

Electronic Supplementary Information

Microfluidic generation of cholesteric liquid crystal droplets with an integrative cavity for dual-gain and controllable lasing

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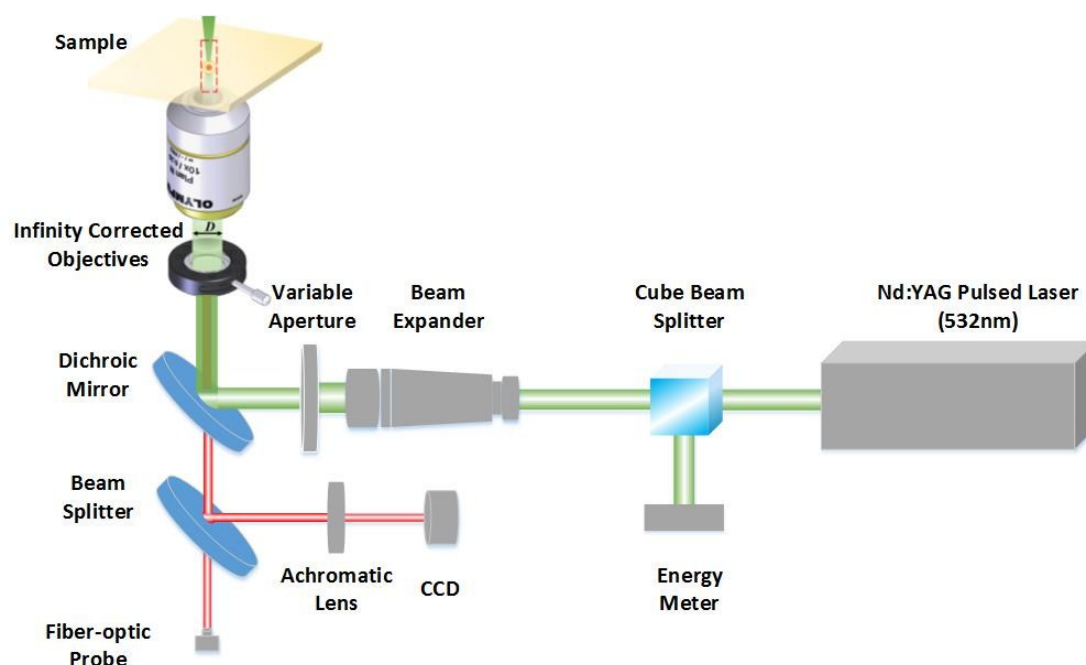


Figure S1. Experiment setup of droplet laser pumping and detection

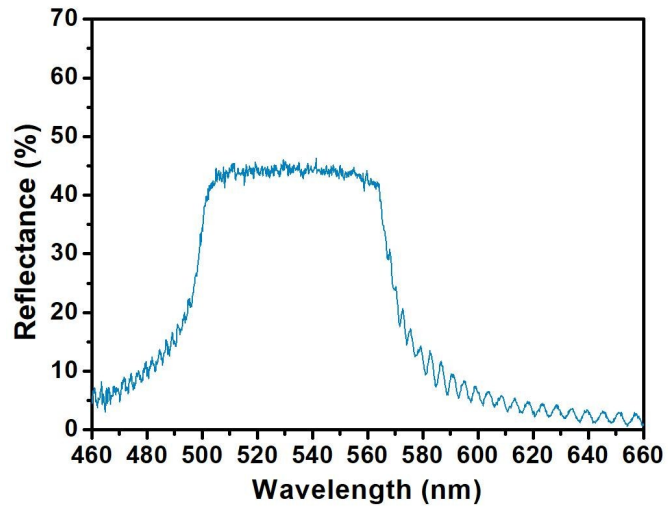


Figure S2. Reflection spectrum of the thermo-insensitive DDCLC used as the shell of Sample A1 and Sample A2.

