

Supporting Information

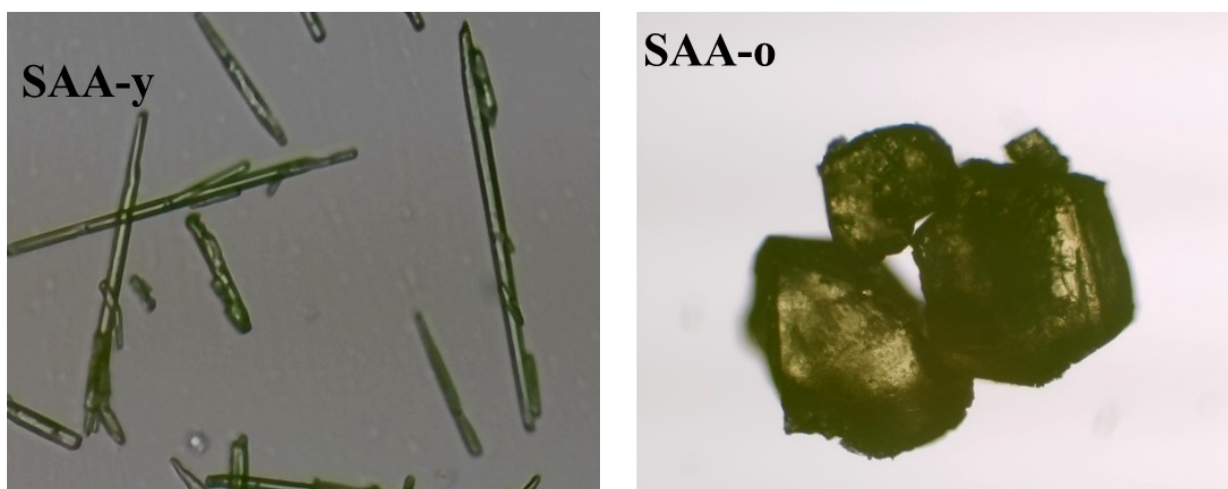


Figure S1 Crystals of two forms of SAA obtained from methane.

Table S1 Crystallographic data for the SAA.

	SAA-y	SAA-o
space group	$P2_12_12_1$	$Pbc2_1$
a / Å	6.075(11)	5.794(<1)
b / Å	11.631(15)	13.018(1)
c / Å	14.484(2)	13.617(1)
β / °	90	90
V / Å ³	1023.38	1027.1(18)
D _{calcd}	1.28	1.275
Z	4	4
T / K	120	120(2)
R	4.1	4.26
R _w	9.5	10.18

Figure S2 Molecular arrangement in crystals of SAA-y (top) and SAA-o (bottom).

