

# Abstracts

## A retrodirective diode grid array using four-wave mixing

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Wenyan Ding, Su-Tak Chad Lei and M.P. DeLisio. "A retrodirective diode grid array using four-wave mixing." 2001 MTT-S International Microwave Symposium Digest 01.3 (2001 Vol. III [MWSYM]): 1851-1854 vol.3.

We report retrodirection using quasi-optical diode grid arrays operating at 4 GHz. Phase conjugation is achieved through a process analogous to four-wave mixing. Antiparallel diode pairs provide the third-order nonlinearity. We report retrodirection of beams with incidence angles of up to 60/spl deg/ in both the E-plane and the H-plane. Measured antenna patterns are consistent with theoretical predictions.

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