

# Supporting Information for

## **Highly Fluorescent Columnar Liquid Crystals with Elliptical Molecular Shape: Oblique Molecular Stacking and Excited- State Intramolecular Proton-Transfer Fluorescence**

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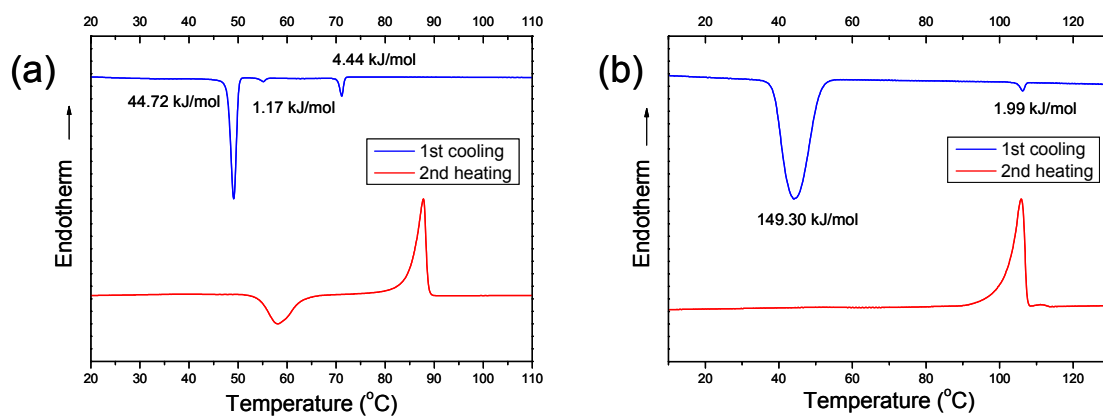


Figure S1. DSC thermograms of (a) DOXG and (b) DOXGBO.

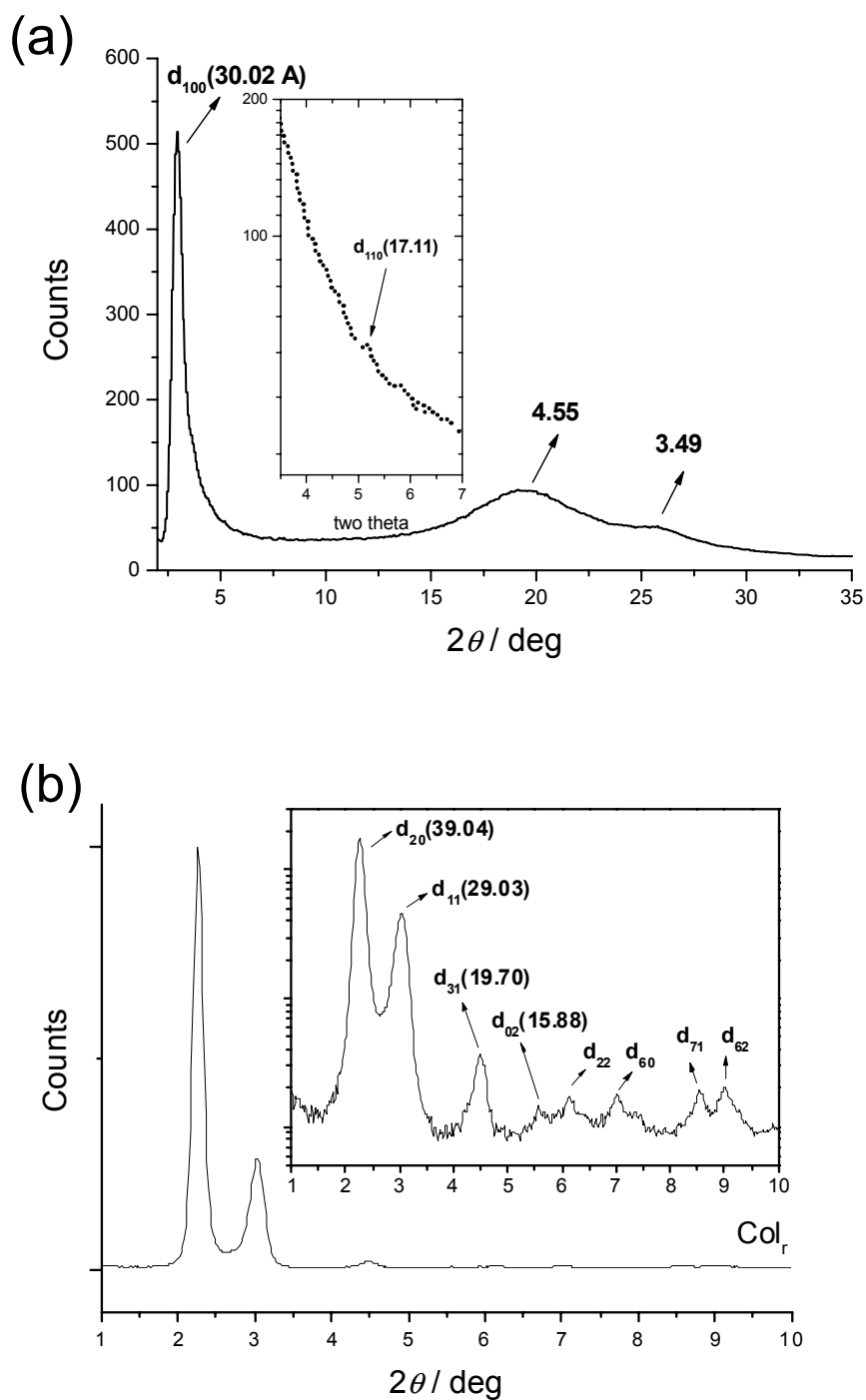


Figure S2. (a) Wide-angle X-ray diffraction pattern of DOXG in the  $Col_h$  phase, taken at high temperature ( $\sim 65^\circ\text{C}$ ). (b) Small-angle X-ray diffraction pattern of DOXG in the super-cooled state after annealing ( $Col_r$ ), taken at room temperature.

