

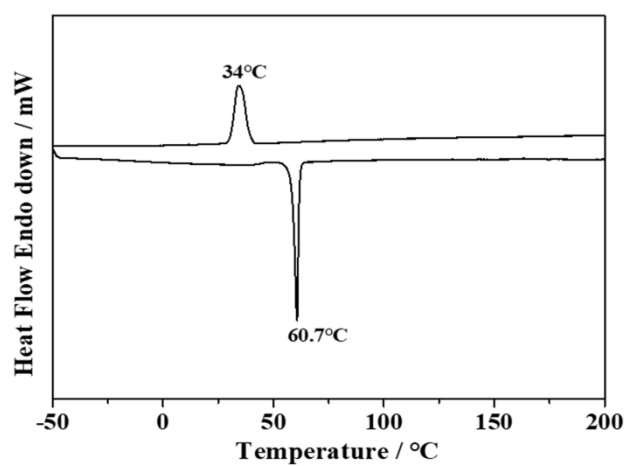
## Supporting Information for

# Supramolecular Thermotropic Ionic Liquid Crystals Formed via Self-Assembled of Zwitterionic Ionic Liquids

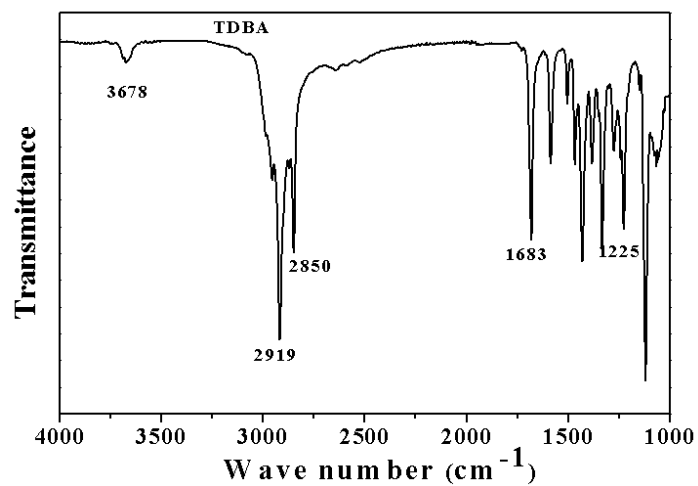
*Xuanxuan Qiao,<sup>a</sup> Panpan Sun,<sup>a</sup> Aoli Wu,<sup>a</sup> Na Sun,<sup>a</sup> Bin Dong,<sup>\*b</sup> Liqiang Zheng<sup>\*a</sup>*

<sup>a</sup>*Key Laboratory of Colloid and Interface Chemistry, Shandong University, Ministry of Education, Jinan 250100, China.*

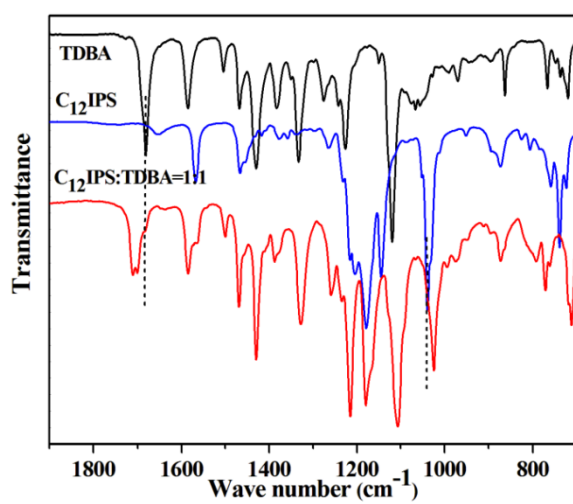
<sup>b</sup>*School of Chemical Engineering and Technology, China University of Mining and Technology, Xuzhou 221116, China.*



