Electronic Supporting Information

Intercalation of lanthanide cations to a layer-like metal-organic framework for color tunable and white light emission

Xi[illegible]

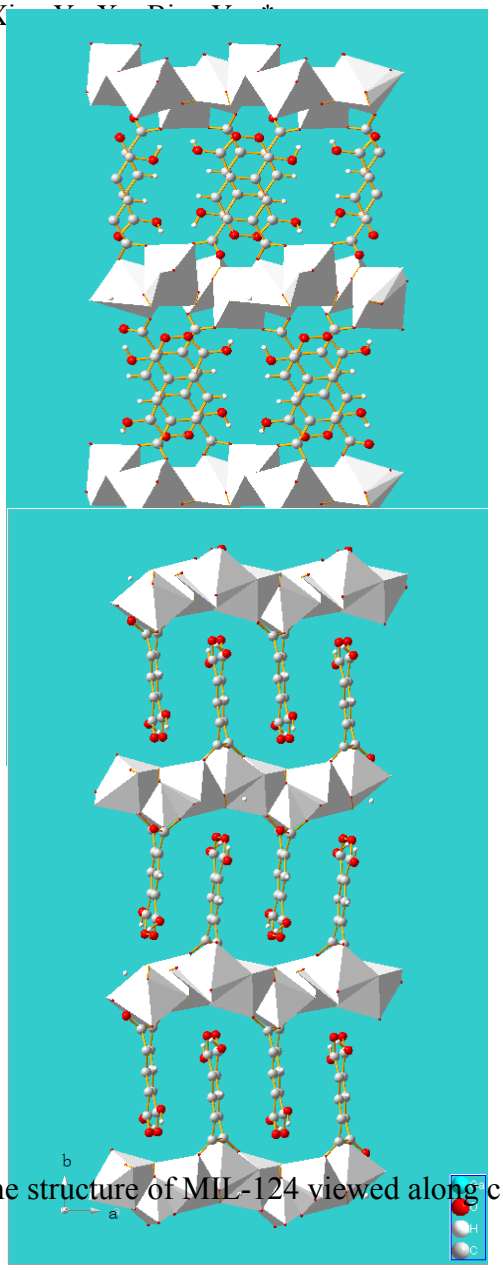
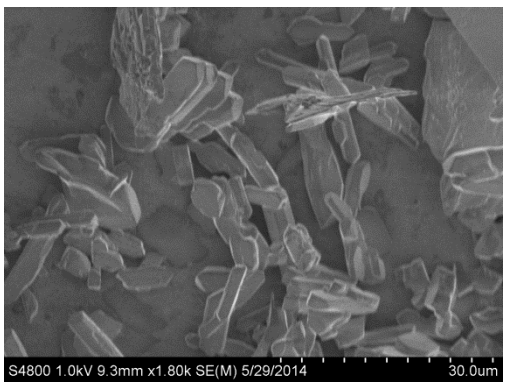


Figure S1 Representation of the structure of MIL-124 viewed along c axis.



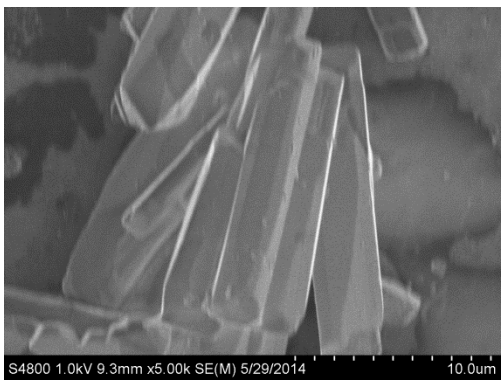


Figure S2 SEM image of MIL-124.