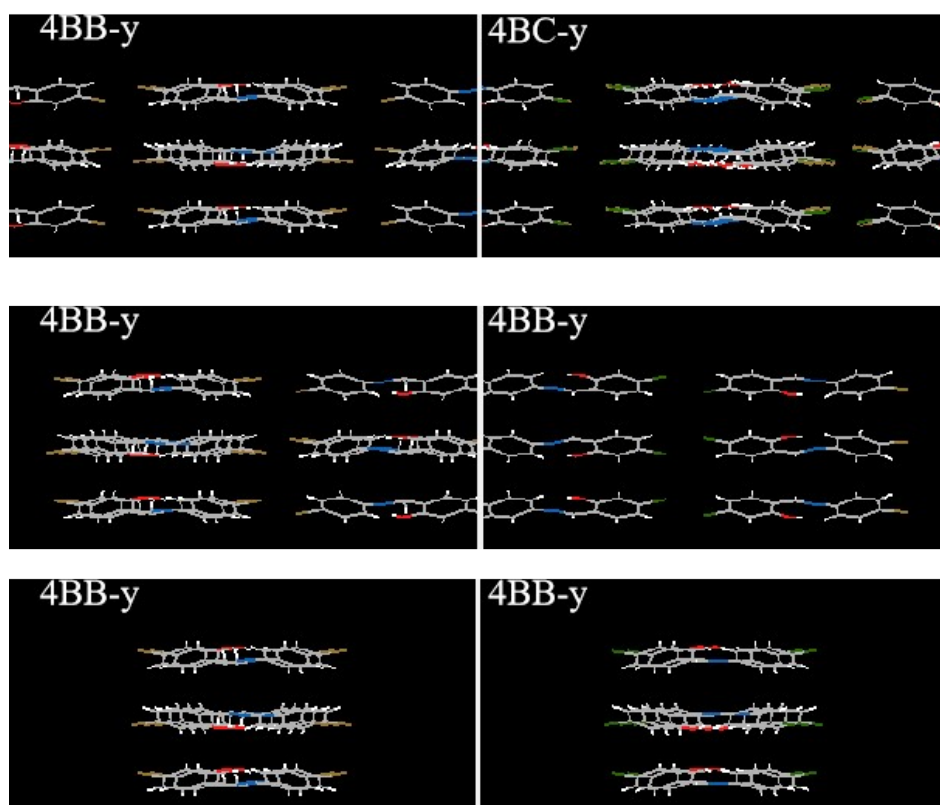
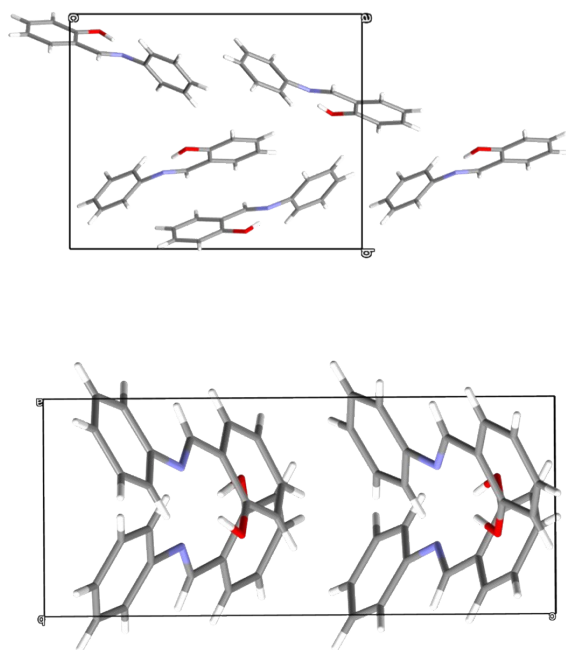


Figure S3 Matching structures of comparison between derivatives and 4BB-y in XPac

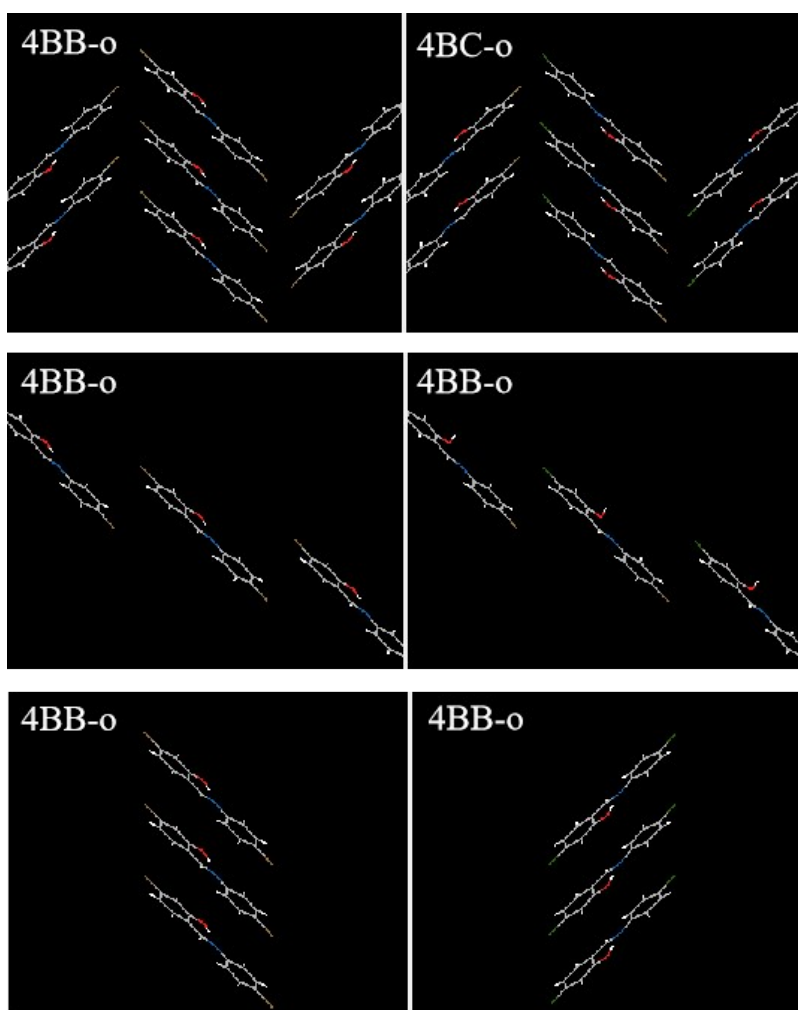


Figure S4 Matching structures of comparison between derivatives and 4BB-o in XPac

