

Supporting Information

Unprecedented homochiral 3D lanthanide coordination polymers with triple-stranded helical architecture constructed from a rigid achiral aryldicarboxylate ligand

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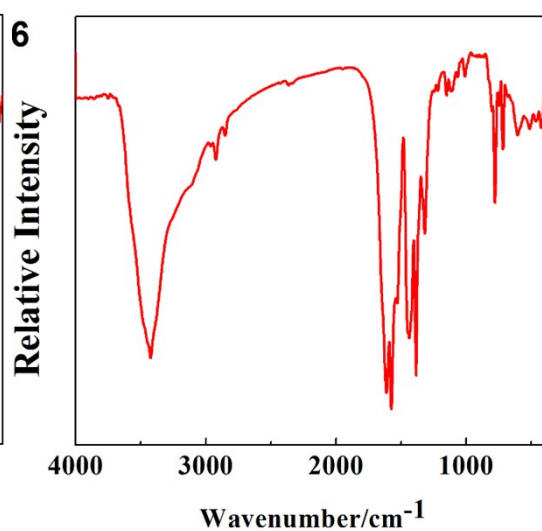
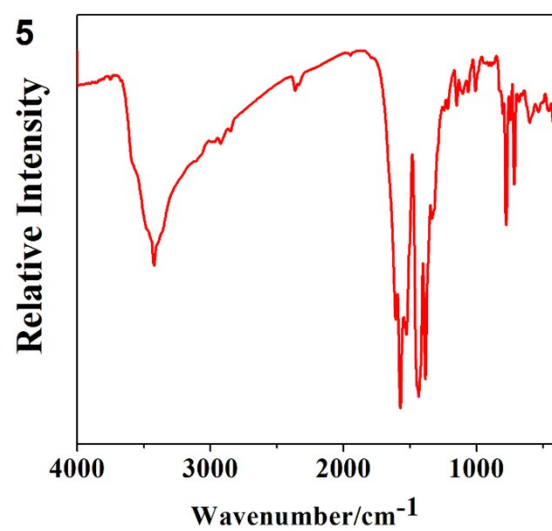
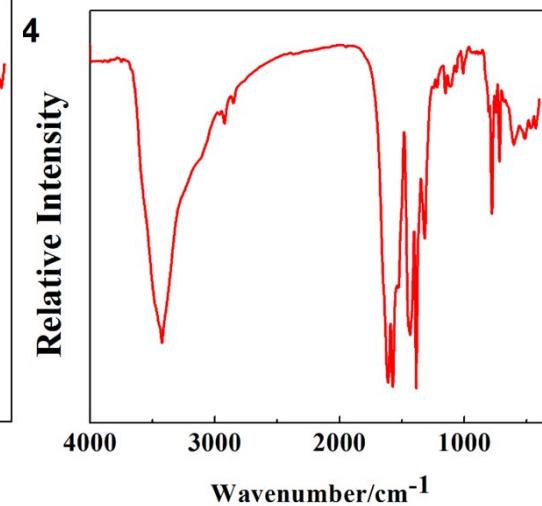
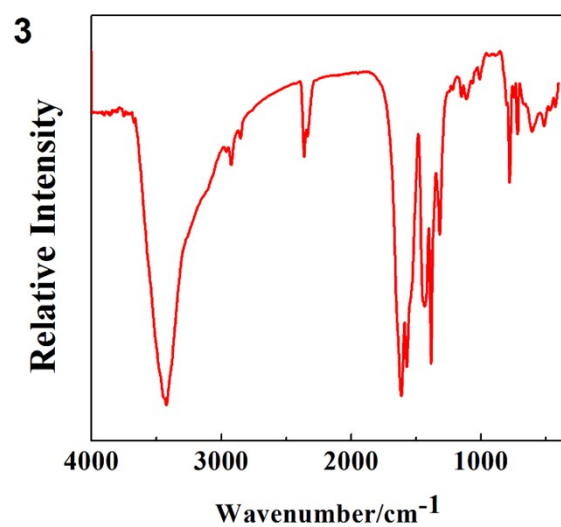
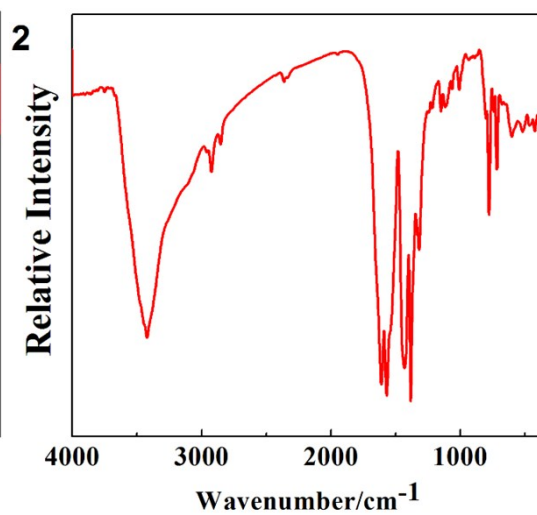
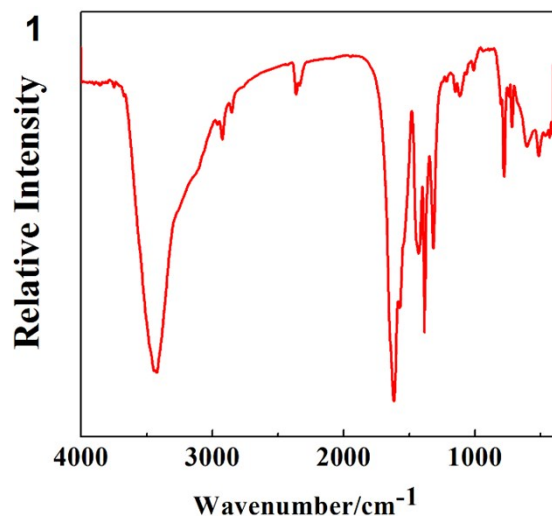
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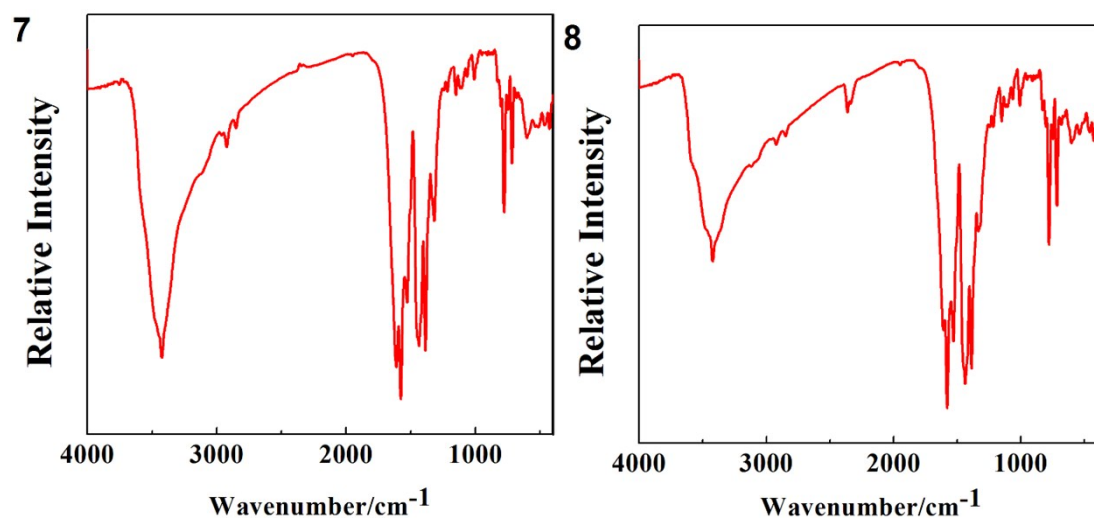


