

MHz is used both as a source of Stokes wave and to synchronously pump Laser, a tunable 400 nm optical parametric oscillator (OPO) HighQ Laser with a output of 10 ps pulses. The synchronously pumped OPO coherent device provides temporal synchronization with Laser and serves as a source of the pump wave. Picosecond outputs of Laser and Laser were coincided in time and in space and then directed to an inverted microscope. A computer controlled XY galvano scanner GSI Lumonics provided fast scan of the sample in the lateral focal plane of a water immersion objective O \times , numerical aperture $NA = 1.2$. The objective O was mounted on a computer controlled piezostage Piezosystem Jena for scanning along the microscope's optical axis. Distribution of Laser power

dye. The strongest signal corresponds to the parts of the sample with $\hat{n} \cdot \mathbf{r}$ parallel to the linear polarization directions of probing light, as shown in Fig. d. TPF and CARSPM images in different modes are consistent with our FCPM studies of FCDs. This allows one to map out the pattern of molecular orientation in D, as demonstrated in Fig. F. CARS images of a single Fig. b and multiple Fig. d. FCDs are constructed from in-plane cross sections obtained at different depths of the sample. In FCDs, the equidistant layers fold around the confocal defect lines, the ellipse and the hyperbola. Fig. a. Multiple FCDs of different eccentricities are embedded into the SmA slab with planar stacks of layers. Fig. d. Experimental images. Figs.