Supporting Information for "Highly strained compliant optical metamaterials with large frequency tunability"

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SUPPORTING INFORMATION:

Coupled systems composed of asymmetric resonator elements have symmetric and antisymmetric resonances. In the manuscript, only the antisymmetric resonances are reported for the SRR-bar and ACSRR cases, as the amount of tuning is larger and more strongly dependent on the coupling distance than for the symmetric resonance. In Figure S1, the wavelength range is extended in order to show how both the symmetric and the antisymmetric mode are affected by the sample strain. In the case of the SRR-bar, the symmetric mode, which is largely due to the nanowire resonance, is almost completely unaffected by changing the coupling distance with the other resonator. This was discussed in greater detail in previous work¹.



Figure S1. The reflectance data for the SRR-bar coupled resonator array. These are the same data as in Figure 2b (Experiment); however, here, the reported wavelength range is extended to shorter wavelengths in order to show both the symmetric and antisymmetric resonant modes.

(1) Aydin, K.; Pryce, I. M.; Atwater, H. A. Opt Express 2010, 18, 13407-13417.