Electronic Supplementary Material (ESI) for RSC Advances.

Chiral ionic liquid crystals with a bulky rigid core from renewable camphorsulfonic acid

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1. TGA results

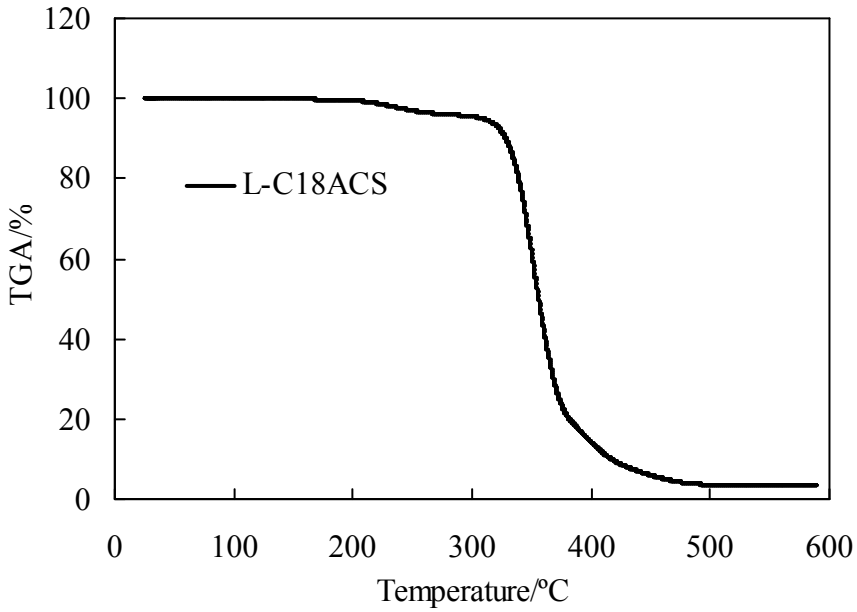
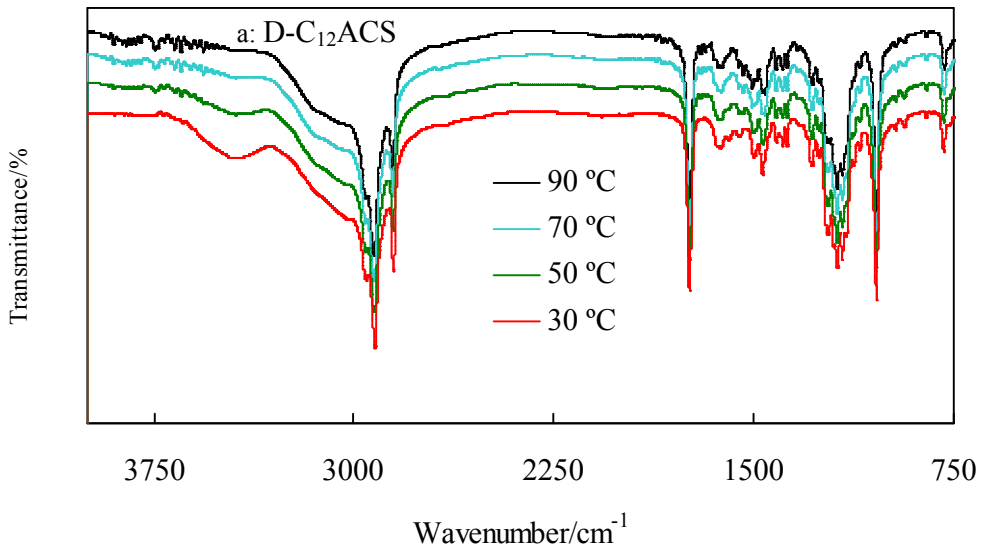
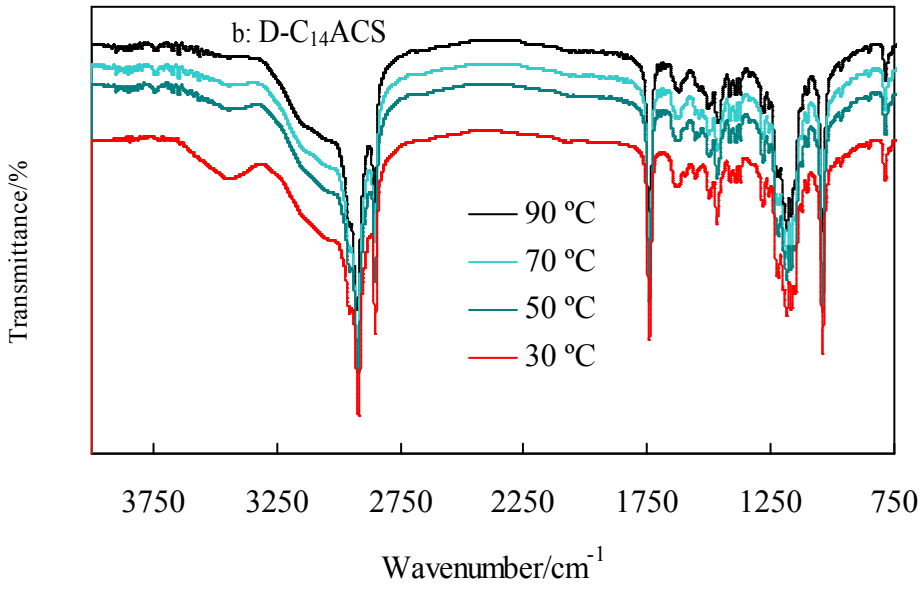
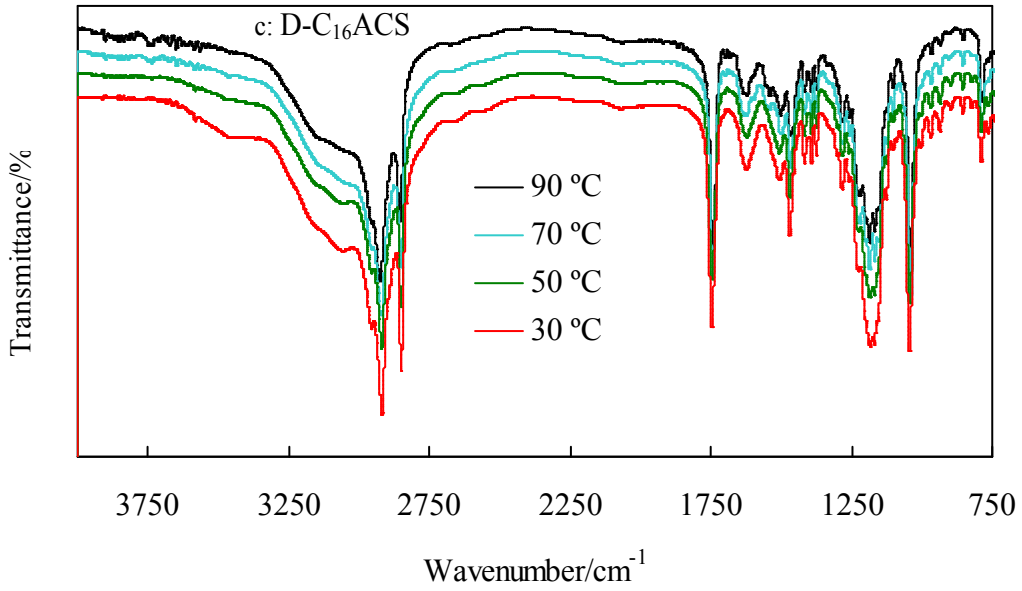


