Chirality transfer in nematic liquid crystals doped with (*S*)-Naproxen functionalized gold nanoclusters: An induced circular dichroism study

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Supplementray Information

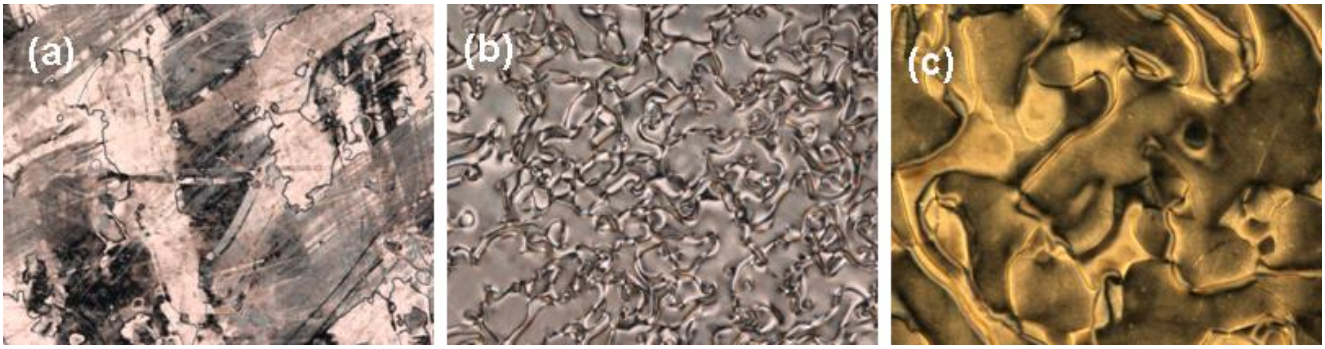

Fig. S1 POM micrographs of the N or N* phases at room temperature after cooling from the isotropic liquid phase at a cooling rate of 1°C/min: (a) marble texture of the N phase of pure 5CB; (b) oily-streak texture of the N* phase of 5CB doped with 0.1wt% (*S*)-Naproxen, and (c) doped with 0.01wt% (*S*)-Naproxen.

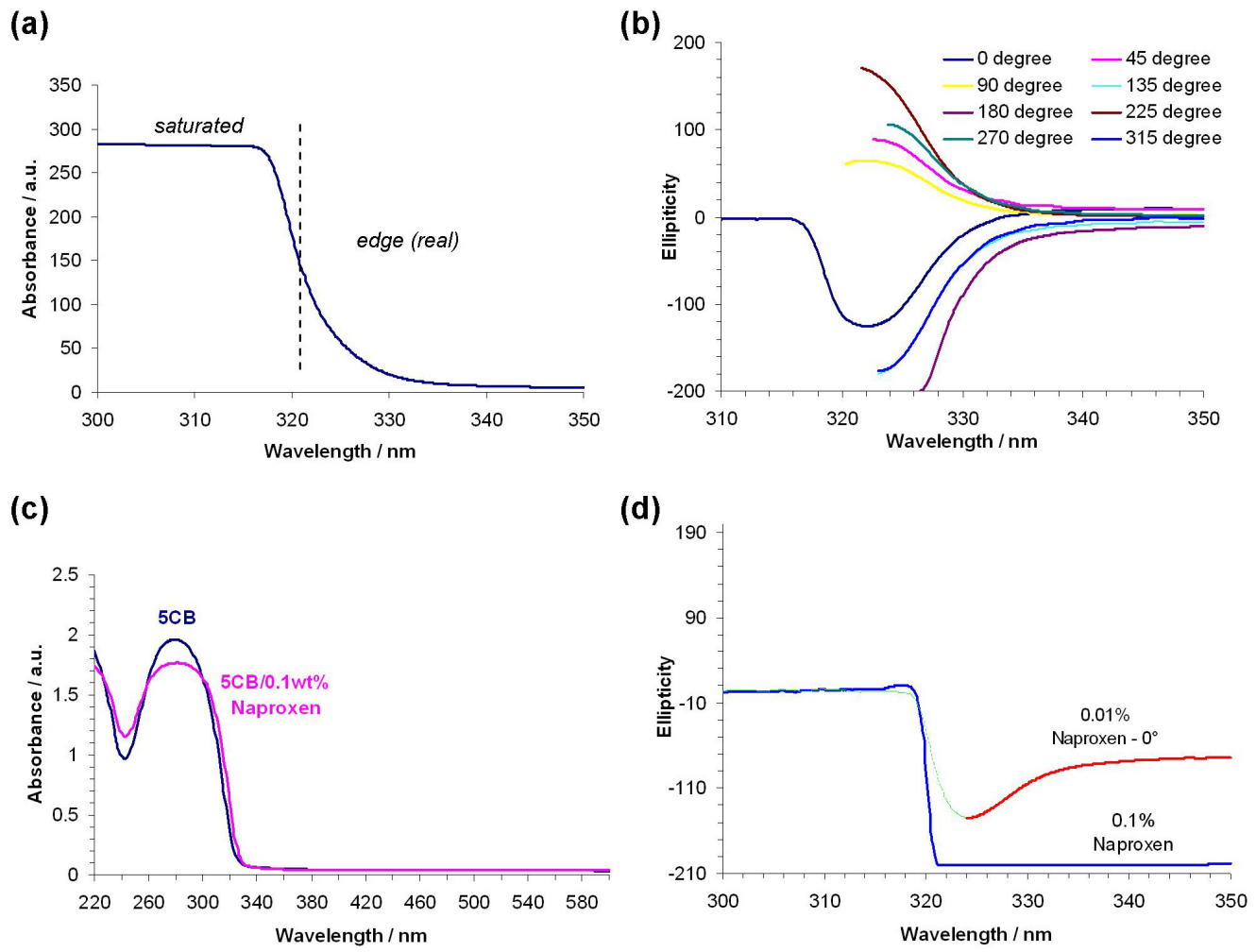

Fig. S2 (a) UV-vis absorption spectrum of a 12 µm thin film of pure 5CB. (b) CD spectra of a 12 µm thin film of pure 5CB at different rotating angles.‡ (c) UV-vis absorption spectra of thin films of 5CB and 5CB doped with 0.1wt% (*S*)-Naproxen prepared by drop-casting on Quartz. (d) CD spectra of 12 µm thin film of 5CB doped with 0.1wt% and 0.01wt% (*S*)-Naproxen. Rotation of the LC film around its normal did not change the shape (sign, intensity) of the spectrum.

‡ Minor variations in cell thickness, due to the preparation of the sandwiched quartz cells using Mylar spacers and epoxy, can not be excluded. The resulting variations of the LC film thickness will contribute to a difference in signal intensity. While this could likely have been avoided to some degree by using a room temperature LC mixture with lower aromatic content, contributions of linear dichroism and birefringence, particularly for mixtures with lower particle content, seem to play a more critical role (although they do not affect the observed sign of the CD signal).