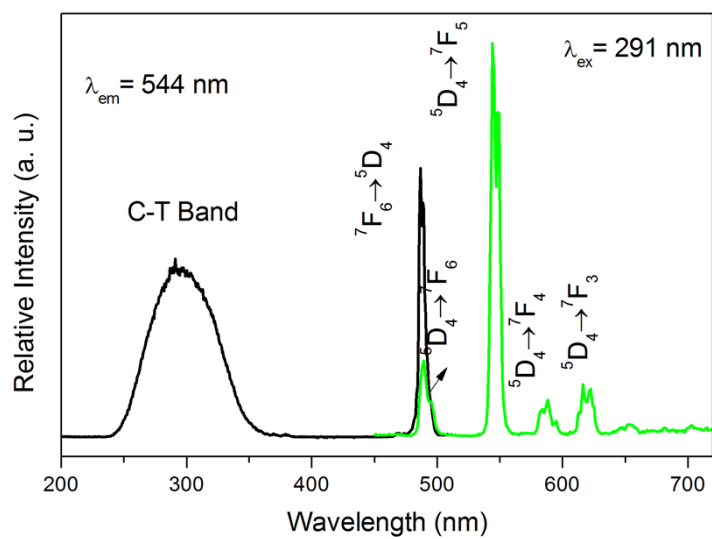


Fig. S4 Excitation and emission spectra of NaGd(MoO₄)₂: 5% Tb³⁺ microplates.

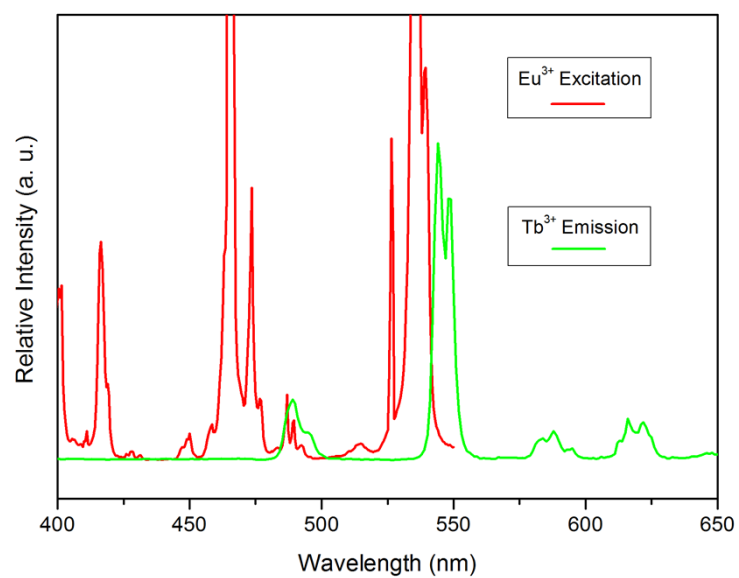


Fig. S5 Spectral overlaps between emission spectrum of NaGd(MoO₄)₂: Tb³⁺ and excitation spectrum of NaGd(MoO₄)₂: Eu³⁺.

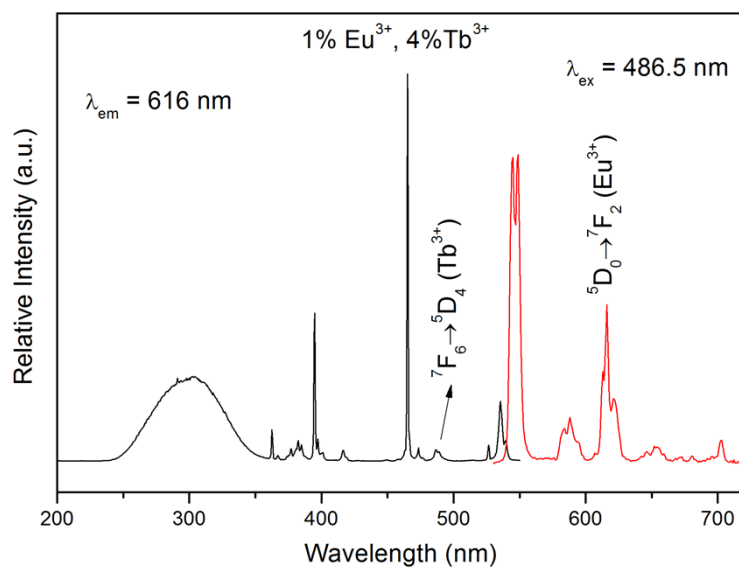


Fig. S6 Excitation and emission spectra of NaGd(MoO₄)₂: 1% Eu³⁺, 4% Tb³⁺ microplates.

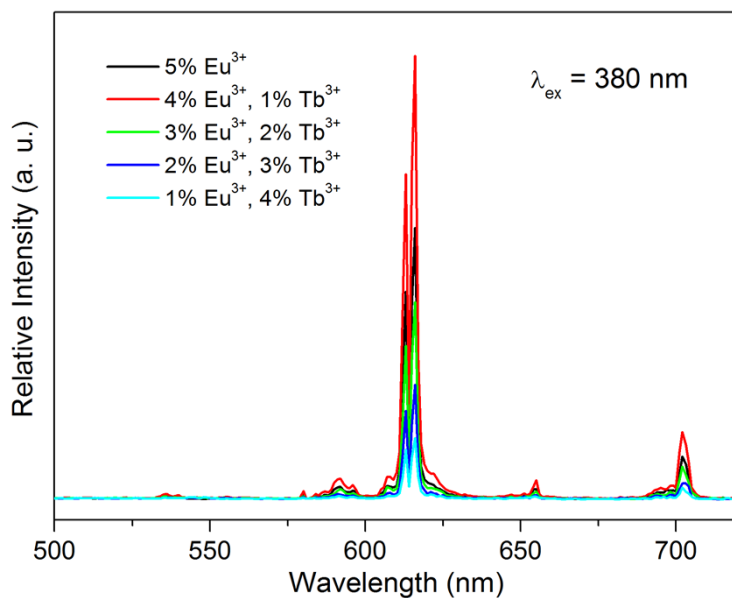


Fig. S7 Emission spectra of NaGd(MoO₄)₂: Eu³⁺, Tb³⁺ microplates with different doping concentrations excited by near-UV light at 380 nm.