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Title

Wavelength-Independent Optical Polarizer Based on Metallic Nanowire Arrays

Source

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Abstract

We propose a design of high-performance wavelength-independent optical polarizer for ultraviolet/visible to terahertz (THz) spectral region based on metallic nanowire (NW) arrays on ultrathin substrates, which can reduce the influence of the substrate material. This NW-based polarizer is anticipated to have far-reaching impact on numerous existing devices including polarimetric imagers in the mid-infrared and THz domains, complementary metal-oxide semiconductor (CMOS) imagers, and DVD/CD players.