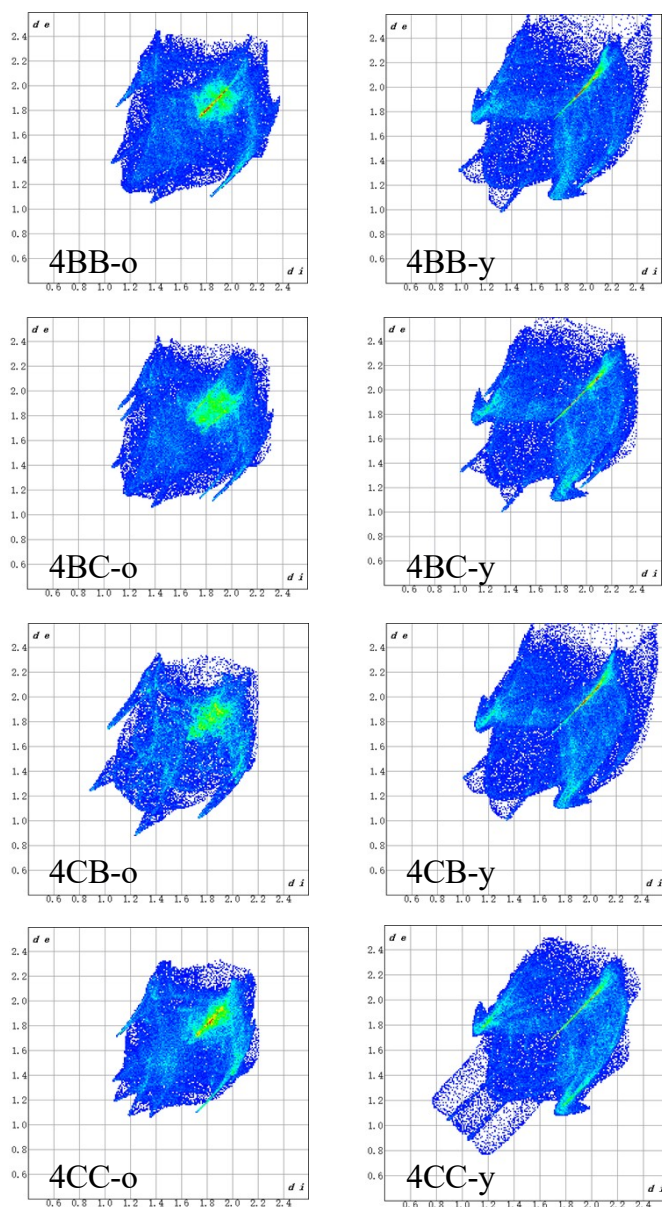


Figure S5 Crystal fingerprint plots for the four salicylideneanilines derivatives.

Table S2 H/J g⁻¹ during heating and cooling process.

	Heating process	Cooling process
4BC-y		
1st cycle	82.991	80.991
2nd cycle	81.604	78.971
4BC-o		
1st cycle	84.366	81.069
2nd cycle	81.163	77.835
4CC-y		

1st cycle	95.841	85.591
2nd cycle	85.808	84.435
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4CC-o		
1st cycle	89.939	79.557
2nd cycle	77.589	76.889

