

# Abstracts

## CW Microwave Generation by Optical Downconversion in a Nonlinear Al<sub>x</sub>Ga<sub>1-x</sub>As Waveguide

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*E. Frlan, S. Janz, F. Chatenoud, R. Normandin, M.G. Stubbs and J.S. Wight. "CW Microwave Generation by Optical Downconversion in a Nonlinear Al<sub>x</sub>Ga<sub>1-x</sub>As Waveguide." 1994 MTT-S International Microwave Symposium Digest 94.2 (1994 Vol. II [MWSYM]): 1109-1112.*

Techniques for optical generation of microwave signals have recently received much attention. The generation of narrowband microwave signals from the mixing of two optical sources has been demonstrated using fast photodetectors. This paper describes the first generation of a tuneable, CW, narrowband microwave radiation by mixing two optical sources in a GaAs/Al<sub>x</sub>Ga<sub>1-x</sub>As waveguide, utilizing the inherent non-linear properties of the material.

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