Supplementary Information

Facile Morphology-controllable Hydrothermal Synthesis and Color Tunable Luminescence Properties of NaGd(MoO₄)₂: Eu³⁺, Tb³⁺ Microcrystals

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Fig. S1 TEM images, HRTEM images and SAED patterns of NaGd(MoO₄)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 NaGd(MoO$_4$)$_2$ samples synthesized at different Na$_2$MoO$_4$/Re(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 NaGd(MoO$_4$)$_2$ samples synthesized at different Na$_2$MoO$_4$/Re(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(MoO$_4$)$_2$: 5% Tb$^{3+}$ microplates.

Fig. S5  Spectral overlaps between emission spectrum of NaGd(MoO$_4$)$_2$: Tb$^{3+}$ and excitation spectrum of NaGd(MoO$_4$)$_2$: Eu$^{3+}$. 
Fig. S6  Excitation and emission spectra of NaGd(MoO$_4$)$_2$: 1% Eu$^{3+}$, 4% Tb$^{3+}$ microplates.

Fig. S7  Emission spectra of NaGd(MoO$_4$)$_2$: Eu$^{3+}$, Tb$^{3+}$ microplates with different doping concentrations excited by near-UV light at 380 nm.