This read me file describes the research data for

Electrogyration in metamaterials:

Chirality and polarization rotatory power that depend on applied electric field

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This research dataset should be interpreted and understood in the context of the corresponding manuscript, which has been published in Advanced Optical Materials with DOI: 10.1002/adom.202001826. All relevant information regarding the dataset, how it was obtained and its context is contained in the manuscript. The data corresponds to the data shown in the figures of the manuscript:

Figure 3. Control of polarization azimuth and ellipticity by electric field. Spectral dispersion of (a) azimuth rotation $\Delta\varphi$ and (b) ellipticity angle change $\Delta\zeta$ for normally incident *x*-polarized light at a selection of different applied static bias levels from 0 to 18 V.

Figure 4. Giant electrogyration. Dependences on applied bias of the metamaterial's (a, c) circular birefringence in terms of average polarization azimuth rotation $\Delta\varphi$ and (b, d) circular dichroism in terms of average ellipticity angle for transmission of normally incident linearly polarized light at wavelengths of (a, b) 1520 nm and (c, d) 1600 nm. Fits are quadratic from 0 V to 16 V.

Figure S1. Repeated measurement of control of polarization azimuth by electric field. Spectral dispersion of azimuth rotation $\Delta\varphi$ for normally incident *x*-polarized light at a selection of different applied static bias levels from 0 to 18 V.

Figure S2. Simulated polarization azimuth due to relative nanowire displacement. Spectral dispersion of azimuth rotation $\Delta\varphi$ for normally incident *x*-polarized light at different relative nanowire displacements from -50 to +400 nm in 50 nm steps.

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