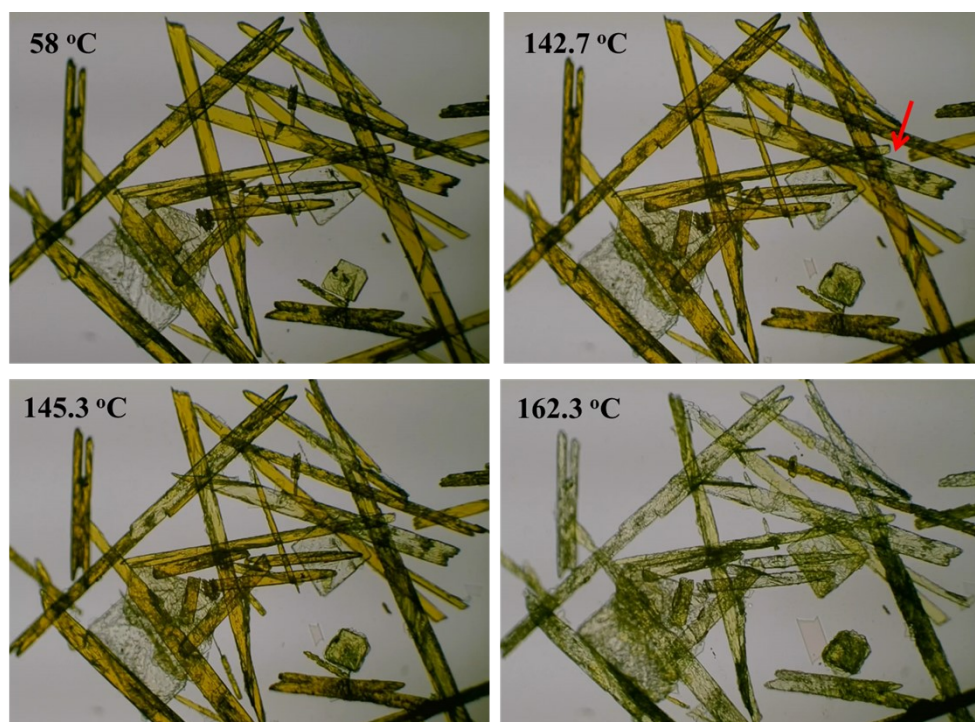


Figure S6 Snapshots of 4CB crystals morphology changes in solid state during heating process.

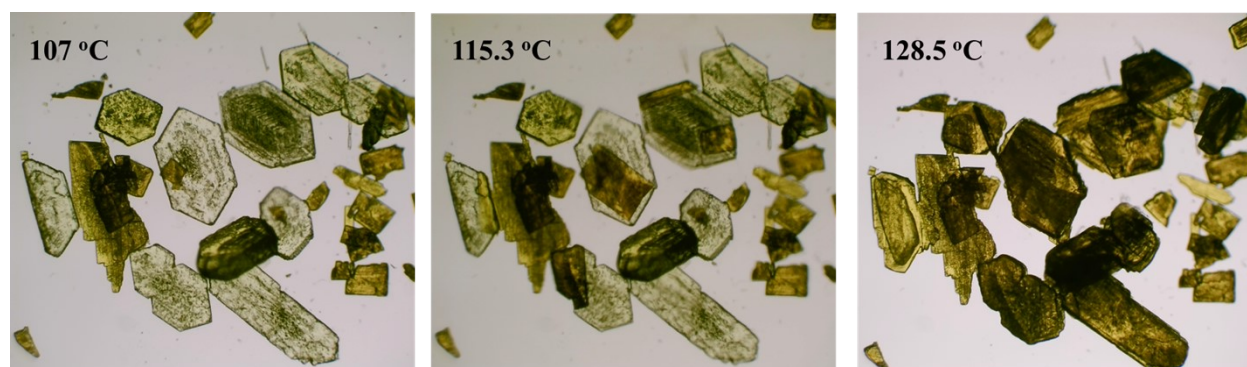


Figure S7 Snapshots of 4CC crystals morphology changes in solution state at constant temperature.

