

Supporting Information

The temperature range and optical properties of Liquid crystalline blue phase in inverse opal structures

Yuxian Zhang,^{a,b} Weidong Zhao,^{a,b} Yongbo Yu,^{a,b} Zhou Yang,^{*a,b} Wanli He,^{*a,b} Hui Cao,^{a,b} Dong Wang^{a,b}

- State Key Laboratory for Advanced Metals and Materials, School of Materials Science and Engineering, University of Science and Technology Beijing, Beijing 100083, China.
- Department of Materials Science and Engineering, University of Science and Technology Beijing, Beijing, 100083, China

*Corresponding authors:

E-mail Address: yangz@ustb.edu.cn (Z. Yang), hewanli@mater.ustb.edu.cn (W. He)

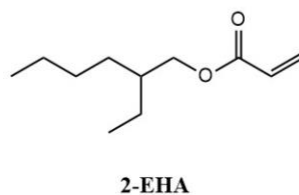
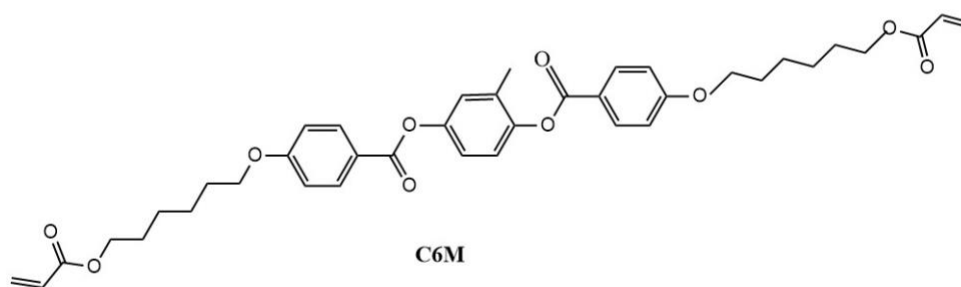
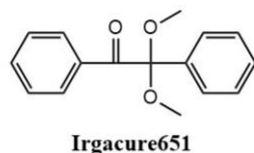
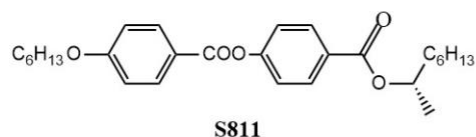


Fig. S1 Chemical structures of the chiral dopant S811, the photoinitiator Irgacure651, the monomer C6M and 2-ethylhexyl acrylate (2-EHA).

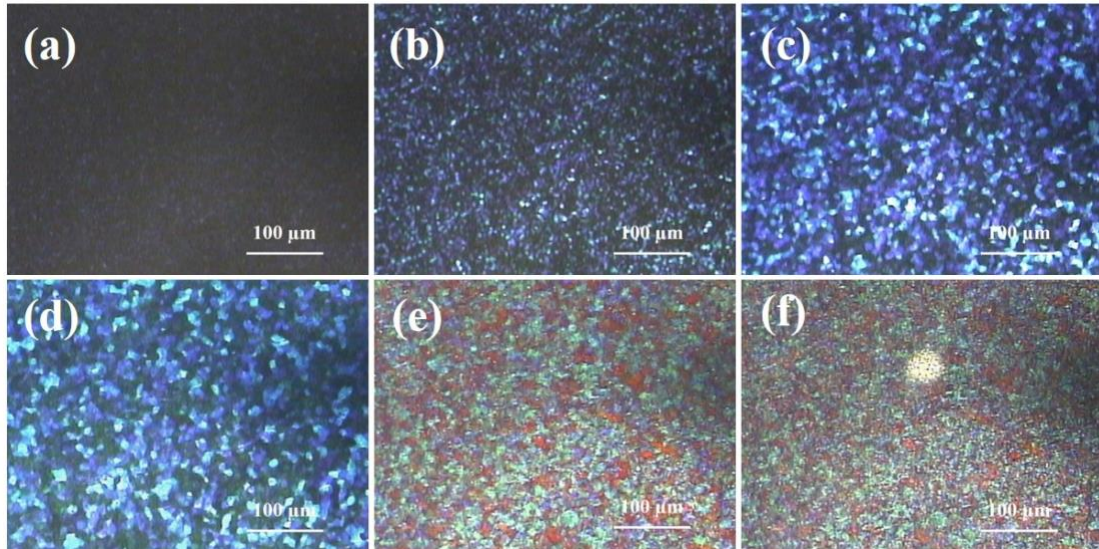


Fig S2. POM images of the BP-IOP device with 20 μm -spacer taken at a cooling rate of 1.0 $^{\circ}\text{C}/\text{min}$ (a) 35.5 $^{\circ}\text{C}$ (b) 34.9 $^{\circ}\text{C}$ (c) 34.2 $^{\circ}\text{C}$ (d) 33.9 $^{\circ}\text{C}$ (e) 29.7 $^{\circ}\text{C}$ (f) 24.5 $^{\circ}\text{C}$

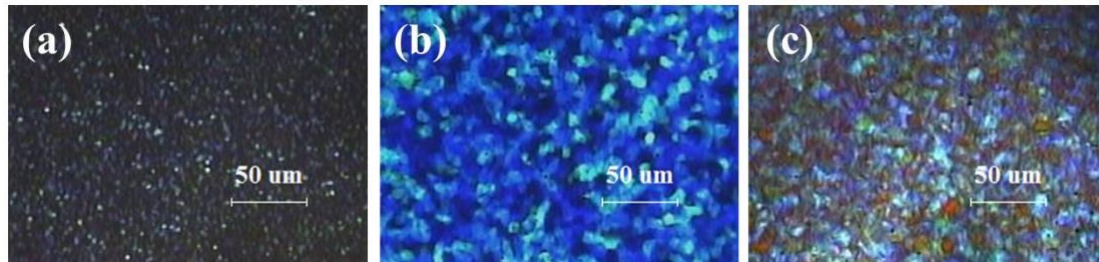


Fig S3. POM textures of PSBP sample at different temperatures before polymerization (a) 21.2 $^{\circ}\text{C}$ (b) 18 $^{\circ}\text{C}$ (c) 17.6 $^{\circ}\text{C}$

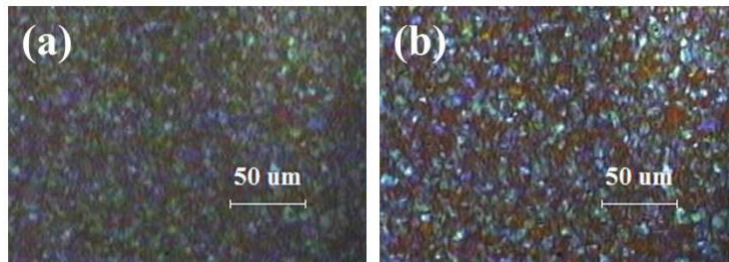


Fig S4. POM textures of PSBP sample at different temperatures after polymerization (a) 25 $^{\circ}\text{C}$ (b) 21.4 $^{\circ}\text{C}$