This read me file describes the research data for

Switchable Chiral Mirrors

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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.202000247. 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. Switching circular conversion dichroism by switching VO_2 between its (a, c, e, g) room-temperature insulator phase and its (b, d, f, h) high-temperature conductive phase, corresponding to conductivities σ_{VO_2} of 10 S/m and 2.6×10^5 S/m, respectively. Frequency-dependence of (a, b) transmittance, (c, d) transmission asymmetry $\Delta T_+ = |T_{-+}|^2 - |T_{+-}|^2 = -\Delta T_-$, (e, f) reflectance and (g, h) reflection asymmetry $\Delta R_+ = |R_{++}|^2 - |R_{--}|^2 = -\Delta R_-$ in terms of intensity of right-handed (+) and left-handed (-) circularly polarized waves illuminating the split rings from the sapphire side.

Figure 6. Switching between LCP mirror and conventional mirror based on the transition between the (a, c) insulator and (b, d) metal phases of VO_2. Reflectance spectra in terms of circular polarization components simulated for VO_2 conductivities of (a) 10 S/m and (b) 2.6×10^5 S/m and corresponding measurements at temperatures of (c) 23 ℃ and (d) 108 ℃.

Figure 9. Switching between LCP mirror and handedness-preserving mirror based on switching VO_2 between its (a, c) low-temperature insulator and its (b, d) high-temperature metallic phases. Reflectance spectra in terms of circular polarization components simulated for VO_2 conductivities of (a) 10 S/m and (b) 2.6×10^5 S/m and corresponding measurements at temperatures of (c) 23 ℃ and (d) 91 ℃.

Figure 12. Switching between LCP mirror and RCP mirror based on the temperature-controlled transition of VO_2 between (a, c) insulator and (b, d) metallic phases. Reflectance spectra simulated for VO_2 conductivities of (a) 10 S/m and (b) 2.6×10^5 S/m and corresponding measurements at temperatures of (c) 23 ℃ and (d) 108 ℃.

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