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Title:Wire-grid polarizer sheet in the terahertz region fabricated by nanoimprint technology

Authors:Takano, Keisuke (1); Yokoyama, Hiroshi (2); Ichii, Akira (2); Morimoto, Isao (3); Hangyo, Masanori (1)

Author affiliation:(1) Institute of Laser Engineering, Osaka University, Osaka 565-0871, Japan; (2) Asahi Kasei E-Materials Corp., Shizuoka 416-8501, Japan; (3) Asahi Kasei Corp., Shizuoka 416-8501, Japan

Corresponding author:Takano, K.(ktakano@ile.osakau.ac.jp)

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Abstract:Wire-grid polarizer sheets in the terahertz region have been fabricated on flexible substrates by nanoimprint technology. They show an ideal polarization property in the terahertz frequency region, whereas the cost is very low. Since the wire pitch is far smaller than the wavelength, the effective medium theory agrees well with experimental results. The effective medium theory shows the possibility of further improvement of polarization properties by selecting appropriate materials for wire grids.

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