

# Abstracts

## Effect of Skin in Microwave Detection of Breast Cancer

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*E. Alanen and I.V. Lindell. "Effect of Skin in Microwave Detection of Breast Cancer." 1986 Transactions on Microwave Theory and Techniques 34.5 (May 1986 [T-MTT] (Special Issue on Phased Arrays for Hyperthermia Treatment of Cancer)): 584-588.*

A calculation method is introduced and subsequent numerical results are shown for the effect of skin in radiometric detection of breast cancer using a horn antenna in direct contact with the skin. The electromagnetic problem in layered medium is solved applying the exact image theory, which enables the field calculation also in the near-field range. A proposal to optimize the aperture function for better resolution is given.

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