

# Abstracts

## Substrate Optimization for Integrated Circuit Antennas (July 1983 [T-MTT])

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*N.G. Alexopoulos, P.B. Katehi and D.B. Rutledge. "Substrate Optimization for Integrated Circuit Antennas (July 1983 [T-MTT])." 1983 Transactions on Microwave Theory and Techniques 31.7 (Jul. 1983 [T-MTT]): 550-557.*

The reciprocity theorem and integral equation techniques are employed to determine the properties of integrated-circuit antennas. The effect of surface waves is considered for dipole and slot elements on substrates. The radiation and bandwidth of microstrip dipoles are optimized in terms of substrate thickness and permittivity.

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