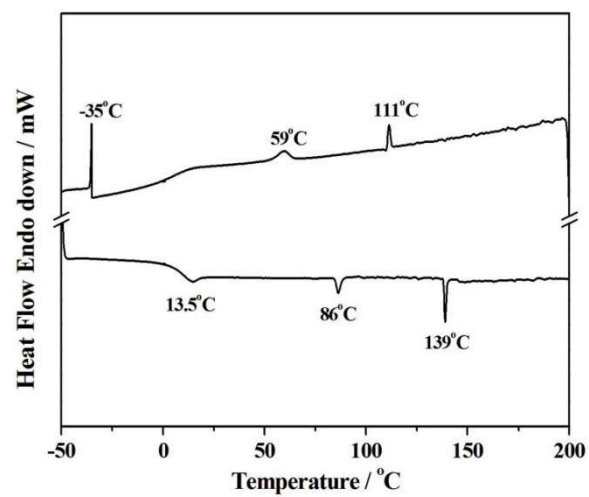
**Fig. S1.** DSC curves during the first cooling and the second heating of TDBA.



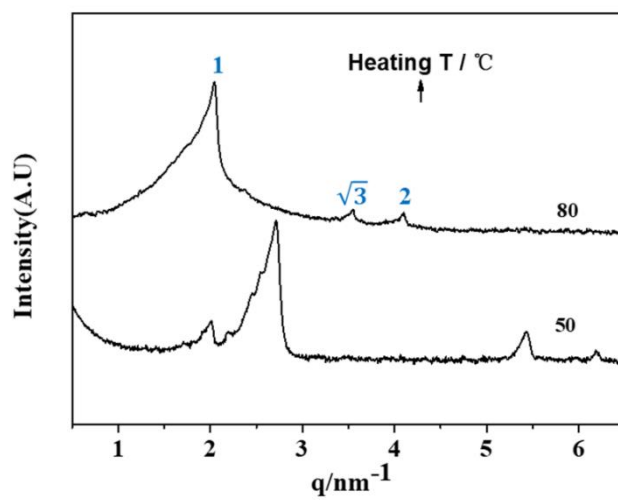
**Fig. S2.** FT-IR spectra of TDBA.



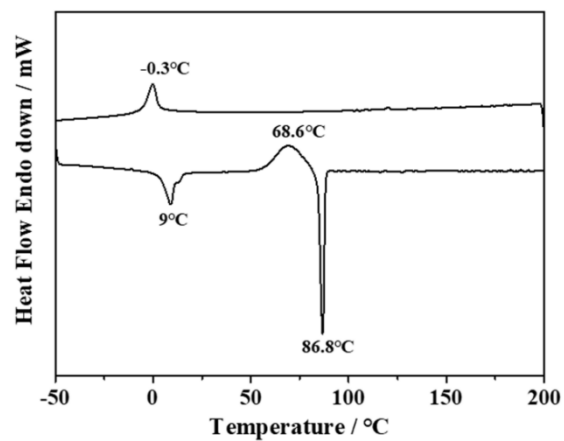
**Fig. S3.** FT-IR spectra of C<sub>12</sub>IPS, TDBA and C<sub>12</sub>IPS/TDBA (1: 1).



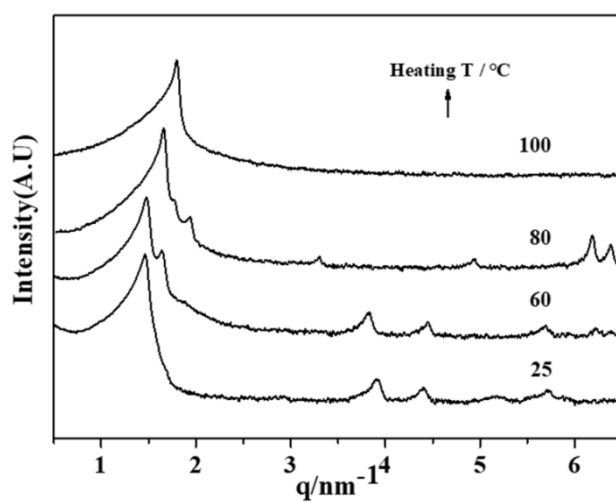
**Fig. S4.** DSC curves during the first cooling and the second heating of C<sub>12</sub>IPS.