Fig.S1. IR spectra of **1-8**.

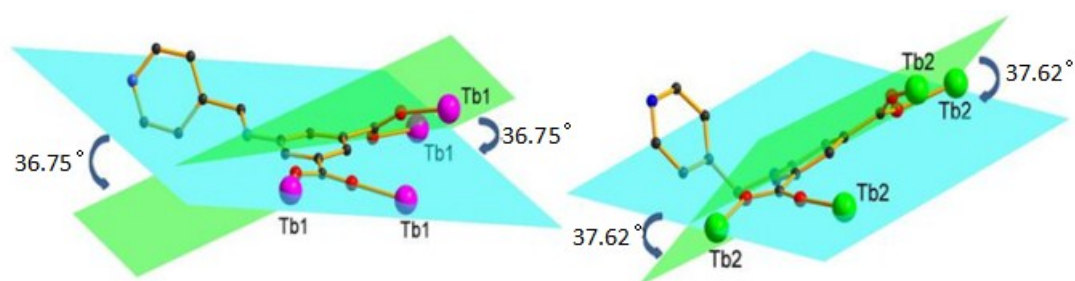


Fig. S2. Dihedral angle of two carboxylates in **4**

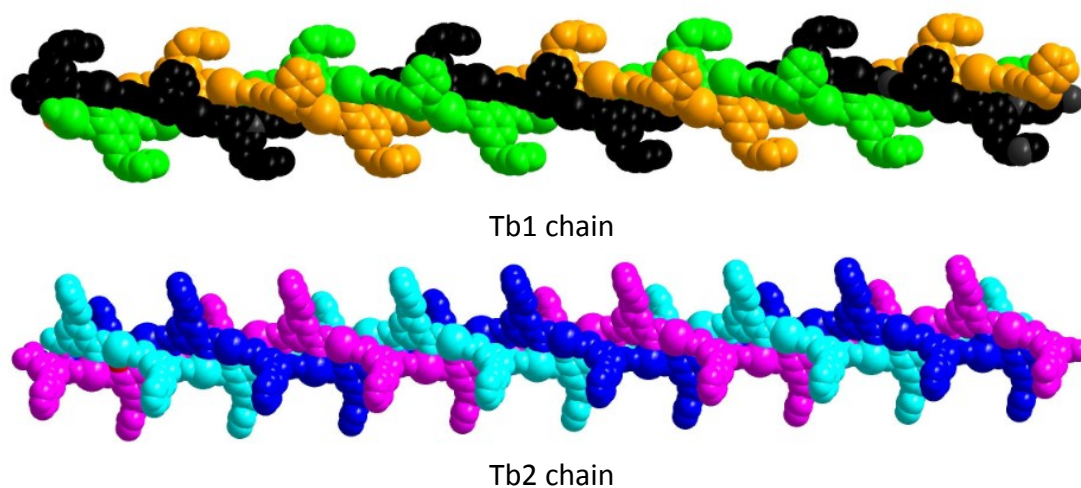


Fig. S3. Triple-stranded helices in van-der-Waals balls in **4**

Table S1. Summary of the structure determinations of **4** (six crystals of **4a-4f**) with R factors and Flack absolute structure parameters for each refinement.

No.	Space group	a	b	c	R_1	wR_2	Flack parameter
4a	$P4_3$	17.6229(11)	17.6229(11)	14.5875(15)	0.0352	0.1014	-0.004(9)
4b	$P4_3$	17.5761(6)	17.5761(6)	14.5652(9)	0.0288	0.0822	-.0003(7)
4c	$P4_3$	17.5565(6)	17.5565(6)	14.5448(8)	0.0327	0.0763	-0.009(9)
4d	$P4_3$	17.5789(8)	17.5789(8)	14.5991(12)	0.0467	0.1325	-0.008(10)
4e	$P4_3$	17.5943(9)	17.5943(9)	14.5706(2)	0.0533	0.1351	-0.004(13)
4f	$P4_3$	17.5855(13)	17.5855(13)	14.5714(18)	0.0295	0.0833	-0.010(8)

