

## Vitrification of the smectic $C_A^*$ phase and kinetics of cold crystallization investigated for the fluorinated compound with a chiral centre based on (*S*)-(+)-3-octanol

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### Supporting Information

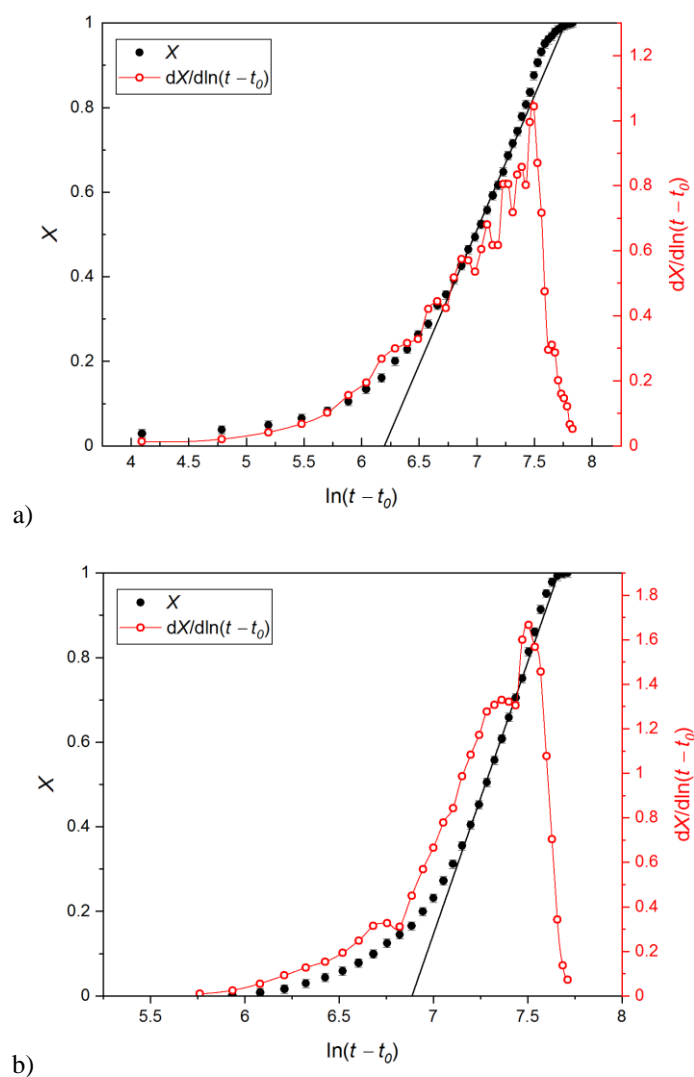


Figure S1. Avrami plots for the isothermal melt crystallization of II.5.(HH) (S) in 278 K (a) and 283 K (b).

