Abstracts

Substrate Optimization for Integrated Circuit Antennas (1982 [MWSYM])

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Imaging systems in microwaves, millimeter and submillimeter wave applications employ printed circuit antenna elements. The effect of substrate properties is analyzed in this paper by both reciprocity theorem as well as integral equation approach for infinitesimally short as well as finite length dipole and slot elements. Radiation efficiency and substrate surface wave guidance is studied for practical substrate materials as GaAs, Silicon, Quartz and Duroid.

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