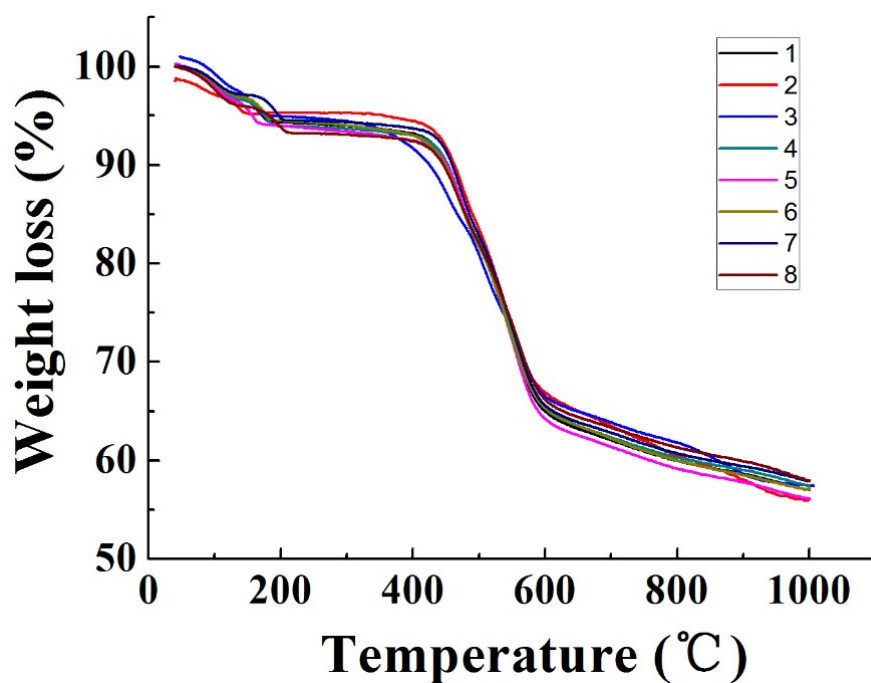
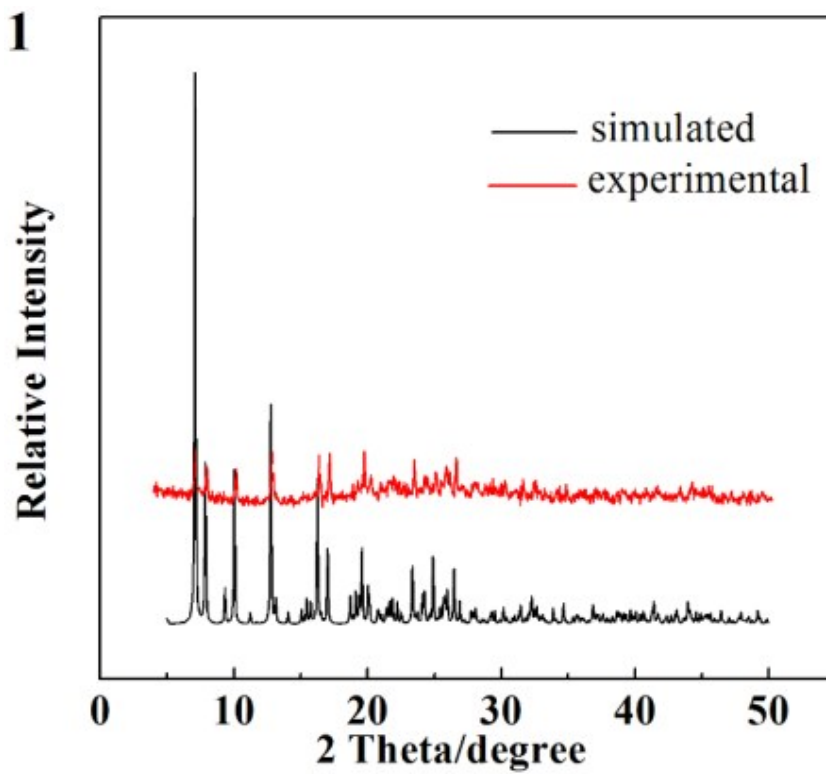
