

ADVANCED OPTICAL MATERIALS

REFRACTION

A novel graphene metasurface composed of periodically patterned graphene nanocrosses allows the dynamic tuning of anomalous refraction for circularly polarized waves in the infrared regime. On page 1744, S. Chen, J. Tian, and co-workers demonstrate the broadband properties of such anomalous refraction by investigating different frequencies and incidence angles. The anomalous conversion efficiency can be dynamically tuned and remain as high in a broadband frequency range by varying the Fermi energy without reoptimizing the nanostructures. This work offers a further step in the development of the tunable wavefront-controlling devices.