



IEEE TRANSACTIONS ON

MICROWAVE THEORY AND TECHNIQUES

A PUBLICATION OF THE IEEE MICROWAVE THEORY AND TECHNIQUES SOCIETY



APRIL 1998

VOLUME 46

NUMBER 4

IETMAB

(ISSN 0018-9480)

PAPERS

Unexpected Physical Phenomena Indicated by FDTD Modeling of the Sigma-60 Deep Hyperthermia Applicator	313
..... C. E. Reuter, A. Taflove, V. Sathiseelan, M. Piket-May, and B. B. Mittal	
Optical Microwave Generation and Transmission Experiments in the 12- and 60-GHz Region for Wireless Communications	
R.-P. Braun, G. Grosskopf, H. Heidrich, C. von Helmolt, R. Kaiser, K. Krüger, U. Krüger, D. Rohde, F. Schmidt, R. Stenzel,	
and D. Trommer	320
Optimum Design of Multihole Directional Couplers With Arbitrary Aperture Spacing	331
..... H. Oraizi	
A Unified Approach to the Design, Measurement, and Tuning of Coupled-Resonator Filters	343
..... J. B. Ness	
Systematic Evaluation and Analysis for 60-GHz Dielectric Resonators Coupled to a Microstrip Line on a GaAs Substrate	
..... K. Hosoya, T. Inoue, M. Funabashi, and K. Ohata	352
Implicit 3-D Dyadic Green's Function Using Self-Adjoint Operators for Inhomogeneous Planar Ferrite Circulator With Vertically	
Layered External Material Employing Mode-Matching	359
..... C. M. Krowne	
Upper Cutoff Frequency of the Bound Wave and New Leaky Wave on the Slotline	378
..... J. Zehentner, J. Macháč, and M. Migliozi	
The Use of FDTD for the Analysis of Magnetoplasma Channel Waveguides	387
..... R. G. Farias and A. J. Giarola	
Thin-Stratified Medium Fast-Multipole Algorithm for Solving Microstrip Structures	
..... J.-S. Zhao, W. C. Chew, C.-C. Lu, E. Michielssen, and J. Song	395
Time-Domain Vector-Potential Analysis of Transmission-Line Problems	404
..... N. Georgieva and E. Yamashita	
A Contour-Based Approach to the Multimode Network Representation of Waveguide Transitions	
..... W. L. Schroeder and M. Guglielmi	411
Time-Domain Analysis of Periodic Structures at Oblique Incidence: Orthogonal and Nonorthogonal FDTD Implementations	
..... J. A. Roden, S. D. Gedney, M. P. Kesler, J. G. Maloney, and P. H. Harms	420

SHORT PAPERS

Electrostatic Potential Due to a Potential Drop Across a Slit	428
..... Y. C. Noh and H. J. Eom	
A Numerically Efficient Technique for the Analysis of Slots in Multilayer Media	430
..... N. Kınayman, G. Dural, and M. I. Aksun	

CALLS FOR PAPERS

Special Issue on Applications of Artificial Neural Networks to RF and Microwave Design	433
--	-----
