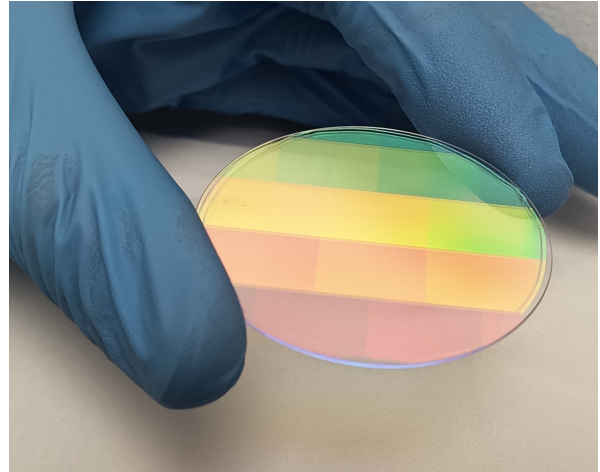
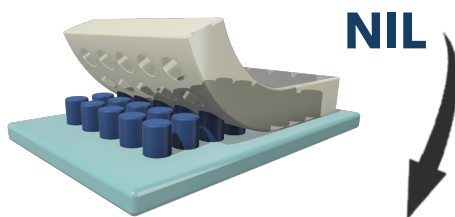
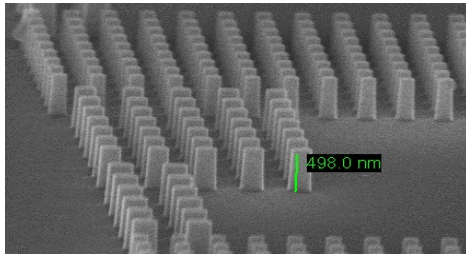


STRUCTURAL COLOURS PRODUCED WITH NANO IMPRINTED TiO₂ RGB PIXELS

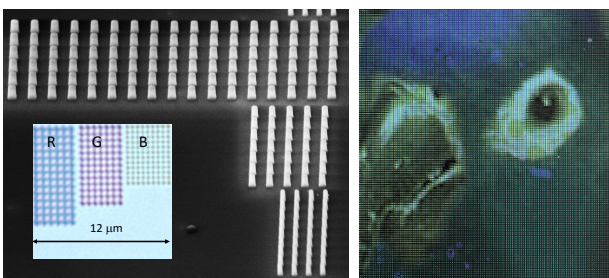
Meta-surfaces for structural colours rely on subwavelength nanostructures to manipulate light at the nanoscale, creating vivid and angle-dependent colors without the need for pigments or dyes relying on absorption. These engineered surfaces use resonances, diffraction, and interference effects to selectively control scattering, transmission, and reflection of light. Structural colours possess many advantages, such as purity, high efficiency, and long-term stability, with respect to the absorbing counterpart.



MASTER



TiO₂ replica (RI = 2.3)



They can find applications in many fields such as

- Architecturally integrated PV
- Display (e.g. screens, AR/VR)
- Colour printing
- Colour filters
- Anti-counterfeiting
- Intelligent sensors