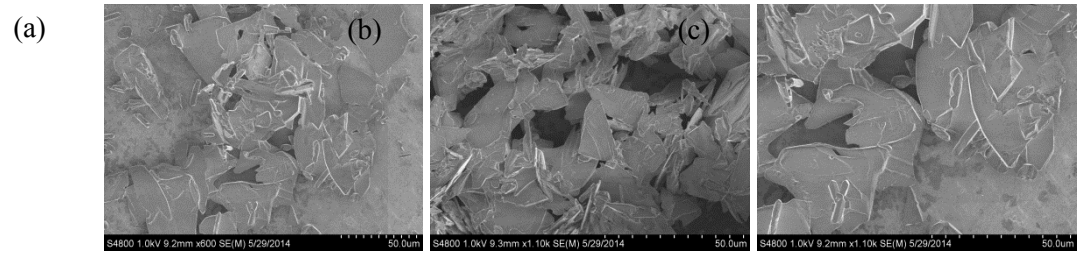


Figure S3 SEM image of MIL-124@Eu^{3+} (a), MIL-124@Tb^{3+} (b), MIL-124@Eu^{3+}/Tb^{3+} (c).

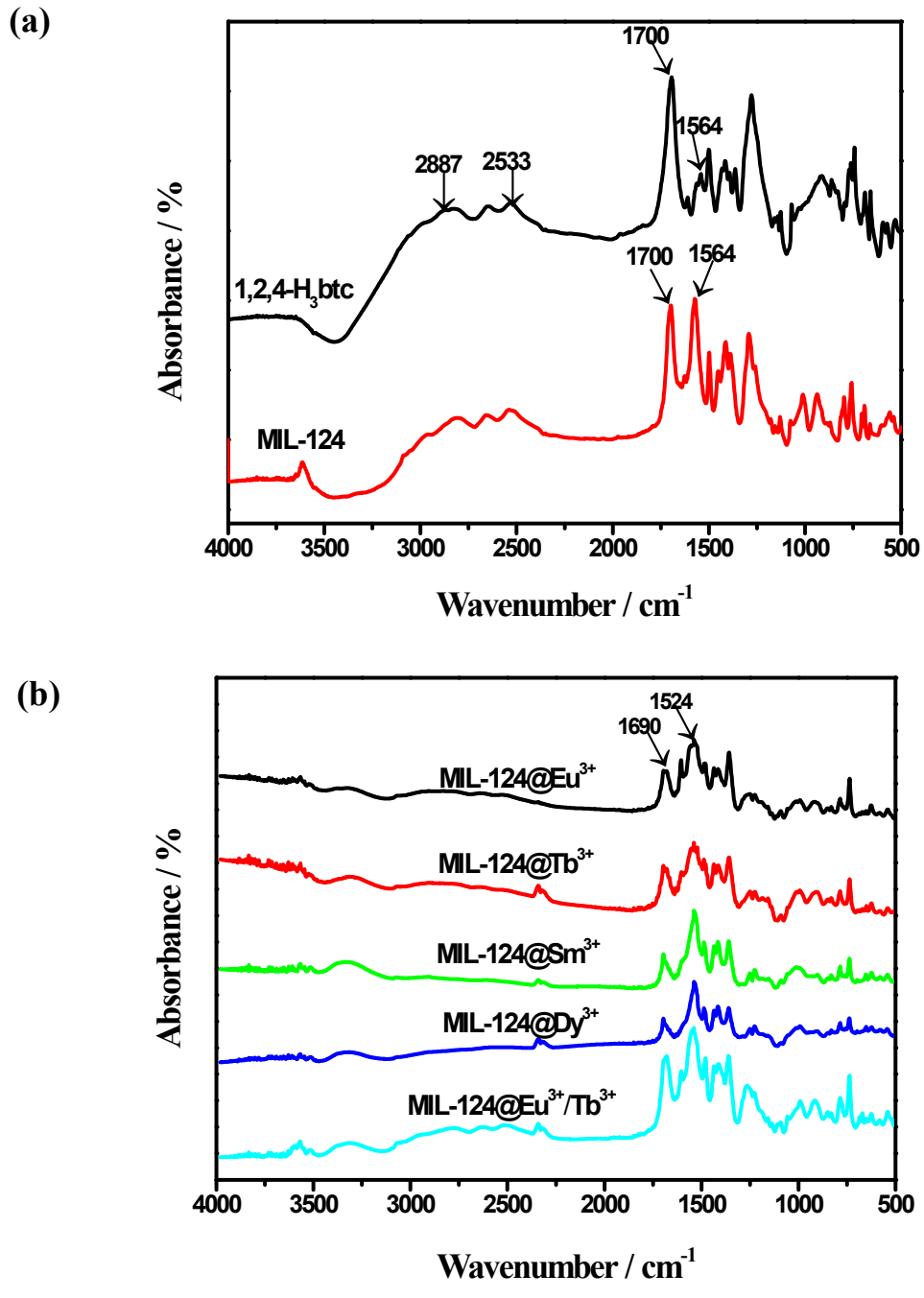


Figure S4 IR spectra of 1,2,4-H3btc and MIL-124(a), MIL-124@Ln^{3+} (Ln = Eu, Tb, Sm, Dy, Eu/Tb).

