

## Electronic Supplementary Information

### Series of High-Temperature Molecular ferroelectric crystals: Chlorine doped Diisopropylammonium Bromide

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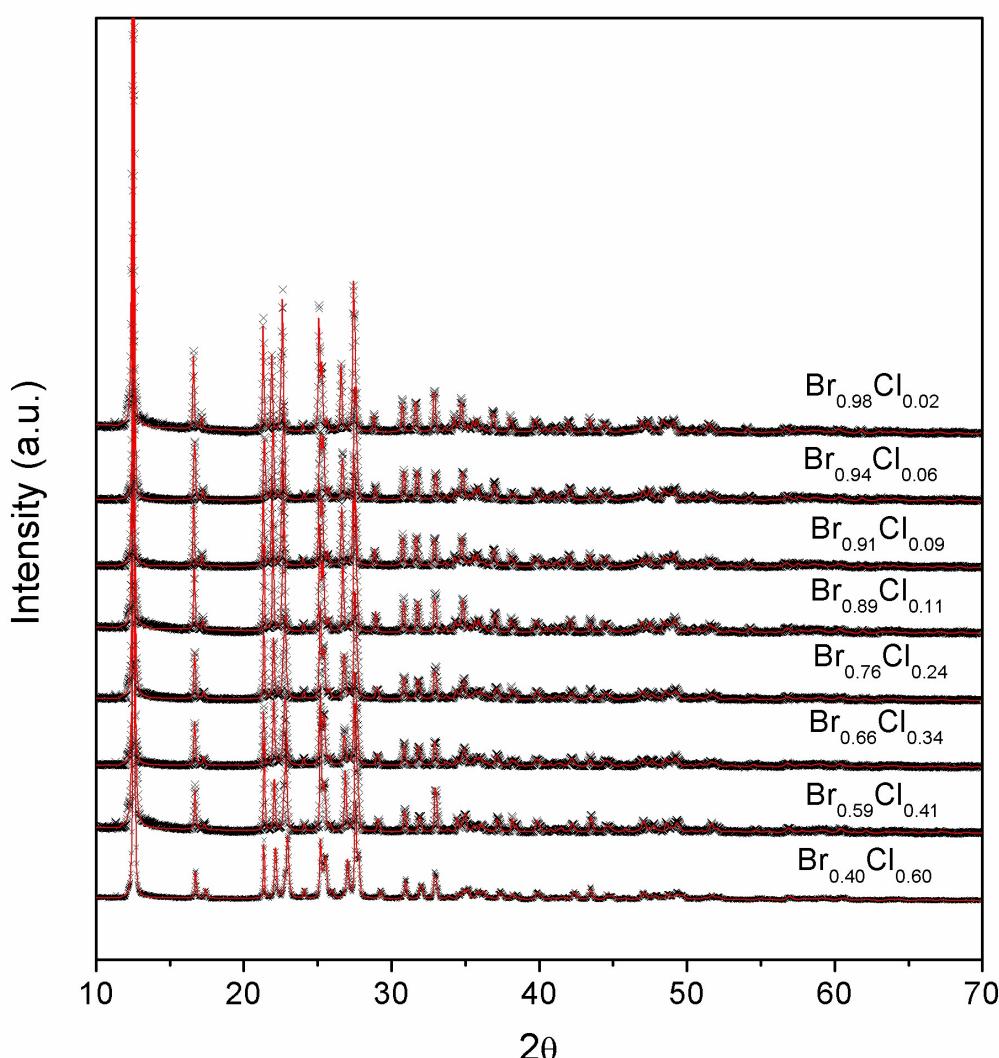


Fig. S1. Rietveld refinements of PXRD pattern of the obtained chlorine doped DIPAB

with P2<sub>1</sub> phase. The black “×” represents the measured XRD pattern and the red line is the refinement curve.

Table S1 The lattice parameters and  $r_{wp}$  of the chlorine doped DIPAB samples got by the Rietveld refinements of PXRD pattern

Measured chlorine content x	a	b	c	$\beta$	volume	$r_{wp}$
0	7.8614(6)	8.0978(5)	7.8943(6)	116.280(5) )	450.61(6)	10.83%
0.02	7.8661(3)	8.1092(3)	7.9038(2)	116.272(2) )	452.10(3)	10.04%
0.06	7.8665(3)	8.1096(2)	7.9067(2)	116.250(2) )	452.39(2)	8.24%
0.09	7.8605(3)	8.1062(3)	7.9000(2)	116.192(2) )	451.69(3)	9.55%
0.11	7.8541(3)	8.0991(3)	7.8984(2)	116.116(2) )	451.13(2)	9.87%
0.24	7.8288(4)	8.0812(4)	7.8780(3)	115.953(3) )	448.15(4)	9.92%
0.34	7.8275(4)	8.0798(3)	7.8796(3)	115.889(3) )	448.32(3)	9.51%
0.41	7.8105(4)	8.0651(5)	7.8631(2)	115.868(3) )	445.69(4)	10.99%
0.60	7.7472(4)	8.0100(4)	7.8165(3)	115.528(3) )	437.70(4)	9.88%

