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## Supplementary Information



Fig. S1. TEM image of oleic acid capped harvested LiNbO3 nanoparticles



Fig. S2. Optical texture (a) non-doped FLC, (b) FLC nanocolloid with 0.01 wt. % LiNbO<sub>3</sub>, (c) nanocolloid with 0.05 wt. % LiNbO<sub>3</sub> and (d) FLC nanocolloid with 0. 10 wt. % LiNbO<sub>3</sub> at  $30^{\circ}$ C



Fig. S3. Photoluminescence emission spectra (a) non-doped FLC (b) FLC nanocolloids with 0.01 wt. % LiNbO<sub>3</sub>, and (c) FLC nanocolloids with 0.10 wt. % LiNbO<sub>3</sub>. Inset represents the excitation wavelength spectra.