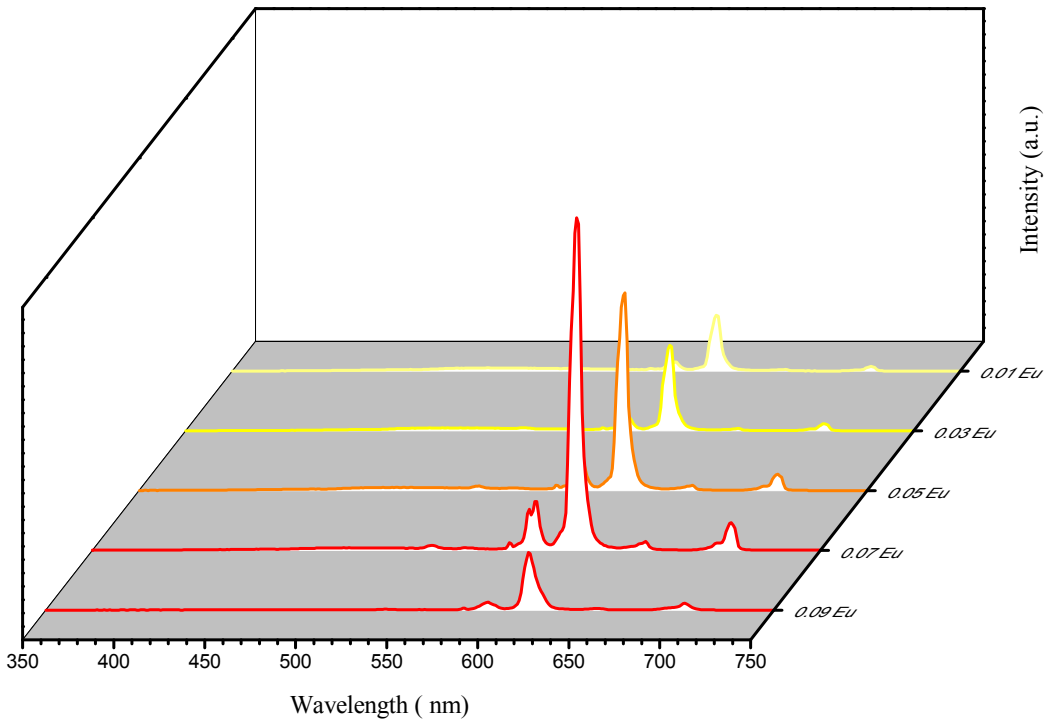
Supporting Information



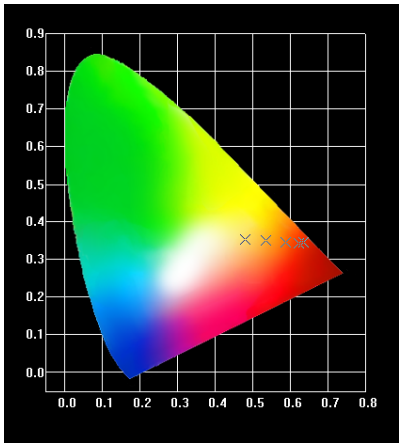
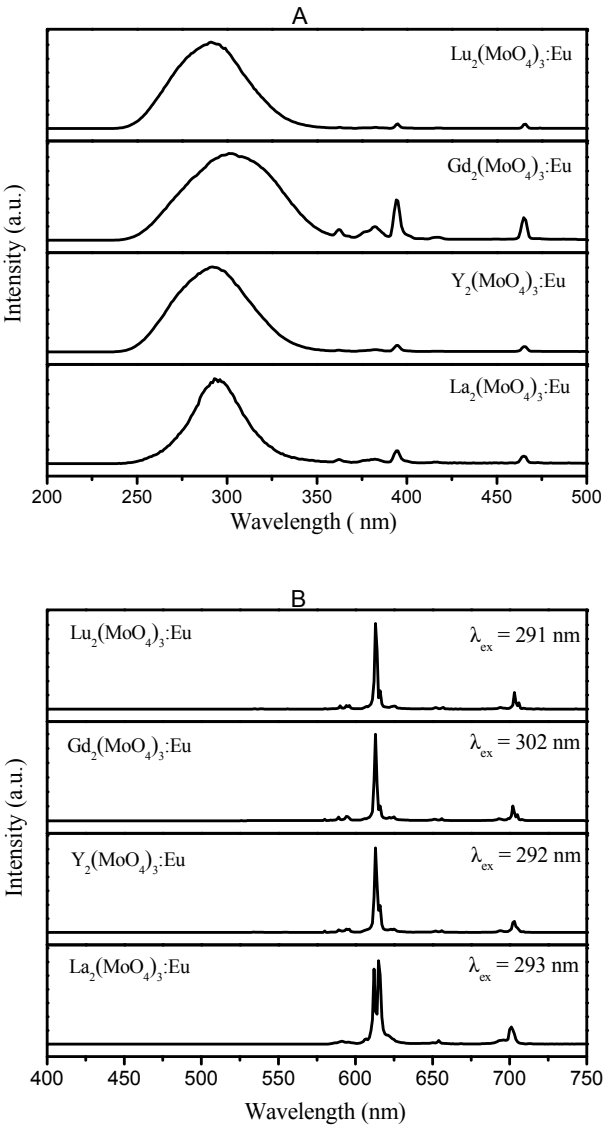
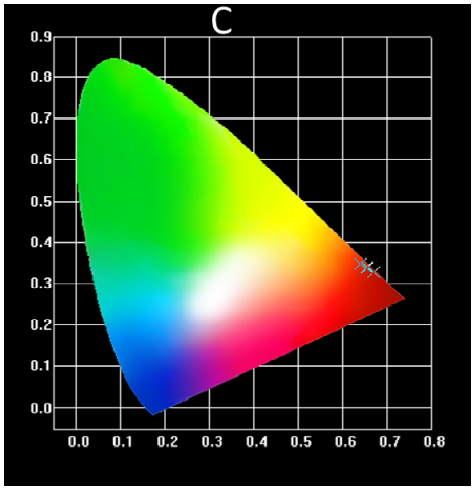


