Supplementary Information

Chiral two-dimensional metal-organic frameworks based

on Zn(salen) ligands: subcomponent self-assembly and

circularly polarised luminescence

Xue-Zhi Wang,^{a,c} Chuang-Wei Zhou,^a Bei Wang,^a Ya-Liang Lai,^a Zhao-Xia Lian,^a Yi-Tong Liu,^a Yan Yan Li ^{*b} and Xiao-Ping Zhou^{* a}

^a College of Chemistry and Materials Science, Guangdong Provincial Key Laboratory of Functional Supramolecular Coordination Materials and Applications, Jinan University, Guangzhou, Guangdong 510632, P. R. China.

^b Key Laboratory of Biomaterials of Guangdong Higher Education Institutes, Engineering Technology Research Center of Drug Carrier of Guangdong, Department of Biomedical Engineering, Jinan University, Guangzhou 510632, P. R. China.

^c Department of Radiology, The First Affiliated Hospital of Jinan University, Guangzhou 510632, P. R. China.



Fig. S1 Microscopy images of single crystals of the (a) (*R*)-1 and (b) (*S*)-1.



Fig. S2 Crystal structure of (*S*)-1: (a) The asymmetric unit with 50% probability thermal ellipsoids, (b) left-handed (*M*) 2₁ helical chain in (*S*)-1 along the *b*-axis, (d) view of the 2D framework. Color scheme: Zn, cyan; N, blue; C, gray; O, red; H, white.



Fig. S3 Topological net of (*R*)-1 with sql topology.



Fig. S4 Three-dimensional stacking structure of (R)-**1** viewed from the (a) a-axis and (b) c-axis. The three layers are labeled lavender, sky blue, and orange, respectively.



Fig. S5 The g_{abs} spectra of (*R*)-1 and (*S*)-1 in the solid state.



Fig. S6 Fourier-transform infrared spectra of (*R*)-1 and (*S*)-1.



Fig. S7 PXRD pattern of (S)-1 simulated and as-synthesized samples.



Fig. S8 The g_{lum} plots of (*R*)-1 and (*S*)-1 in the solid state.



Fig. S9 CPL spectra of (*R*)-H₂L and (S)-H₂L in the solid state.