

# Abstracts

## A novel millimeter-wave beam-steering technique using a dielectric-image-line-fed grating film

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*C.T. Rodenbeck, Ming-Yi Li and Kai Chang. "A novel millimeter-wave beam-steering technique using a dielectric-image-line-fed grating film." 2001 MTT-S International Microwave Symposium Digest 01.1 (2001 Vol. 1 [MWSYM]): 267-270 vol.1.*

This paper introduces a novel, broadband, low-cost technique for beam steering at millimeter-wave frequencies using a moveable grating film fed by a dielectric image line. An excellent radiation pattern is maintained across the measured scanning ranges at 30, 35, and 40 GHz, with up to 53/spl deg/ scanning reported at 35 GHz. Theoretical calculations closely predict the observed scan angle across the entire range of measurement.

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