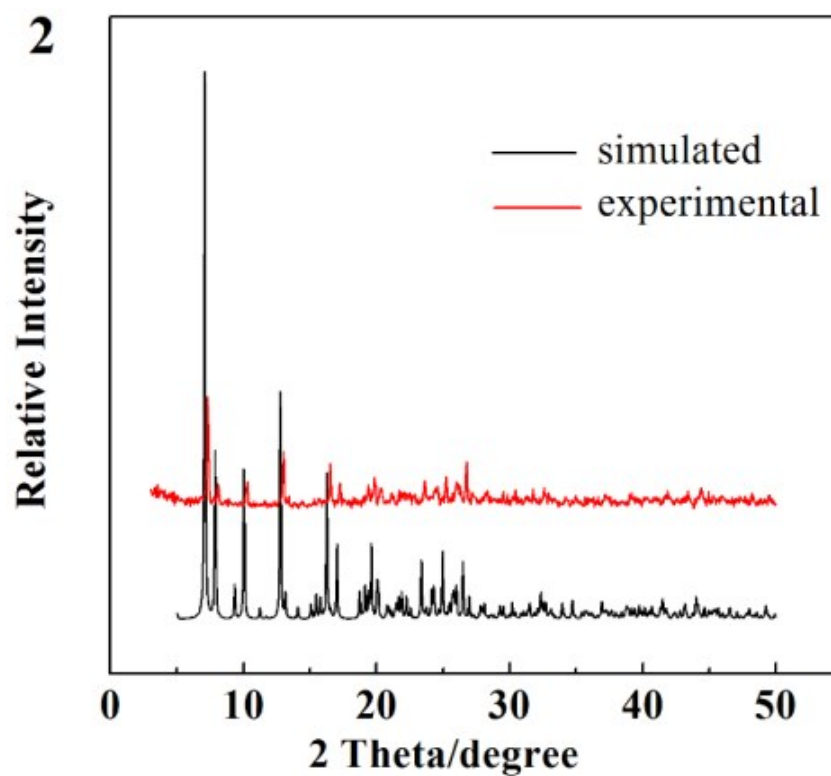
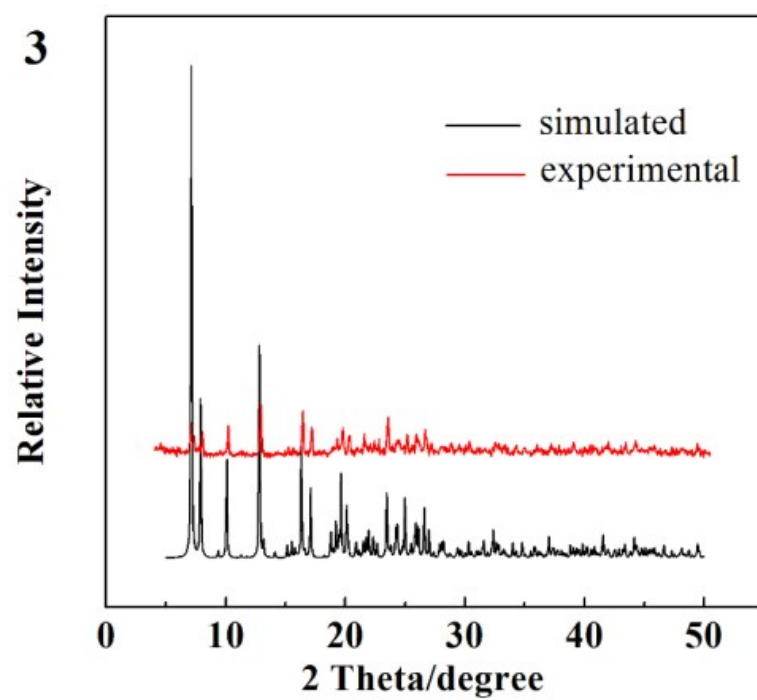