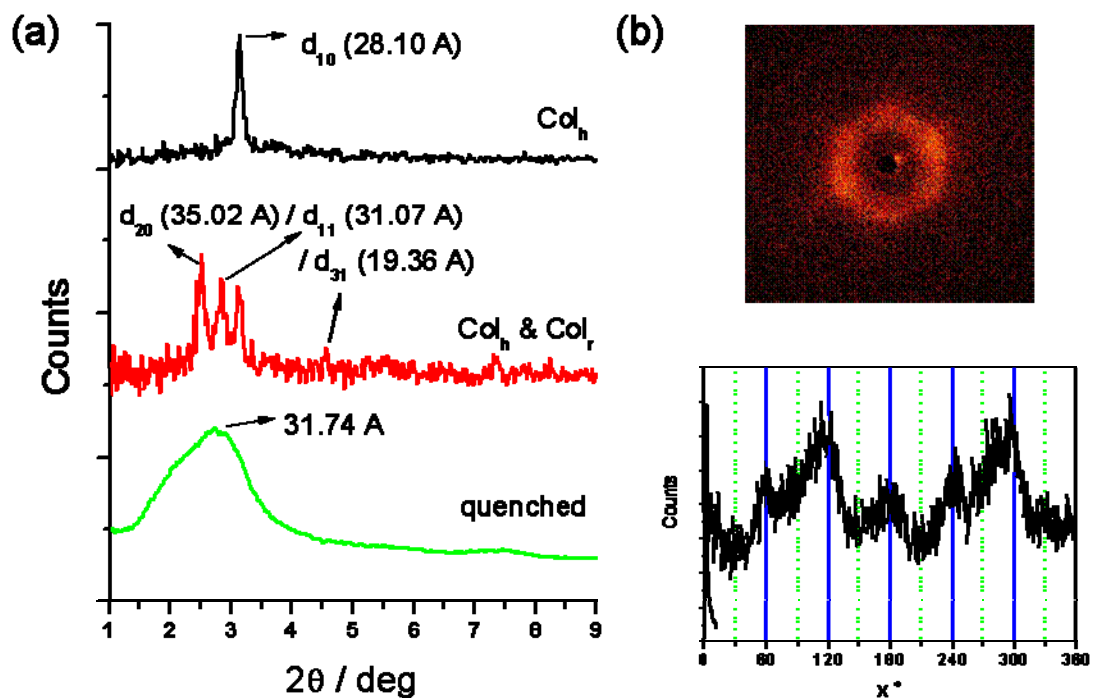


Figure S3. (a) Small-angle X-ray diffraction pattern of DOXGBO in  $Col_h$ ,  $Col_r$  (taken at high temperature), and quenched state after annealing (taken at room temperature). (b) Oriented pattern images in quenched state and its diffraction pattern along X-scan.

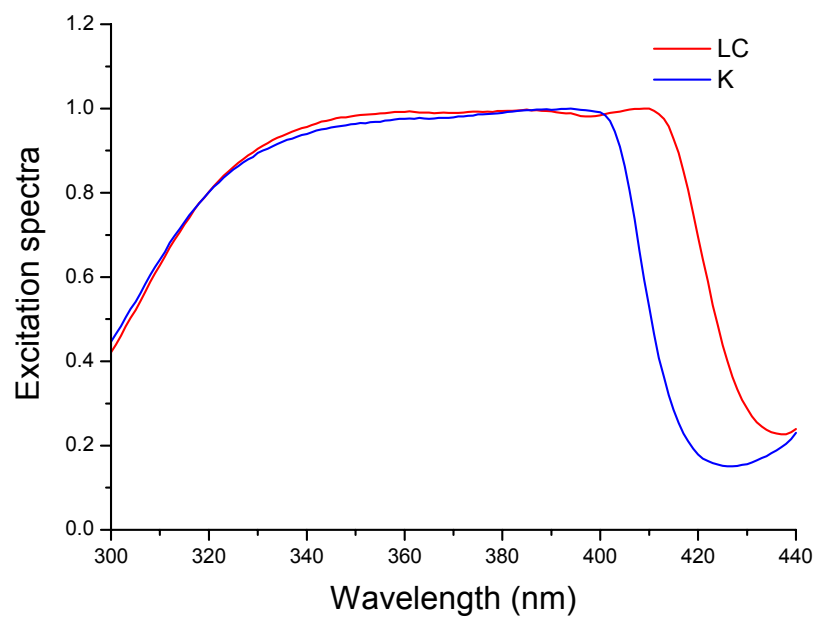


Figure S4. The excitation spectra at 460 nm in  $\text{Col}_h$  and K phases.