

IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES

A PUBLICATION OF THE IEEE MICROWAVE THEORY AND TECHNIQUES SOCIETY



JULY 2002

VOLUME 50

NUMBER 7

IETMAB

(ISSN 0018-9480)

PAPERS

Stopband Performance Improvement of Rectangular Waveguide Filters Using Stepped-Impedance Resonators	1657
..... <i>M. Morelli, I. Hunter, R. Parry, and V. Postoyalko</i>	
Conductivity Measurements at the Interface Between the Sintered Conductor and Dielectric Substrate at Microwave Frequencies	1665
..... <i>A. Nakayama, Y. Terashi, H. Uchimura, and A. Fukuura</i>	
Noise Model of InP-InGaAs SHBTs for RF Circuit Design	1675
..... <i>A. Huber, D. Huber, C. Bergamaschi, T. Morf, and H. Jäckel</i>	
Novel Configurations of Planar Multilayer Magic-T Using Microstrip-Slotline Transitions	1683
..... <i>J. P. Kim and W. S. Park</i>	
FDTD Modeling of Wave Propagation in Dispersive Media by Using the Mobius Transformation Technique	1689
..... <i>J. A. Pereda, A. Vegas, and A. Prieto</i>	
Convergence Behavior and Acceleration of the Berenger and Leaky Modes Series Composing the 2-D Green's Function for the Microstrip Substrate.	1696
..... <i>H. Rogier and D. De Zutter</i>	
Methods for Measurement and Simulation of Weak Substrate Coupling in High-Speed Bipolar ICs	1705
..... <i>W. Steiner, M. Pfost, H.-M. Rein, A. Stürmer, and A. Schüppen</i>	
Analysis of Nonlinear Behavior of Power HBTs.	1714
..... <i>W. Kim, S. Kang, K. Lee, M. Chung, J. Kang, and B. Kim</i>	
Effects of Particle Shape on the Effective Permittivity of Composite Materials With Measurements for Lattices of Cubes	1723
..... <i>K. W. Whites and F. Wu</i>	
Dispersion Analysis of Multilayer Cylindrical Transmission Lines Containing Magnetized Ferrite Substrates.	1730
..... <i>N. Dib and A. Omar</i>	
Multifrequency Radiometric Determination of Temperature Profiles in a Lossy Homogeneous Phantom Using a Dual-Mode Antenna With Integral Water Bolus	1737
..... <i>S. Jacobsen and P. R. Stauffer</i>	
Unified Model for Collector Charge in Heterojunction Bipolar Transistors.	1747
..... <i>M. Rudolph, R. Doerner, K. Beilenhoff, and P. Heymann</i>	
Scattering Analysis by the Multiresolution Time-Domain Method Using Compactly Supported Wavelet Systems	1752
..... <i>T. Dogaru and L. Carin</i>	
Imaging of Biomedical Data Using a Multiplicative Regularized Contrast Source Inversion Method	1761
..... <i>A. Abubakar, P. M. van den Berg, and J. J. Mallorqui</i>	

(Contents Continued on Back Cover)



Retrodirective Array Augmentation for Electronic RCS Modification.	V. F. Fusco and B. Y. Toh	1772
Accurate Synthesis of Inline Prototype Filters Using Cascaded Triplet and Quadruplet Sections	G. Macchiarella	1779
A High-Efficiency Dual-Frequency Rectenna for 2.45- and 5.8-GHz Wireless Power Transmission	Y.-H. Suh and K. Chang	1784
Broad-Banding Technique for In-Phase Hybrid Ring Equal Power Divider.	B.-L. Ooi, W. Palei, and M. S. Leong	1790
Slow-Wave Bandpass Filters Using Ring or Stepped-Impedance Hairpin Resonators	L.-H. Hsieh and K. Chang	1795
Theoretical and Experimental Study of Amplifier Linearization Based on Harmonic and Baseband Signal Injection Technique	C.-W. Fan and K.-K. M. Cheng	1801
Eye Pattern Evaluation in High-Speed Digital Systems Analysis by Using MTL Modeling	G. Antonini, J. L. Drewniak, A. Orlandi, and V. Ricchiuti	1807
On-Board Accurate Calibration of Dual-Channel Radiometers Using Internal and External References	I. Corbella, A. J. Gasiewski, M. Klein, V. Leuski, A. J. Francavilla, and J. R. Piepmeier	1816
Novel TE _{10δ} Rectangular-Waveguide-Type Resonators and Their Bandpass Filter Applications	H. Y. Hwang and S.-W. Yun	1821
Analysis of the AO-FDPC Optical Heterodyne Technique for Microwave Time Delay and Phased Array Beamsteering Applications	W. D. Jemison	1832
A Compact 2-D Full-Wave Finite-Difference Frequency-Domain Method for General Guided Wave Structures	Y.-J. Zhao, K.-L. Wu, and K.-K. M. Cheng	1844
A New Method for the Design of a Quasi-Optical Mode Converter With a Special Reflector	S. Yang, S. H. Tan, and H. Li	1849

SHORT PAPERS

On the Evaluation of Modal Coupling Coefficients by Contour Integrals	M. Bozzi, G. Conciauro, and L. Perregrini	1853
---	---	------

LETTERS

Comments on “Nonthermal Effects of Extremely High-Frequency Microwaves on Chromatin Conformation in Cells <i>in vitro</i> —Dependence on Physical, Physiological, and Genetic Factors”.	J. M. Osepchuk and R. C. Petersen	1856
Authors’ Reply	I. Y. Belyaev, E. D. Alipov, and V. L. Ushakov	1856

Information for Authors		1859
-----------------------------------	--	------

CALLS FOR PAPERS

IEEE International Symposium on Phased Array Systems and Technology		1860
---	--	------