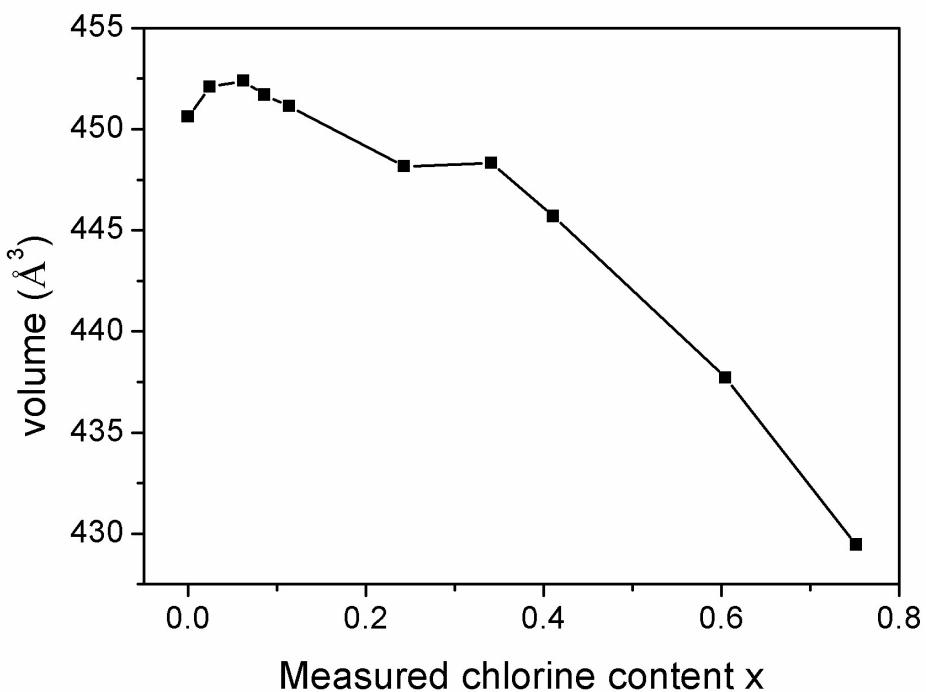


Fig. S2 The unit cell volume of the chlorine doped DIPAB versus the measured chlorine content.

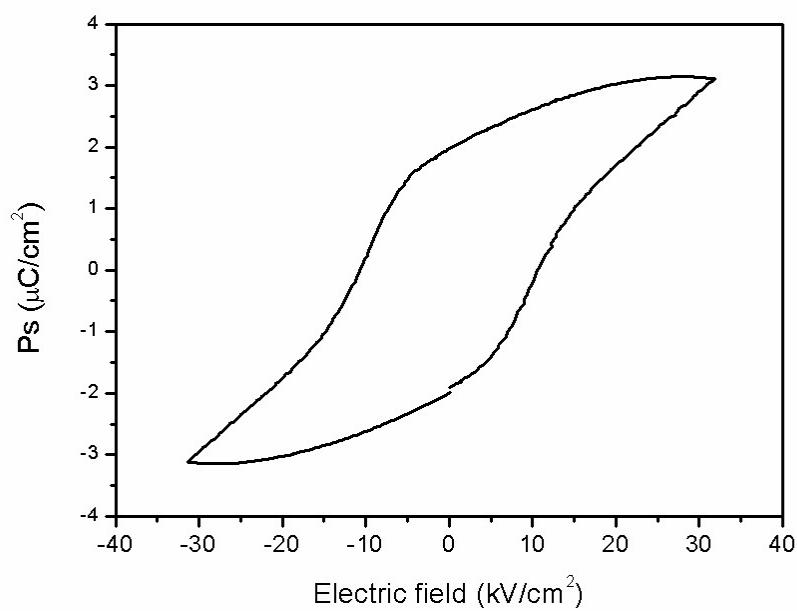


Fig. S3 The ferroelectric hysteresis loop of  $\text{C}_6\text{H}_{16}\text{NBr}_{0.59}\text{Cl}_{0.41}$  at 423K.