

Anisotropic Crystal Growth of Blue Phase I during Cholesteric-Blue Phase I Transition: Supplemental information

This document provides supplementary information to “Anisotropic Crystal Growth of Blue Phase I during Cholesteric-Blue Phase I Transition”. The elastic constants of the nematic LC materials used as BPLCs are listed in Table 1. These elastic constants were obtained experimentally from the Fredericks transition. The phase transition temperatures of each BPLC material are given in Table 2. Phase transition temperatures were evaluated by POM observation using a non-alignment cell with a cell thickness of 5 μm .

Table 1. Elastic constants of the host nematic LC materials used in BPLCs.

	K_{11} (pN)	K_{22} (pN)	K_{33} (pN)
5CB + MLC-6849-100	6.4	4.4	9.8
5CB	5.7	4.0	8.4
E7	10.9	10.3	18.5

Table 2. Phase transition temperatures of the BPLC materials.

	Ch-BPI	BPI-BPII	BPII-Iso
BPLC1	46.0 °C	46.8 °C	48.1 °C
BPLC2	28.8 °C	29.3 °C	29.8 °C
BPLC3	48.9 °C	49.7 °C	52.0 °C