

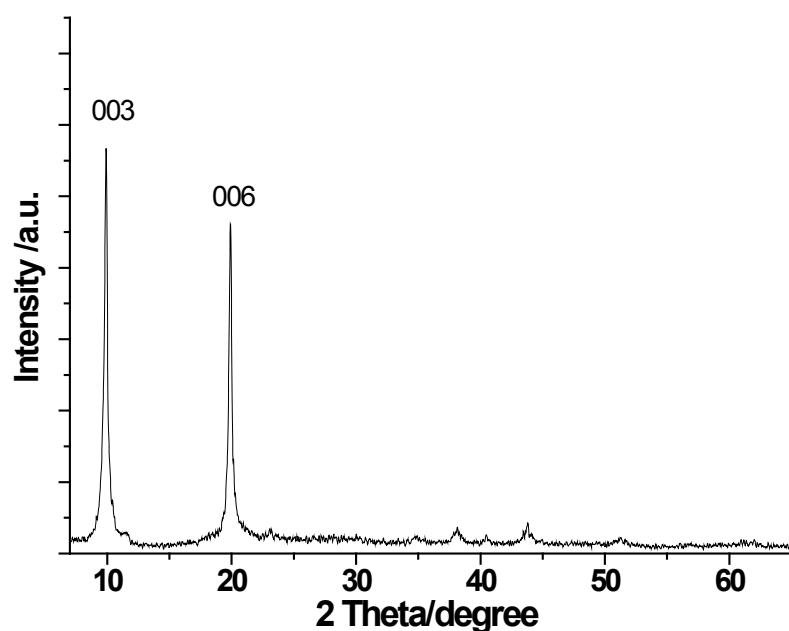
## Supplementary Information for

# Two-Color Polarized Emission and Angle-dependent Luminescence Based on Layer-by-layer Assembly of Binary Chromophores/Layered Double Hydroxide Thin Films

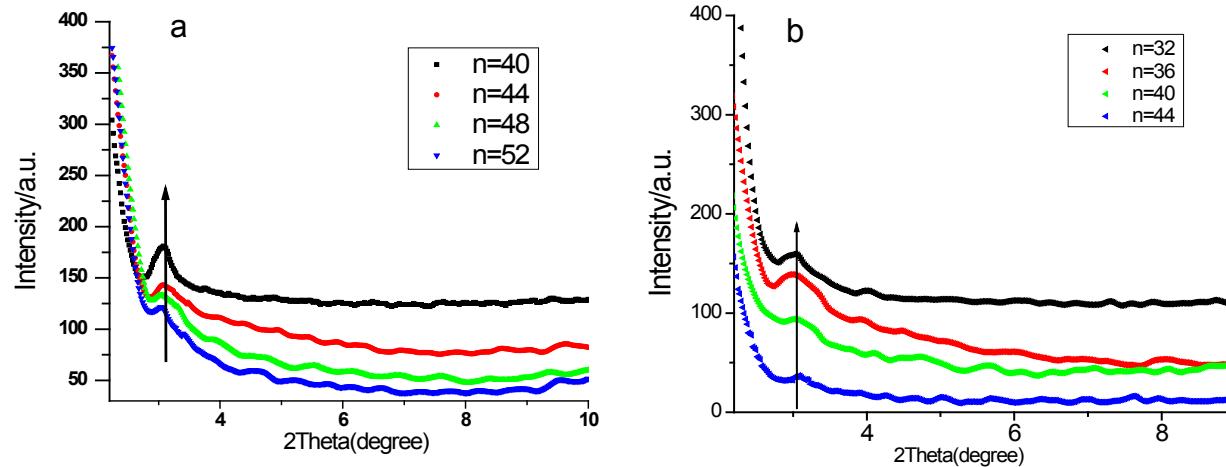
Rui Gao,<sup>a</sup> Xiaodong Lei,<sup>a</sup> Mingxing Chen,<sup>b</sup> Dongpeng Yan,<sup>\*,a</sup> and Min Wei<sup>a</sup>

a: State Key Laboratory of Chemical Resource Engineering, Beijing University of Chemical Technology, Beijing 100029, P. R. China.

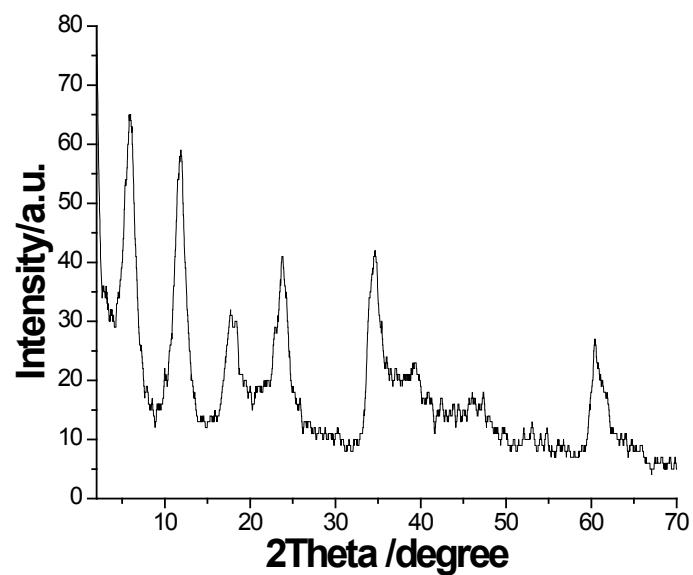
b: College of Chemistry and Molecular Engineering, Peking University, Beijing, 100871, P. R. China.



**Fig. S1.** Powder XRD pattern of LDH-nitrate.



**Fig. S2.** XRD patterns of a) the  $(\text{VBL}@\text{SPT}/\text{LDH})_n$  UTFs ( $n = 40, 44, 48, 52$ );  
b) the  $(\text{VBL}@\text{Ru}(\text{dpds})_3/\text{LDH})_n$  UTFs ( $n = 32, 36, 40, 44$ ).



**Fig. S3.** Powder XRD pattern of the VBL intercalated LDH.

VBL intercalated LDH system has been prepared by a typical co-precipitation method.<sup>[1]</sup> The XRD pattern of the VBL/LDH shows that the 003 reflection peak appears at ca.  $5.85^\circ$ , which corresponds to basal spacing of 1.51 nm.

#### Reference:

- [1] D. P. Yan, J. Lu, M. Wei, D. G. Evans and X. Duan, *J. Phys. Chem. B*, 2009, **113**, 1381.