Figure S1. TGA curve of L-C_{18}ACS measured in the N_2 atmosphere.

2. FTIR spectra of D -C_nACSs




b: D-C14ACS
90 ℃
70 ℃
50 ℃
30 ℃
Transmittance/%
3750
3250
2750
2250
1750
1250
750
Wavenumber/cm-1


c: D-C16ACS
90 ℃
70 ℃
50 ℃
30 ℃
Transmittance/%
3750
3250
2750
2250
1750
1250
750
Wavenumber/cm-1

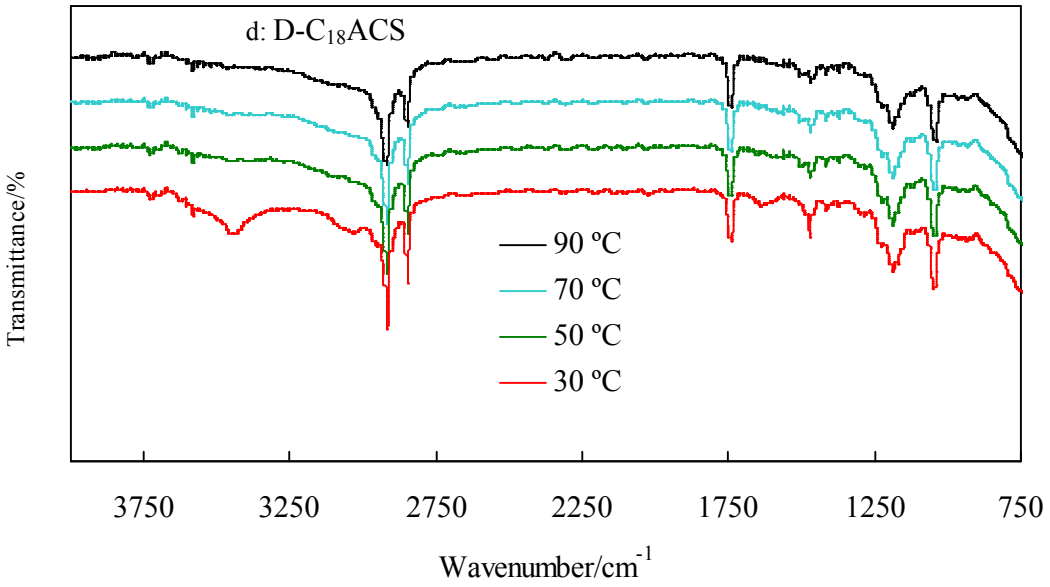
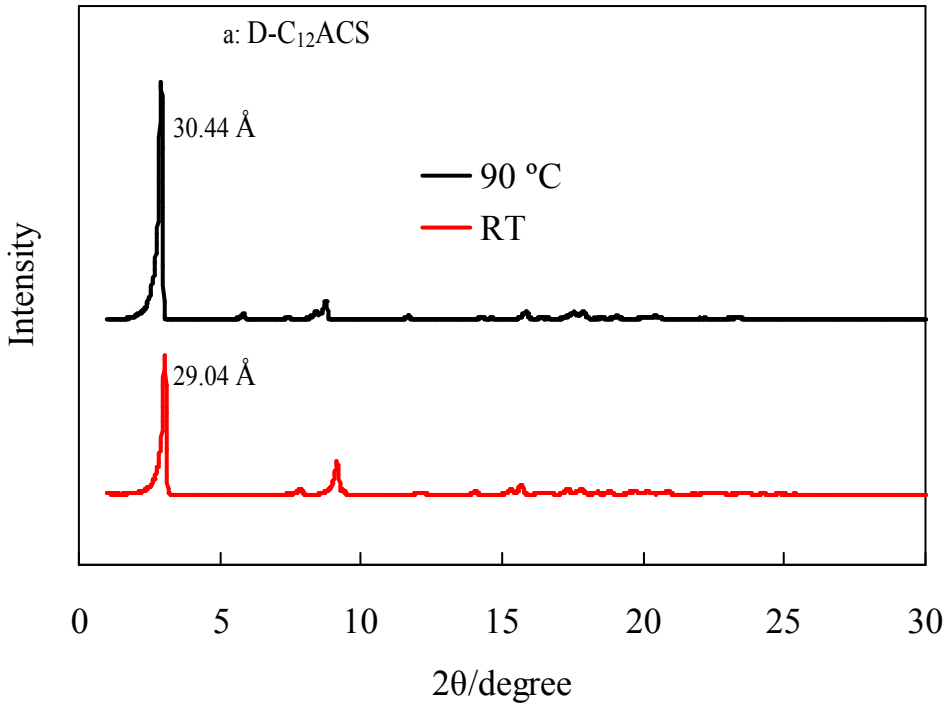
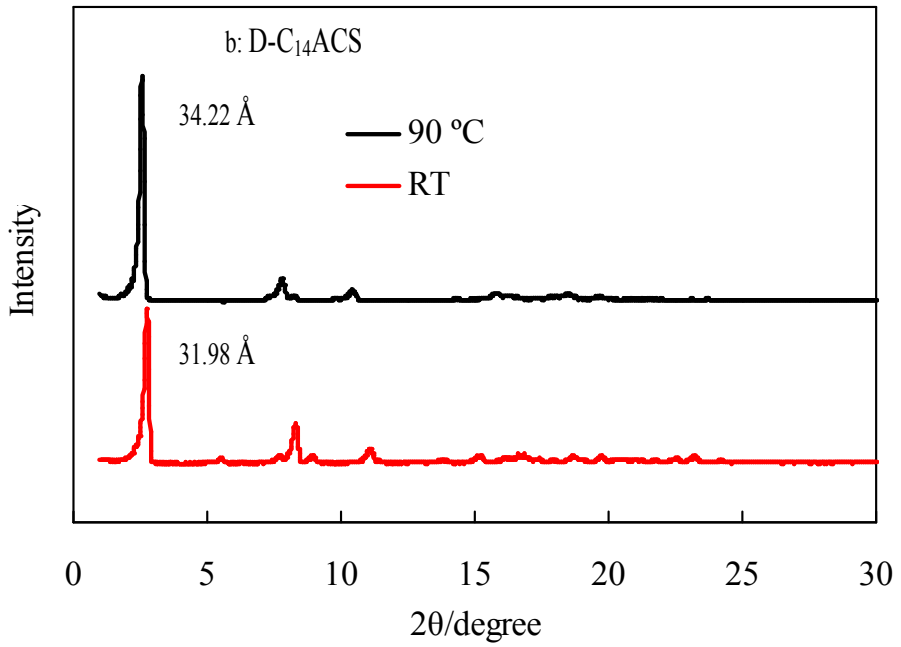
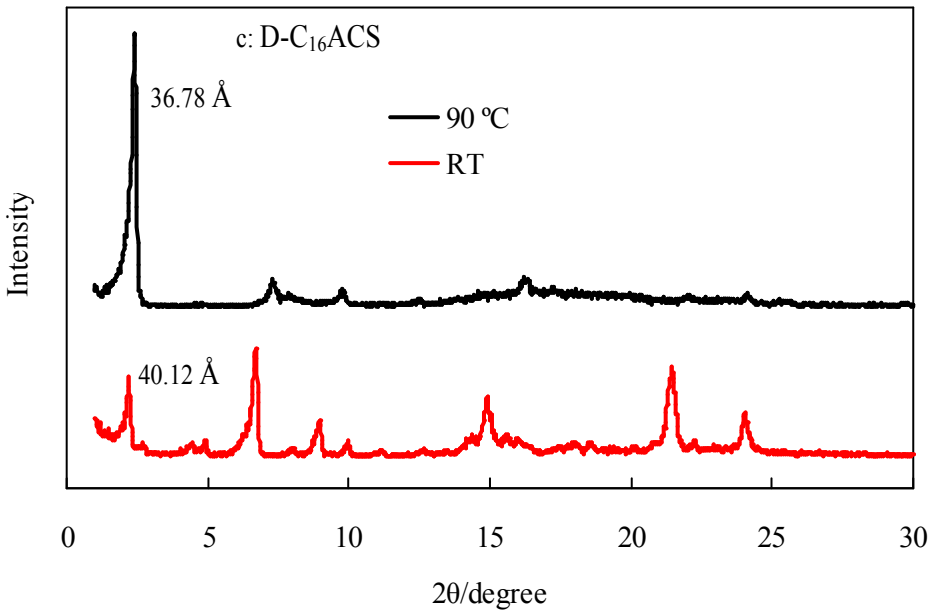