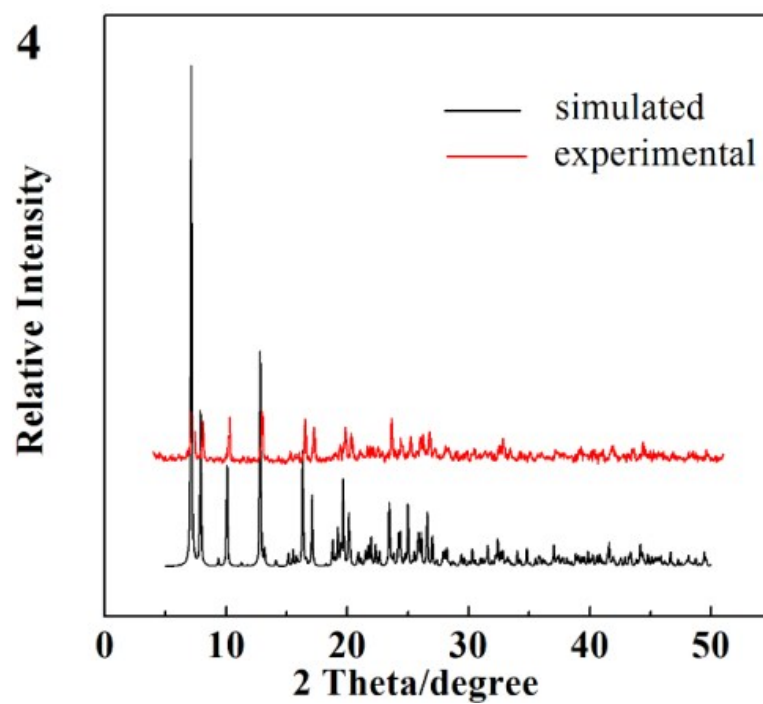
Fig. S4. TGA curves of **1-8**.