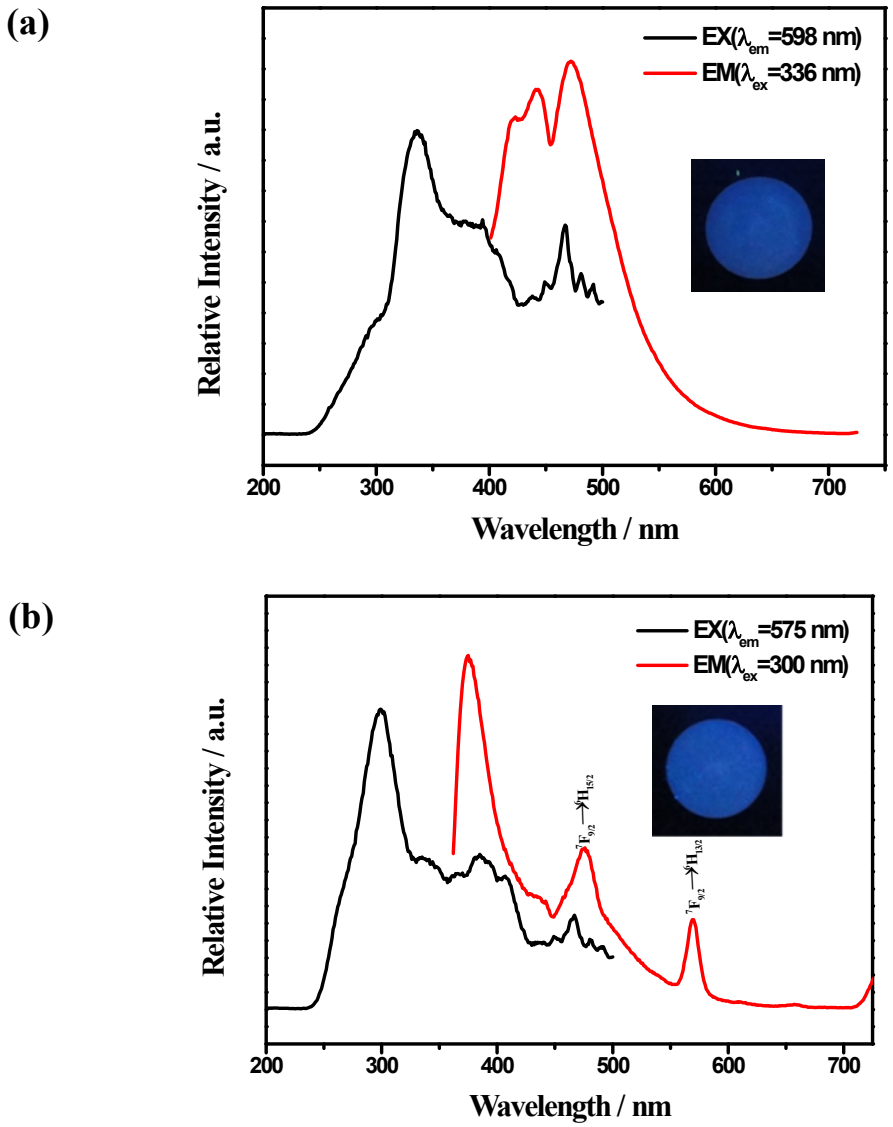


Figure S5 Excitation (black line) and emission (red line) spectra of MIL-124@Sm^{3+} (a) and MIL-124@Dy^{3+} (b). The insets are the corresponding luminescence pictures under UV-light irradiation of 254 nm

Table S1 The corresponding CIE coordinate of the MIL-124@Eu^{3+} (different concentration and different excitation wavelength) and MIL-124@Eu^{3+}/Tb^{3+} (different excitation wavelength)

CIE / Sample MOF@Eu^{3+}	X , Y	CIE / Sample MOF@Eu^{3+}	X , Y	CIE / Sample MOF@Eu^{3+}/Tb^{3+}	X , Y
