

PHLUXi TMO

THz optics based on Metamaterial

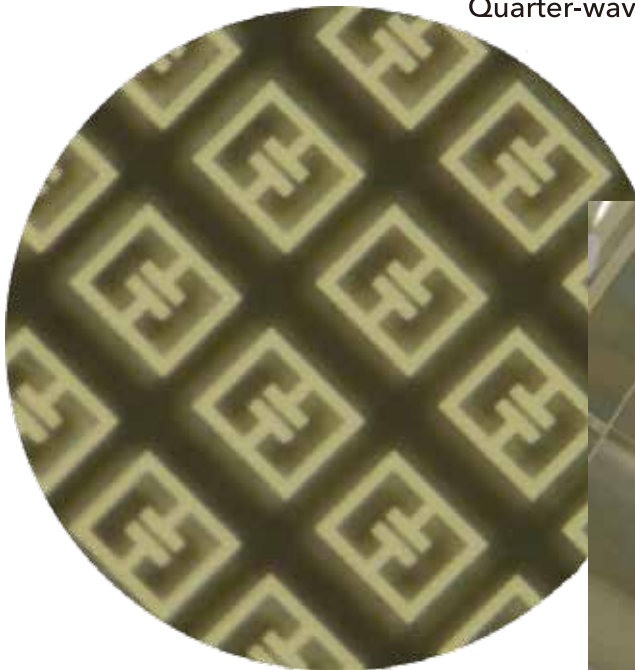
PRELIMINARY

Micro structured array on polymer film.

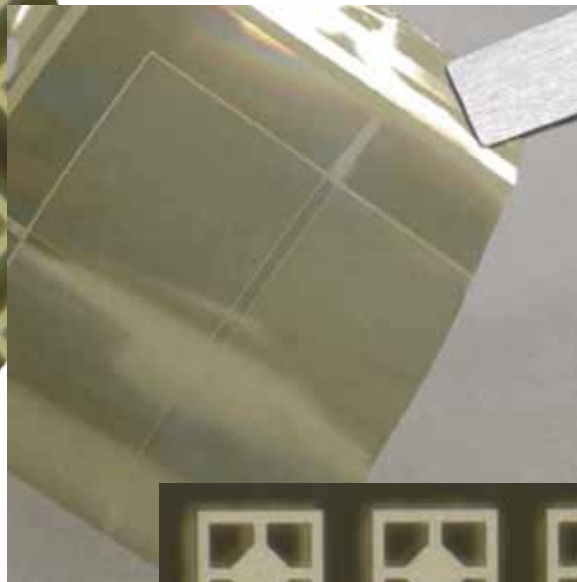
Engineered optical properties due to the specific cell design and its layout.

Large size component available by lithographic technique.

