

Research data for

Optical addressing of nanomechanical metamaterials with subwavelength resolution

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The corresponding manuscript contains all information required to reproduce the simulated and experimental results that it contains. Here, the simulated and experimental results are given by **ResearchData.xlsx**.

Sheets Fig2a, b, c: Optical properties of the reconfigurable metamaterial. (a) Simulated and (b) measured reflection (R), transmission (T) and absorption (A) spectra of the nanostructure in percent as a function of wavelength in nanometers. (c) In-plane optical forces per unit cell in units of P/c according to Maxwell stress tensor calculations, where P is the incident power and c is the speed of light in vacuum.

Sheets Fig3b, c: Selective actuation of metamaterial strings with light. (b) and (c) Detected transmission modulation $\Delta T/T$ at the probe wavelength (1310 nm) as a function of the pump (1550 nm wavelength) modulation frequency.

Column "Frequency, Hz": Pump modulation frequency in Hertz.

Column "Amplitude, V": Measured modulation of the probe light in terms of the voltage detected with a lock-in amplifier in Volts.

Column "normalised dT/T , %": Corresponding relative transmission modulation of the metamaterial in percent.