Figure S2. FTIR spectra of (a) D-C_{12}ACS, (b) D-C_{14}ACS, (c) D-C_{16}ACS and (d) D-C_{18}ACS at different temperatures.

3. X-Ray diffraction patterns of D-C_nACSs




b: D-C14ACS
34.22 Å
90 ºC
RT
31.98 Å
Intensity
0
5
10
15
20
25
30
2θ/degree


c: D-C16ACS
36.78 Å
90 ºC
RT
40.12 Å
Intensity
0
5
10
15
20
25
30
2θ/degree

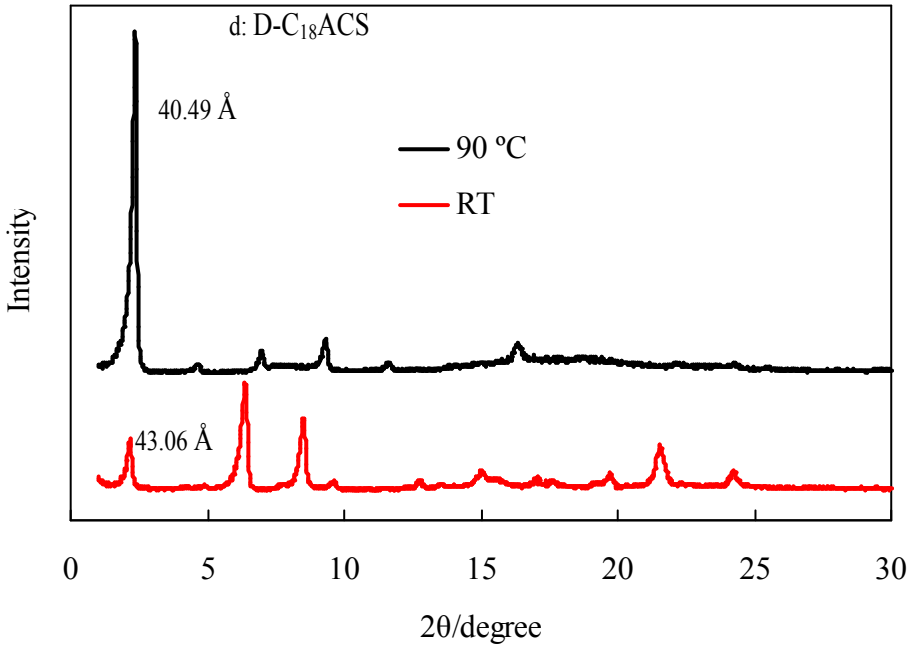


Figure S3. X-Ray diffraction patterns of (a) D-C_{12}ACS, (b) D-C_{14}ACS, (c) D-C_{16}ACS and (d) D-C_{18}ACS at room temperature and 90 °C.