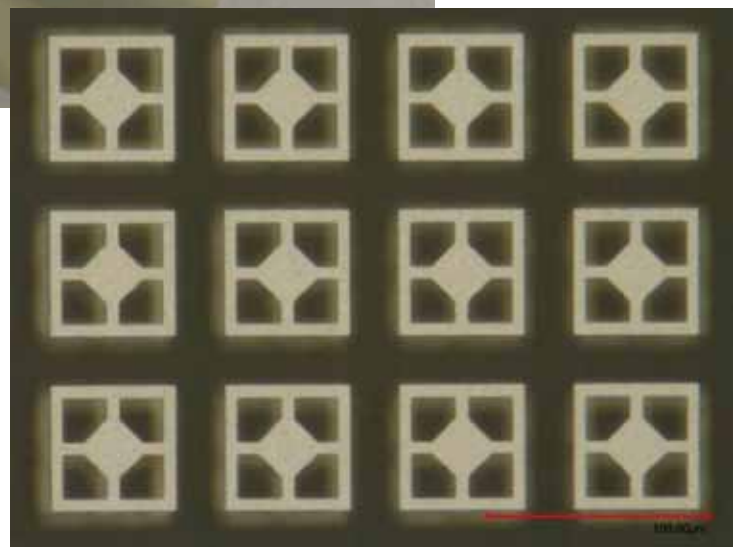
Quarter-wave plate



Micro structured pattern on film



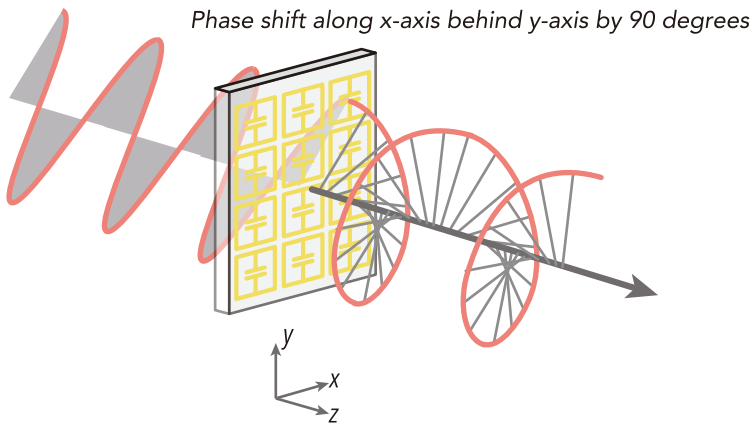
$1/2\pi$ phase shifter



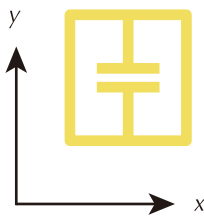
Double-layered Split ring resonator (SRR) enables to produce a number of optical elements; Phase shifter, Waveplate, Modulator, Absorber, Reflectivity control, Lens, and Grating.

Quarter-wave plate

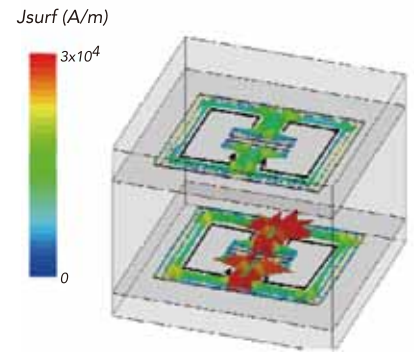
Operation



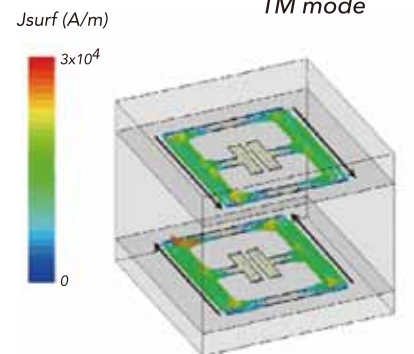
Unit cell design



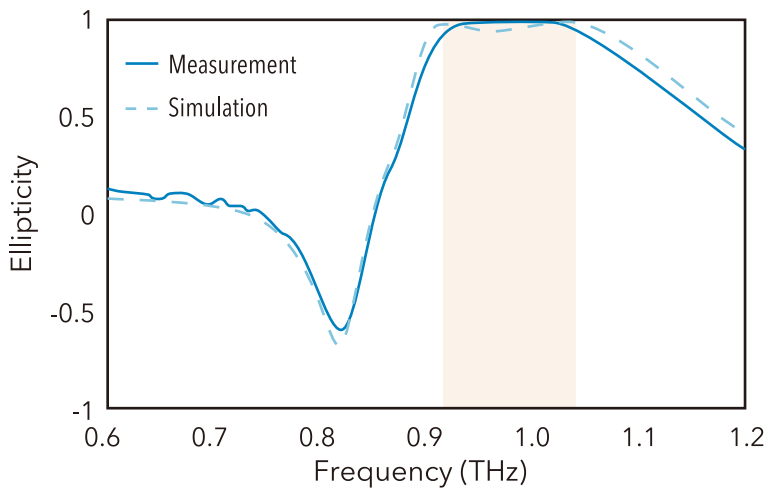
TE mode



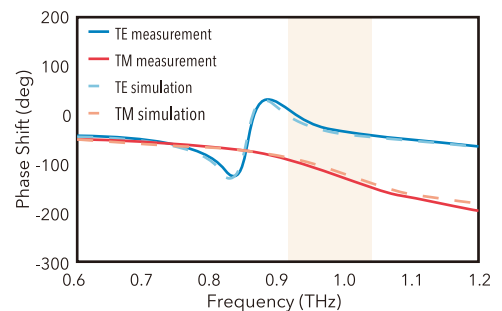
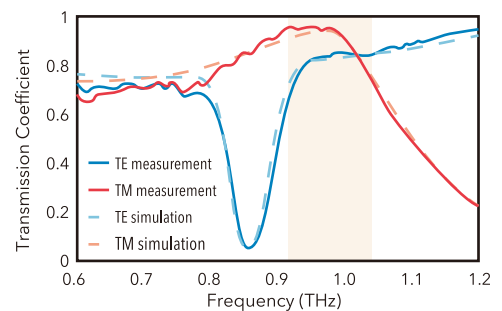
TM mode



Performance



Ellipticity >0.98 and transmittance >0.80
at target frequency 0.98 THz.



Items will be released in 2020.

Detailed information available. Ask us!