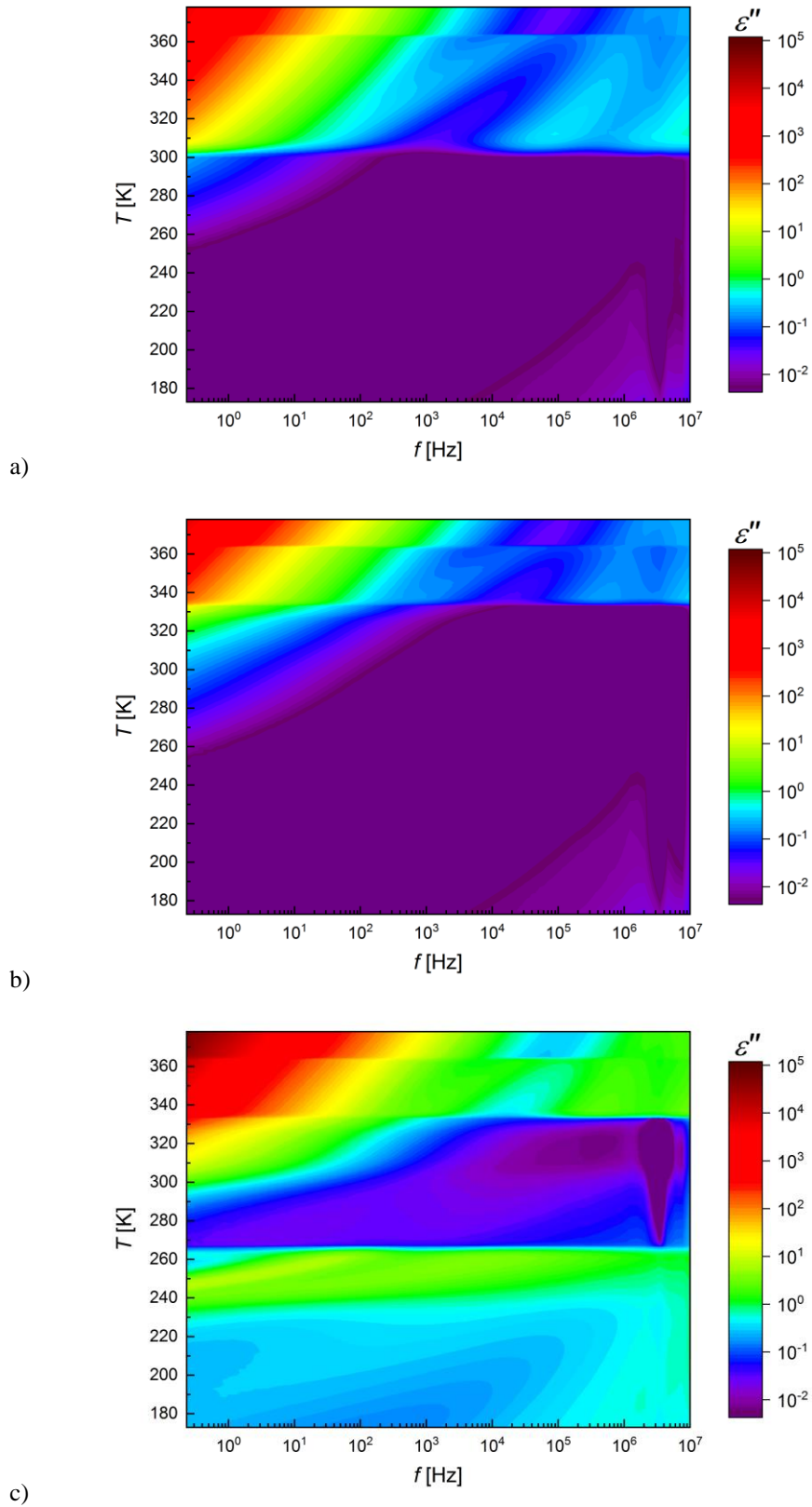


Figure S2. Dielectric absorption of II.5.(HH) (S) vs. temperature and frequency on slow cooling (a), on heating after slow cooling (b) and on heating after fast cooling (c).

