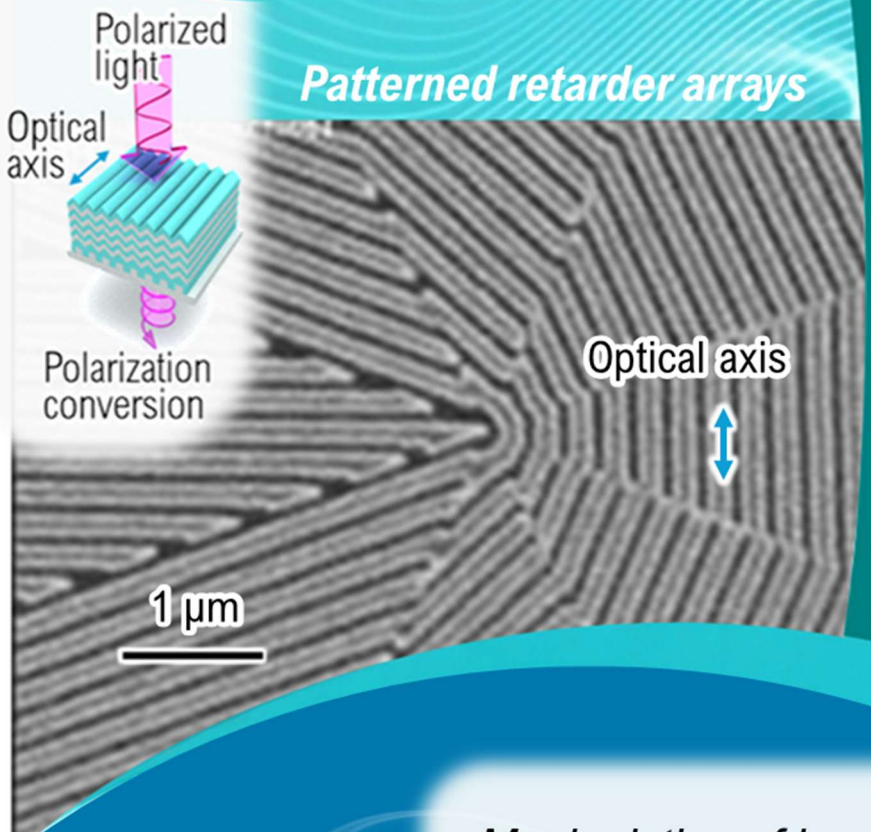
https://www.photonic-lattice.com/

Photonic Lattice

The Next Evolution in Beam Shaping

Redefining Laser Processing with Advanced Polarization Control



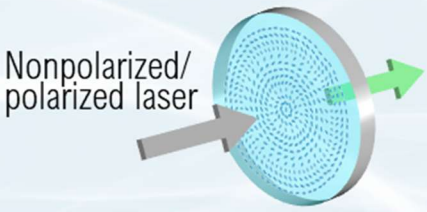
Core Technology

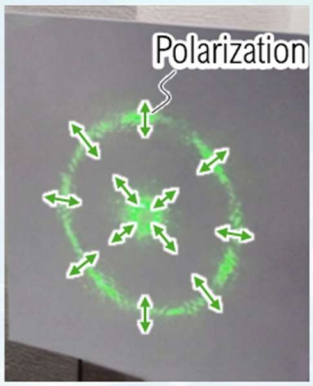
- Micron-scale retarder arrays composed of inorganic multilayers
- Ultra-precise control of retardation and optical axis orientation for arbitrary spatial polarization manipulation
- Advanced beam shaping utilizing "Pancharatnam-Berry phase"

Features

- Wavelength, λ: 250 nm -12 μm
- Laser induced damage threshold: > 22 MW/cm^2 at λ =1030nm (CW)
- Transmission efficiency: > 95 %
- In-house integrated production from design to manufacturing

Manipulation of beam shape and polarization





Applications

Metal processing (welding, cutting, drilling, etc), Patterning, Marking, Annealing, Medical research, and Laser surgery