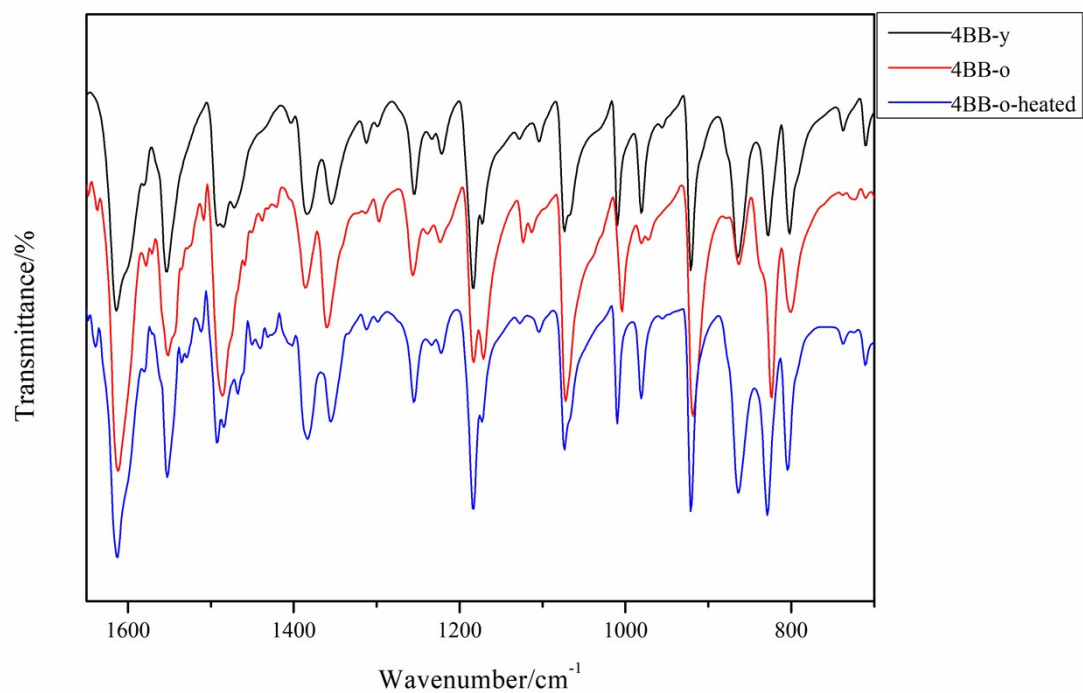


Figure S8 FT-IR spectra of 4BB-y and 4BB-o with different thermal histories.

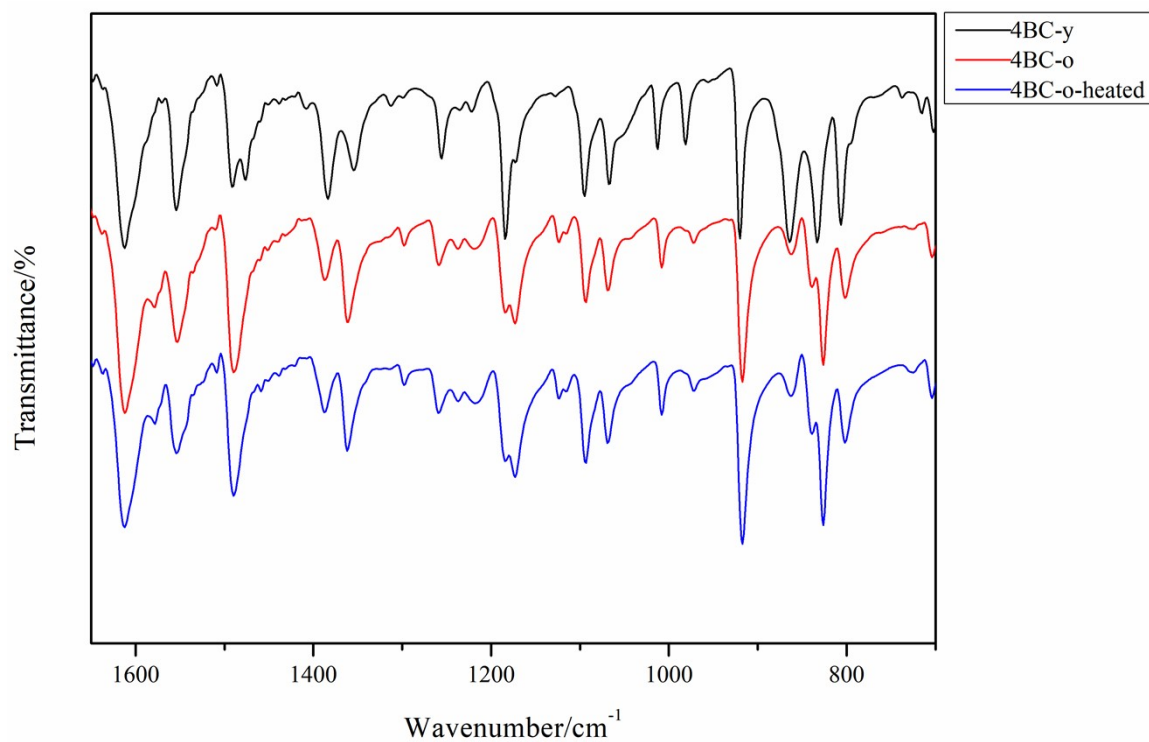


Figure S9 FT-IR spectra of 4BC-y and 4BC-o with different thermal histories.