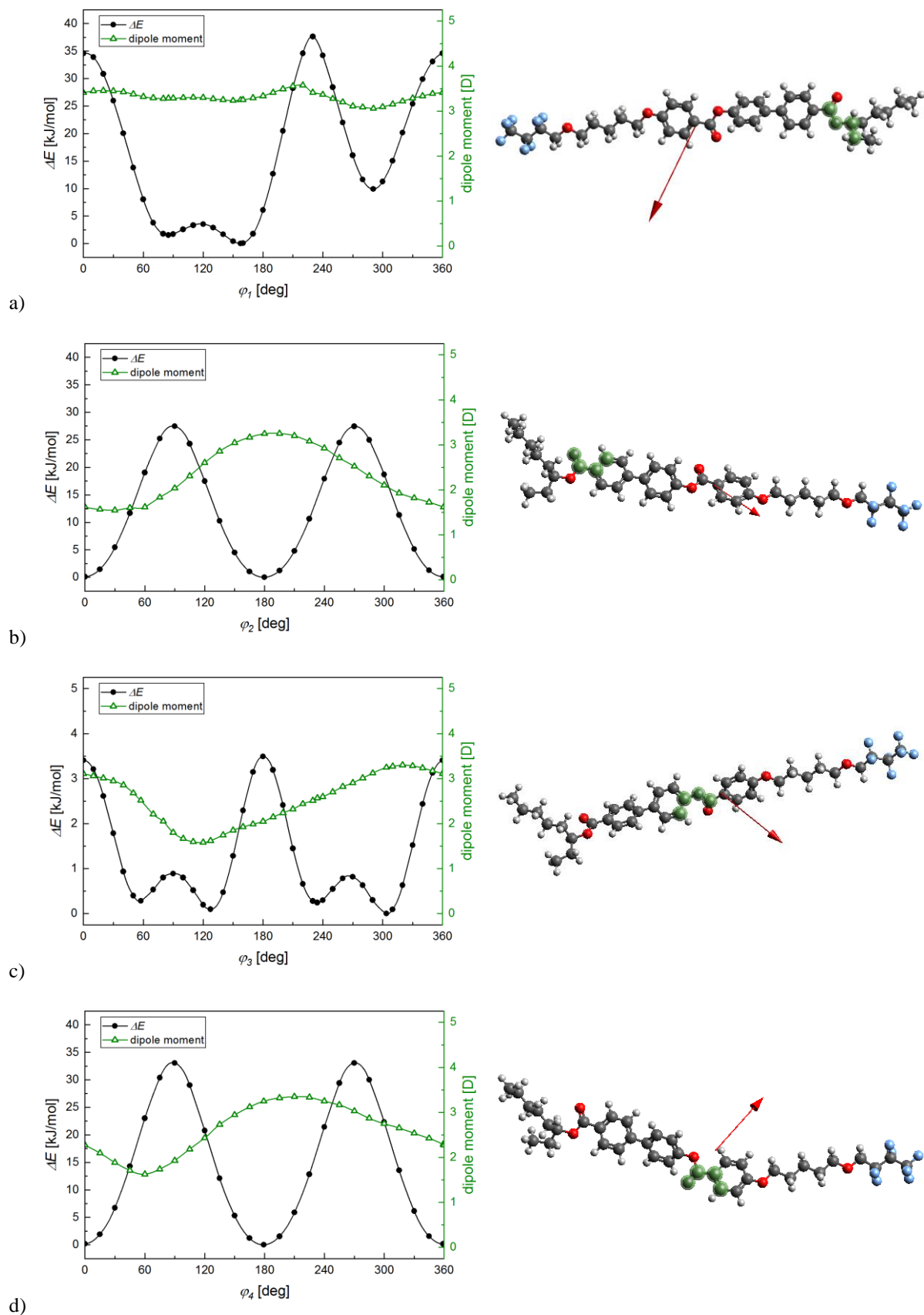


Figure S3 (part I). Conformational energy (circles, left axis) and total dipole moment (squares, right axis) vs. torsional angle for selected intra-molecular rotations calculated for the isolated II.5.(HH) (S) molecule with the DFT-B3LYP/def2TZVP method.