Figure S1 The emission spectra of $La_2(WO_4)_3:Eu^{3+}$ samples with different Eu^{3+} doping concentration, and the inset is the corresponding CIE diagram (×, from left to right, from 0.01 Eu^{3+} to 0.09 Eu^{3+}).





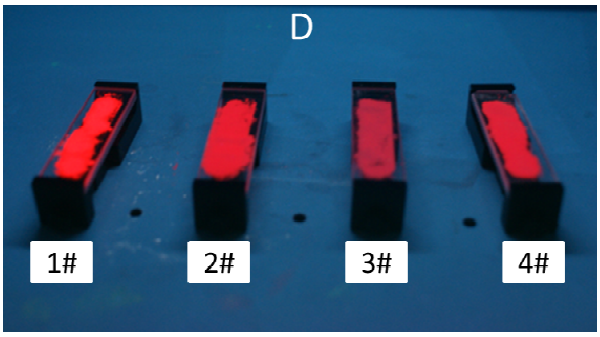


Figure S2 Luminescent properties of $RE_2(MoO_4)_3$: 2% Eu^{3+} (RE = La, Y, Gd, Lu): (A) excitation spectra (λ_{em} = 613 nm), (B) emission spectra (λ_{ex} labeled in the figure), (C) CIE chromaticity diagram (×, from left to right, from 1# to 4#), and (D) the luminescence photographs irradiated under a UV lamp.

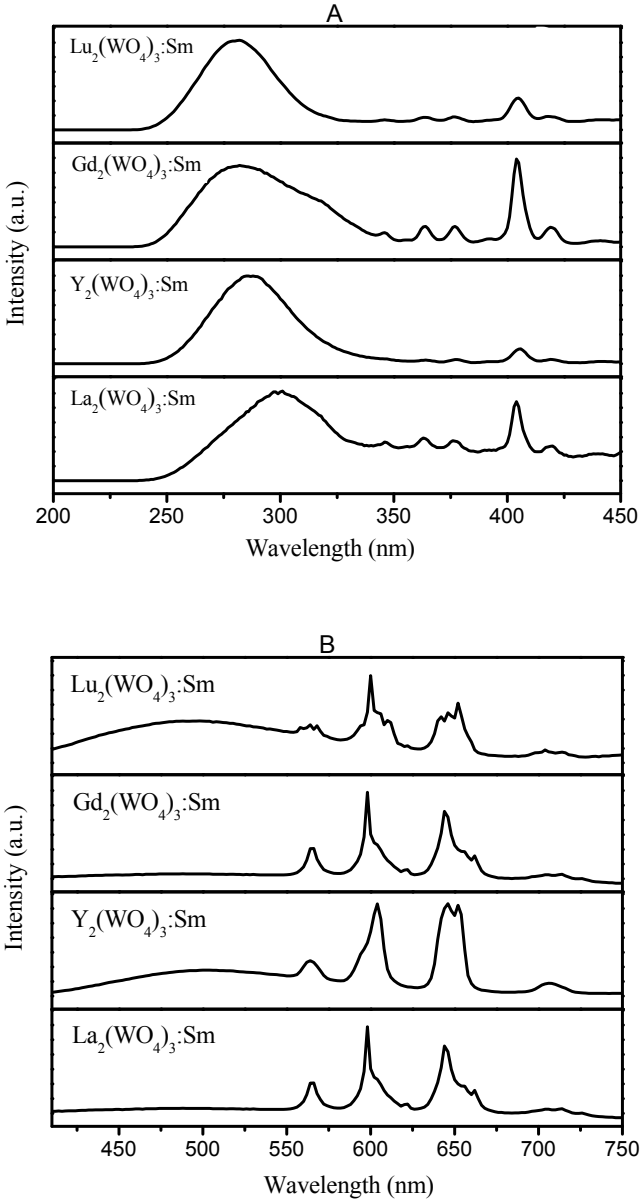


Figure S3 Excitation spectra (λ_{em} = 600 nm) of $RE_2(MoO_4)_3$: Sm^{3+} (RE = La, Y, Gd, Lu).