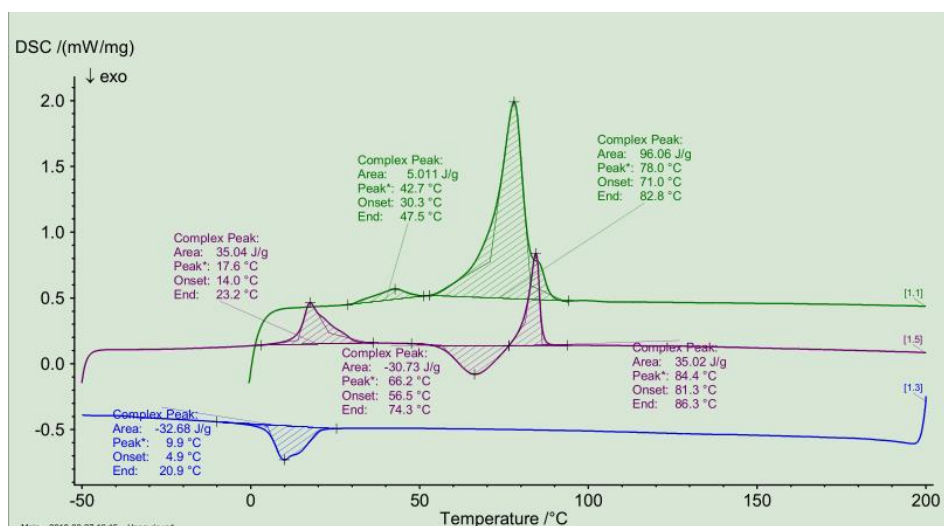
**Fig. S5.** SAXS patterns with increasing temperature of C<sub>12</sub>IPS.



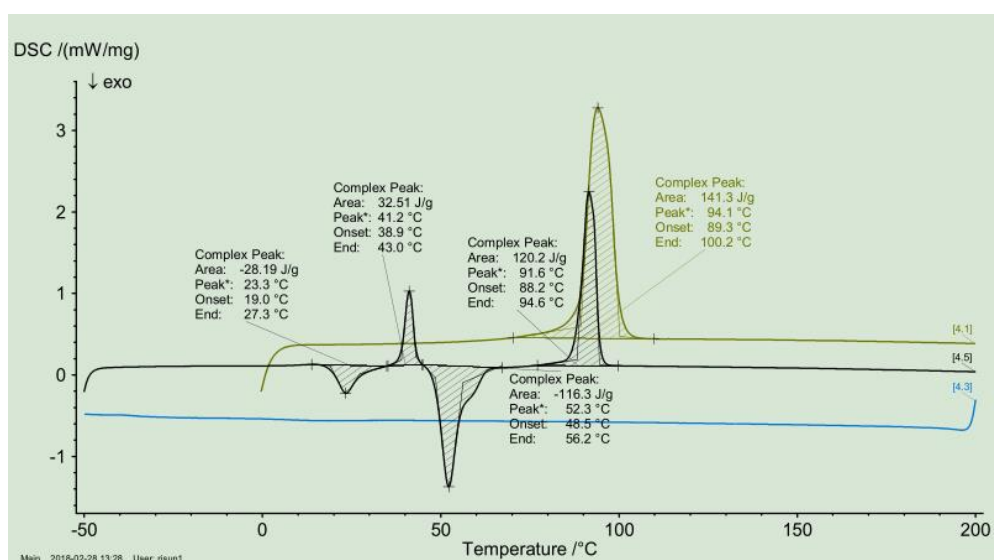
**Fig. S6.** DSC curves during the first cooling and the second heating of C<sub>12</sub>IPS/TDBA (1: 1).



**Fig. S7.** SAXS patterns with increasing temperature of C<sub>12</sub>IPS/TDBA.



**Fig. S8.** DSC curves during the first heating, first cooling and the second heating of C<sub>14</sub>IPS/TDBA.



**Fig. S9.** DSC curves during the first heating, first cooling and the second heating of C<sub>16</sub>IPS/TDBA.