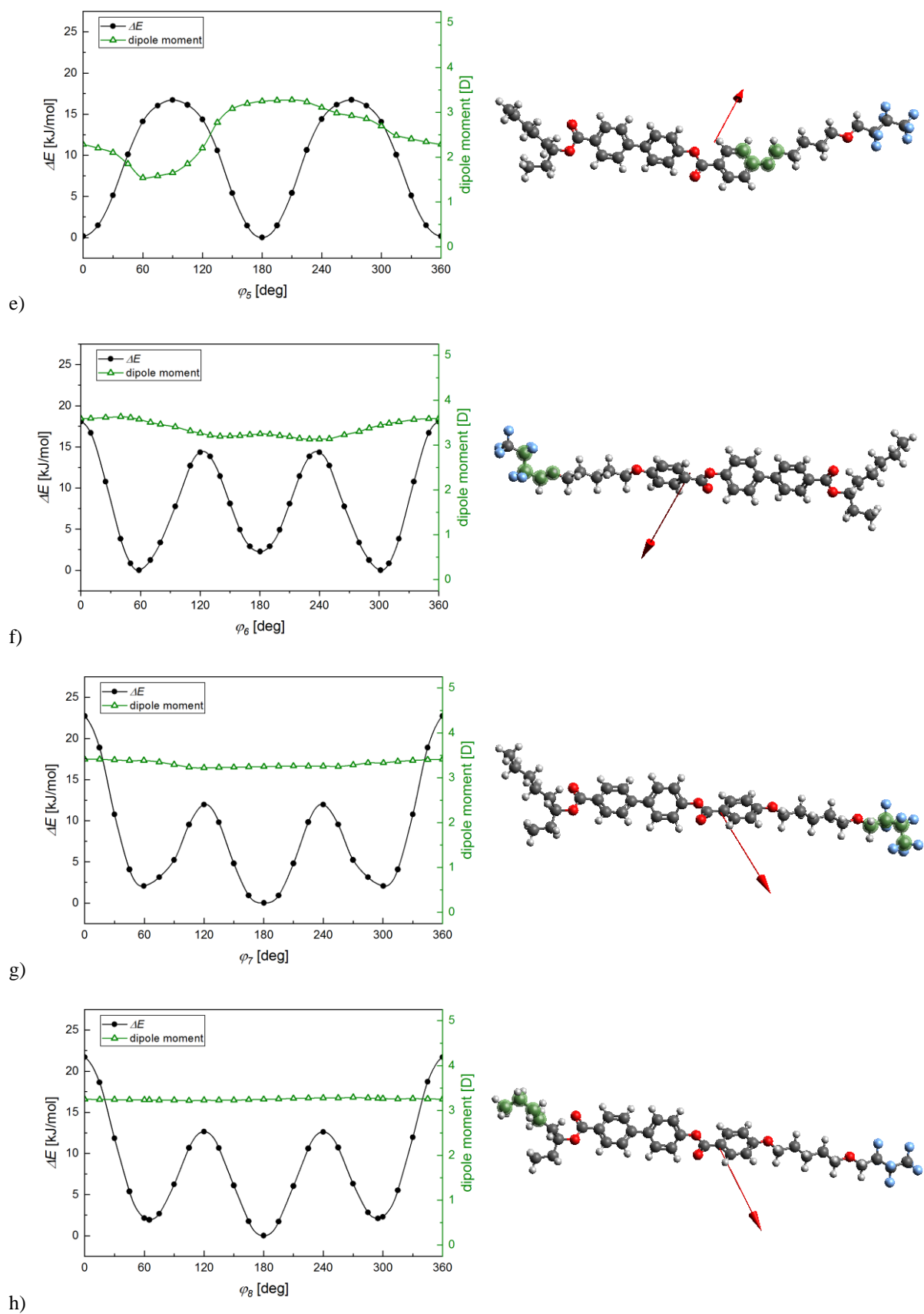
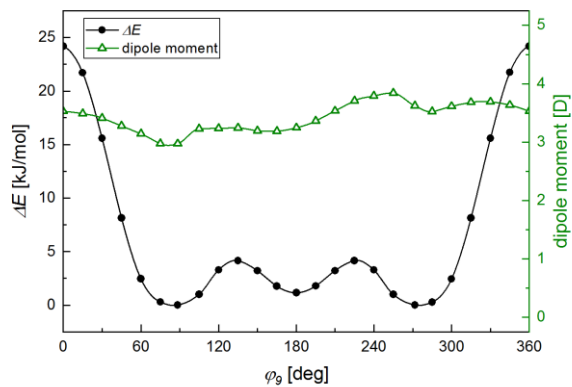
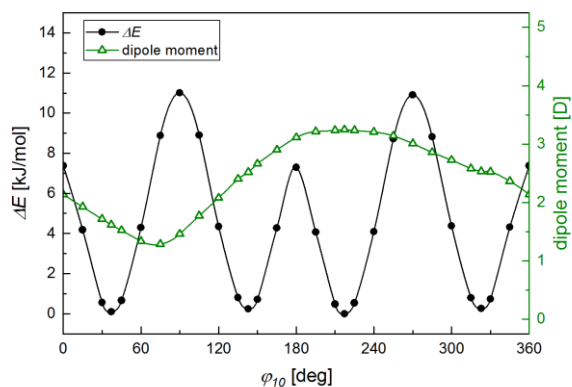
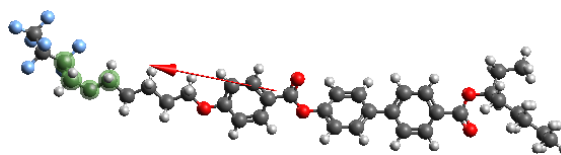


Figure S3 (part II). Conformational energy (circles, left axis) and total dipole moment (squares, right axis) vs. torsional angle for selected intra-molecular rotations calculated for the isolated II.5.(HH) (S) molecule with the DFT-B3LYP/def2TZVP method.



i)



j)

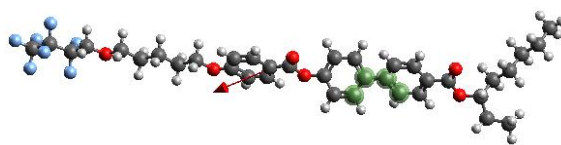


Figure S3 (part III). Conformational energy (circles, left axis) and total dipole moment (squares, right axis) vs. torsional angle for selected intra-molecular rotations calculated for the isolated II.5.(HH) (S) molecule with the DFT-B3LYP/def2TZVP method.