10^{-3} (mol/L)	0.5066 , 0.2761	310 nm	0.5066 , 0.2761	297 nm	0.3693 , 0.3362
10^{-4} (mol/L)	0.3935 , 0.2092	320 nm	0.4029 , 0.2321	305 nm	0.3155 , 0.2969
10^{-5} (mol/L)	0.2311 , 0.1205	330 nm	0.2905 , 0.2083	315 nm	0.2679 , 0.2506
--	--	340 nm	0.2058 , 0.1662	320 nm	0.2194 , 0.2209

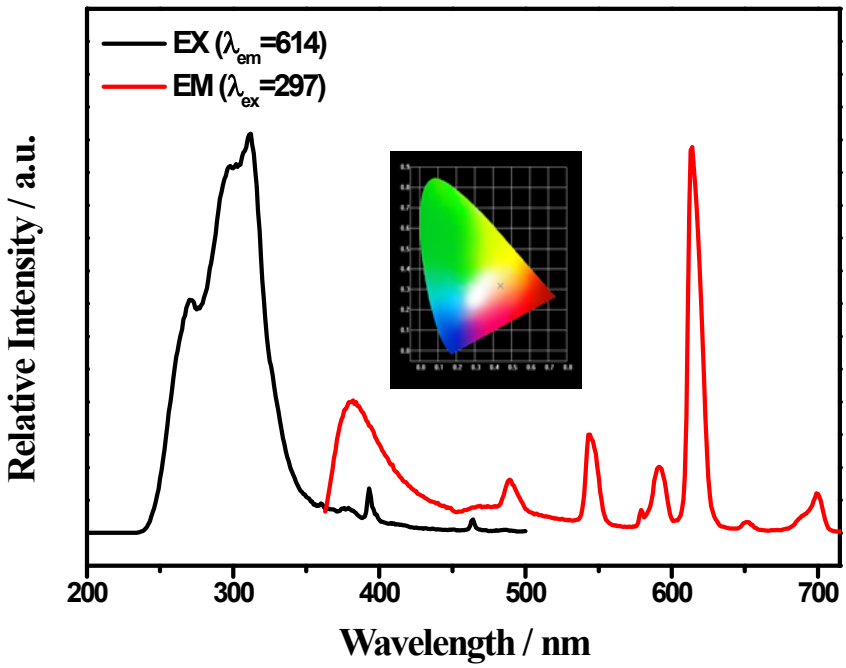


Figure S6 Excitation (black line) and emission (red line) spectra of MIL-124@Eu^{3+}/Tb^{3+} exciting at 614 nm and the inset showing the corresponding CIE chromaticity diagram.