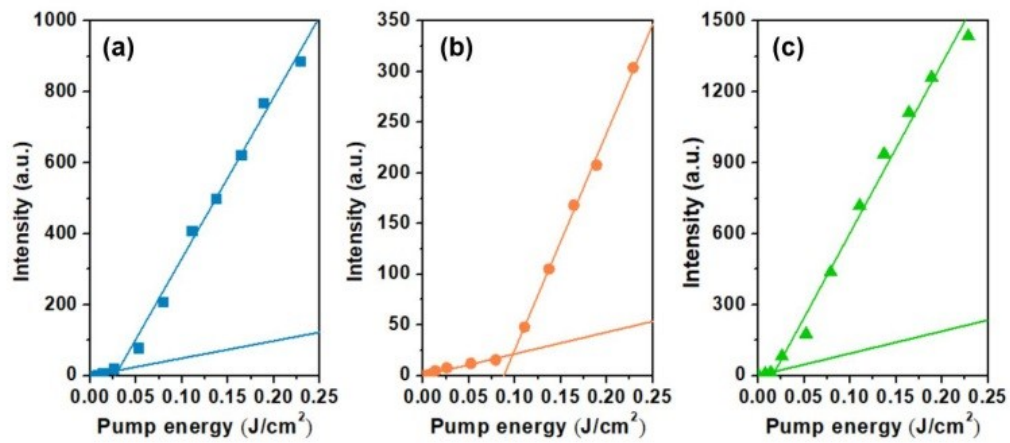


Figure S3. Emission intensity from Sample A1 as a function of the pumped energy measured at 31 °C as $D=4.5$ mm. (a) DFB mode lasing emission from the DDCLC shell, (b) DFB mode lasing emission from the DDCLC core, (c) WG lasing emission.

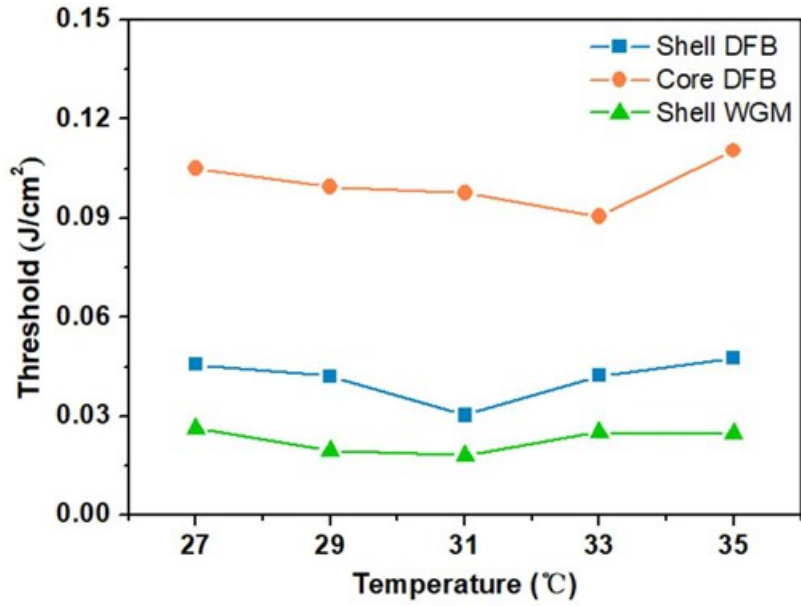


Figure S4. The dependence of lasing threshold on temperature in Sample A1.

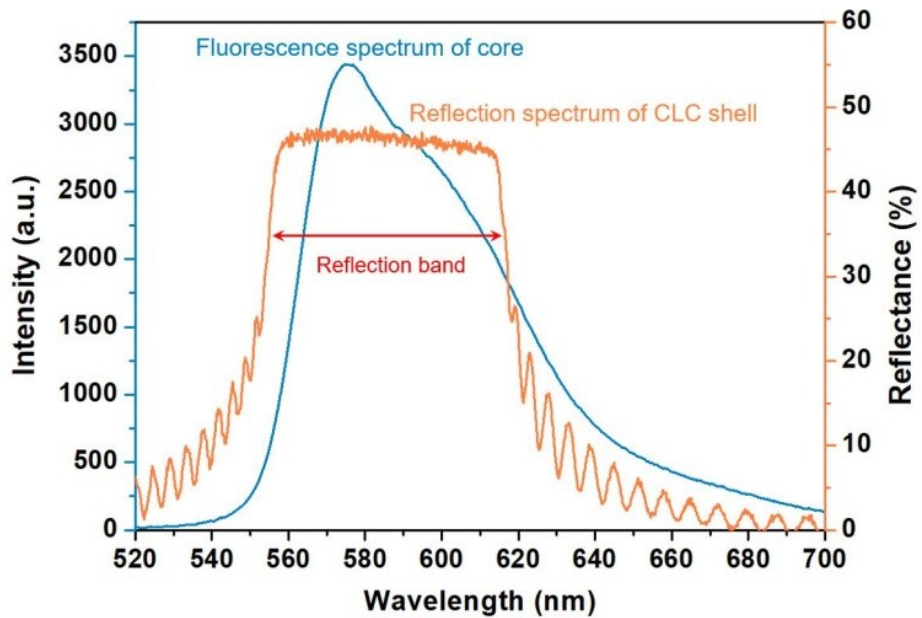


Figure S5. (a) Fluorescence spectrum of PM597-doped 1-Bromohexadecane solution in core of Sample B when illuminated by a cw 532 nm laser and reflection spectrum of the thermo-insensitive CLCs shell measured at room temperature.