Supporting Information

Self-Assembled Liquid Crystal Gels in Emulsion

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1. Optical and fluorescence microscope images of a LC gel emulsion.

![Image](a) ![Image](b)

44 µm

Fig. S1. Image a is the photomicrograph (reflection mode) of an emulsion cast on a glass slide; most of dispersed LC droplets have diameters in the range of 2-5 µm. Image b was recorded with the same dispersion using a fluorescence microscope. The fluorescence emission from the droplets indicates that CN-TFMBE molecules are in an aggregated state inside the LC cavities.
2. Polarizing Optical Micrographs

![Polarizing photomicrographs showing (a) the droplets of liquid crystal emulsion without gelator and (b) the droplets of liquid crystal gel emulsion. The insets are magnified images of two large droplets (~ 20 µm in diameter) showing the radial configuration for the droplet without gelator (a) and the disrupted LC director in the gel droplet (b).](image)

3. Electrooptical switching of a single LC gel droplet

![Graph showing repeated switching of transmittance for a single liquid crystal gel droplet (55 µm in diameter) at the field-on (5.3 V/µm) and field-off (0 V/µm) state (a.c field, 1000 Hz, peak-to-peak).](image)