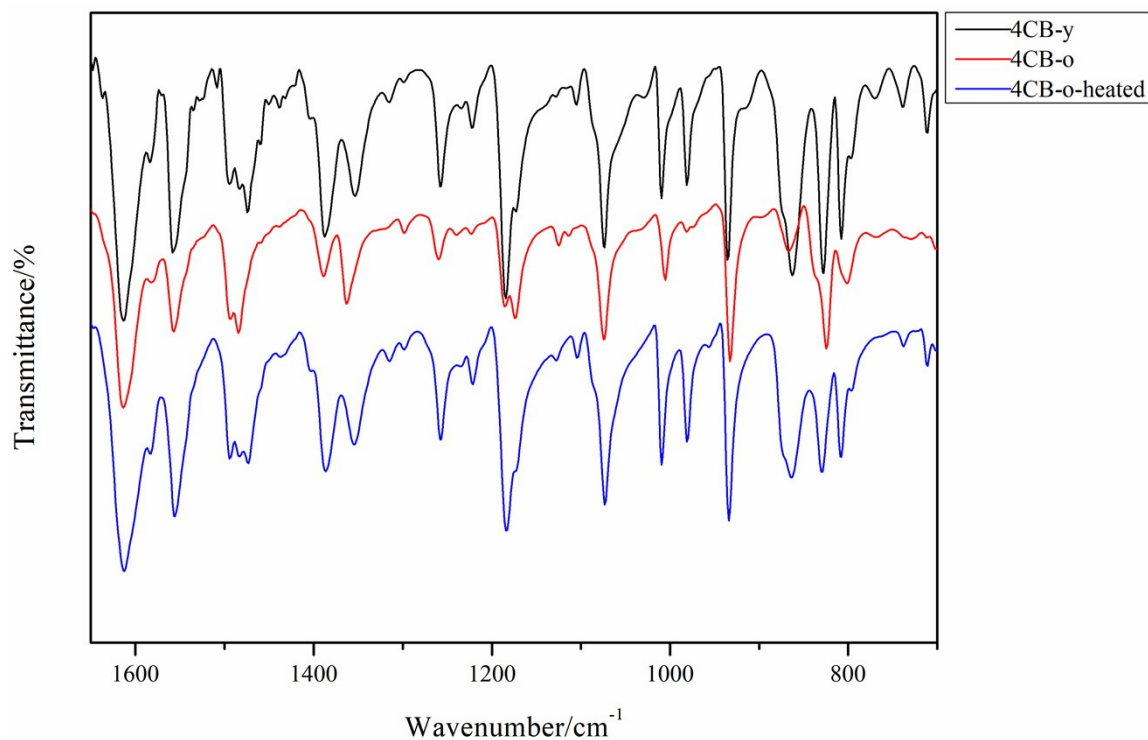


Figure S10 FT-IR spectra of 4CB-y and 4CB-o with different thermal histories.

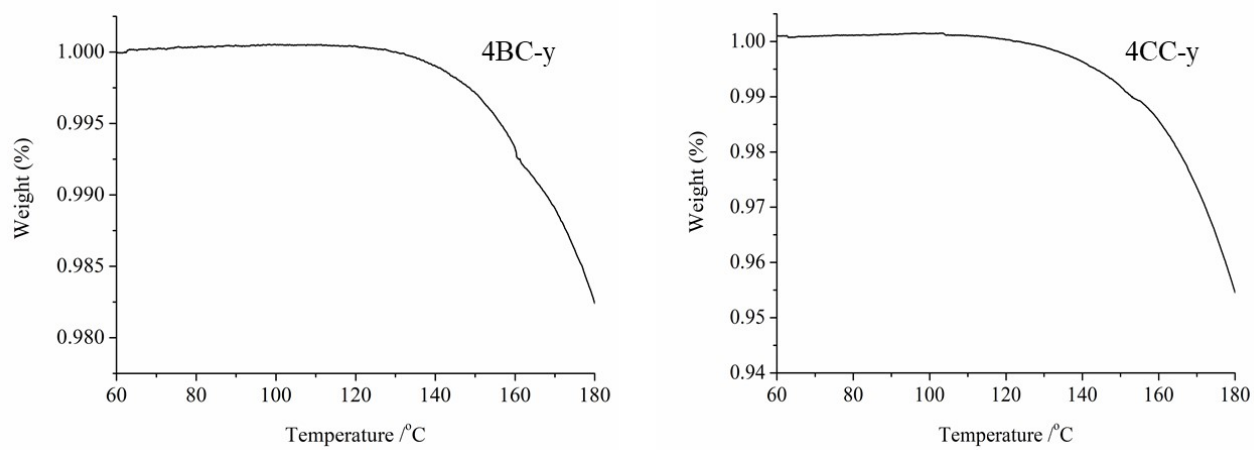


Figure S11 TG patterns of 4BC-y and 4CC-o.