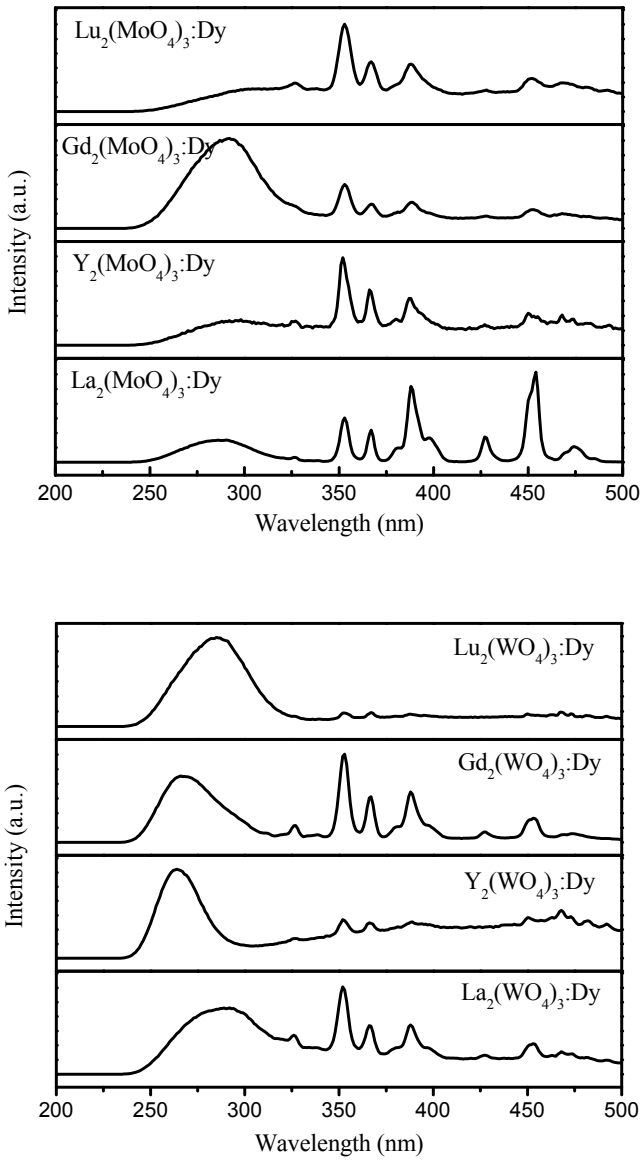


Figure S4 Excitation spectra (λ_{em} = 600 nm) of $RE_2(MoO_4)_3$: Dy^{3+} (RE = La, Y, Gd, Lu).

Table S1 The doping concentration of the Ln^{3+} in $RE_2(MO_4)_3$ (RE = Y, La, Gd, Lu; M = W, Mo; Ln = Eu, Sm, Dy) microcrystals

$RE_2(MO_4)_3:Ln^{3+}$	Doping concentration of Ln^{3+} (molar ratio)	$RE_2(MO_4)_3:Ln^{3+}$	Doping concentration of Ln^{3+} (molar ratio)
$La_2(WO_4)_3:Eu^{3+}$	~0.02	$Y_2(WO_4)_3:Sm^{3+}$	~0.02
$Gd_2(WO_4)_3:Eu^{3+}$	~0.02	$Lu_2(WO_4)_3:Sm^{3+}$	~0.02
$Y_2(WO_4)_3:Eu^{3+}$	~0.02	$La_2(MoO_4)_3:Sm^{3+}$	~0.02
$Lu_2(WO_4)_3:Eu^{3+}$	~0.02	$Gd_2(MoO_4)_3:Sm^{3+}$	~0.02
$La_2(MoO_4)_3:Eu^{3+}$	~0.02	$Y_2(MoO_4)_3:Sm^{3+}$	~0.02
$Gd_2(MoO_4)_3:Eu^{3+}$	~0.02	$Lu_2(MoO_4)_3:Sm^{3+}$	~0.02
$Y_2(MO_4)_3:Eu^{3+}$	~0.02	$La_2(WO_4)_3:Dy^{3+}$	~0.02
$Lu_2(MoO_4)_3:Eu^{3+}$	~0.02	$Gd_2(WO_4)_3:Dy^{3+}$	~0.02
$La_2(WO_4)_3:Eu^{3+}$	~0.02	$Y_2(WO_4)_3:Dy^{3+}$	~0.02
$La_2(WO_4)_3:Eu^{3+}$	~0.03	$Lu_2(WO_4)_3:Dy^{3+}$	~0.02
$La_2(WO_4)_3:Eu^{3+}$	~0.05	$La_2(MoO_4)_3:Dy^{3+}$	~0.02
$La_2(WO_4)_3:Eu^{3+}$	~0.07	$Gd_2(MoO_4)_3:Dy^{3+}$	~0.02
$La_2(WO_4)_3:Sm^{3+}$	~0.09	$Y_2(MoO_4)_3:Dy^{3+}$	~0.02
$Gd_2(WO_4)_3:Sm^{3+}$	~0.02	$Lu_2(MoO_4)_3:Dy^{3+}$	~0.02