1**2**

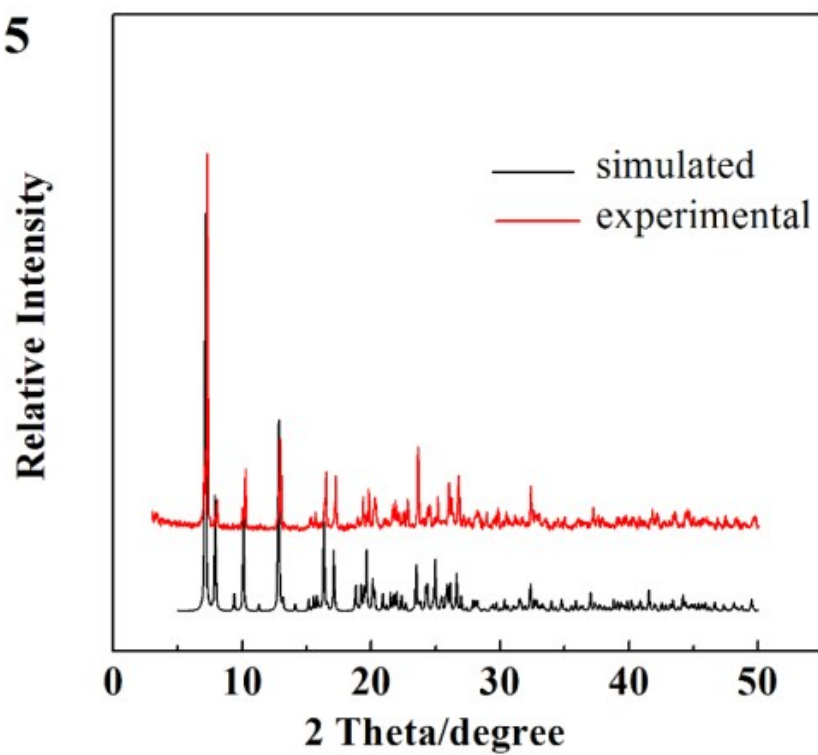
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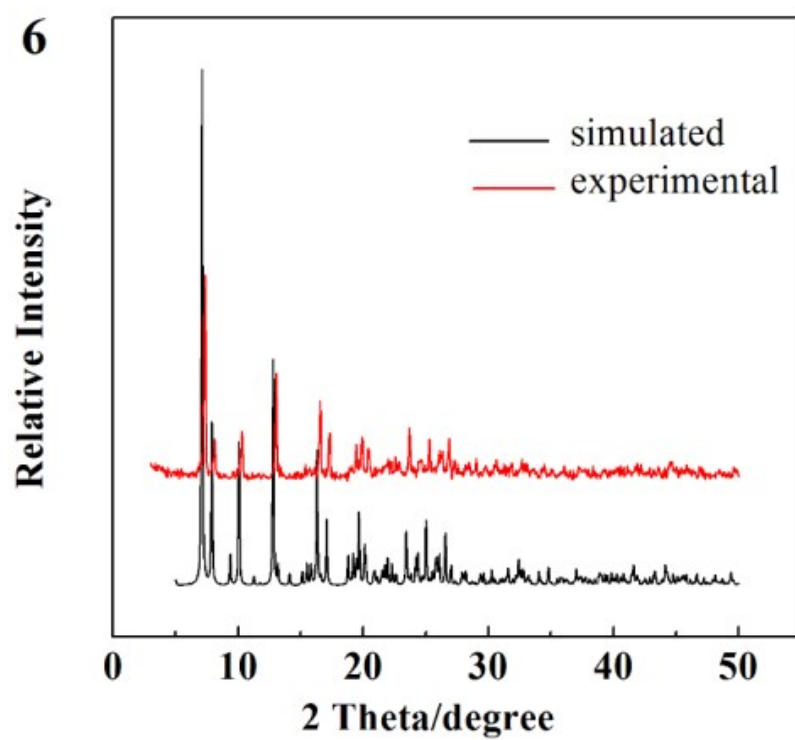
4



