

Dataset for Mechanochromic Reconfigurable Metasurfaces

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Research data - Dataset for Mechanochromic Reconfigurable Metasurfaces.xlsx

- Fig 1. Raman spectra of metamaterial sample; Ellipsometric data of a few layer MoS₂ film and strain calculated data induced of a single nanowire upon cooling, deformation of the nanowire.
- Fig 2. Experimental Reflection, transmission and absorption spectra of mechanochromic metamaterial and numerically simulated reflection, transmission and absorption spectra of the metamaterial. Numerically simulated distribution of the electromagnetic field in the metamaterial nanowires can be reproduced after following description in manuscript.
- Fig. 3 Spectral dispersion of transmission in the regime of slow cooling of the metamaterial for different levels of strain up to maximum strain of 2% and Relative transmission change for different strain levels. Calculated transmission of no displacement, black and 50nm displacement, green. Transmission of the sample at 654nm- for the full strain cycle.
- Fig. 4 Transmission spectra for different strain levels in the regime of rapid cooling. Experimental data of the metamaterial transmission at 680nm during a full strain cycle. Span of the hysteresis loop as a function of wavelength at strain level of 1.8%.