5



6



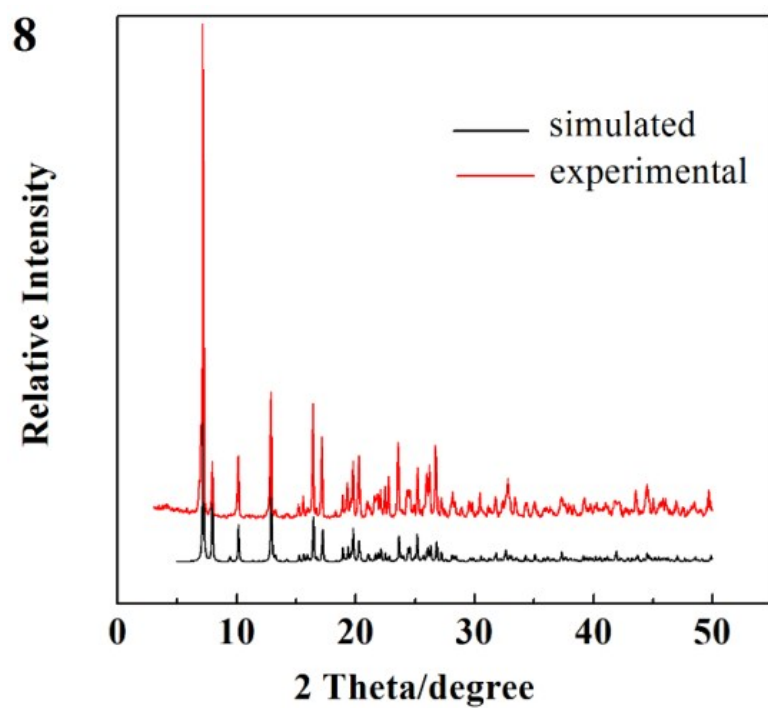
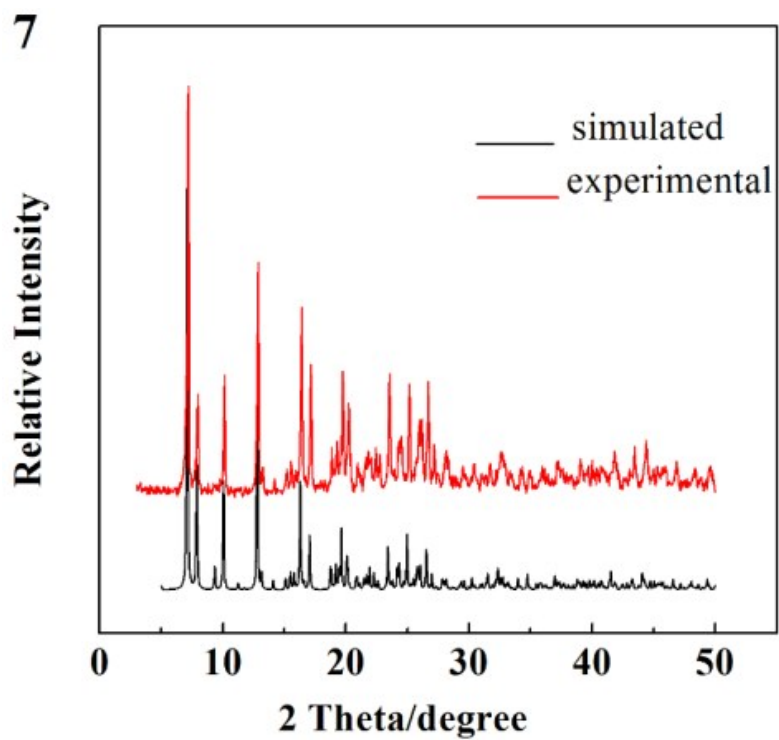


Fig. S5. The simulated and experimental PXRd patterns of **1-8**.