

IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES

A PUBLICATION OF THE IEEE MICROWAVE THEORY AND TECHNIQUES SOCIETY



SEPTEMBER 2002

VOLUME 50

NUMBER 9

IETMAB

(ISSN 0018-9480)

PAPERS

- A Design of the Novel Coupled-Line Bandpass Filter Using Defected Ground Structure With Wide Stopband Performance *J.-S. Park, J.-S. Yun, and D. Ahn* 2037
- Hybrid Circuit-Full-Wave Computer-Aided Design of a Manifold Multiplexers Without Tuning Elements *L. Accatino and M. Mongiardo* 2044
- Evolutionary Generation of Microwave Line-Segment Circuits by Genetic Algorithms *T. Nishino and T. Itoh* 2048
- RF and IF Ports Matching Circuit Synthesis for a Simultaneous Conjugate-Matched Mixer Using Quasi-Linear Analysis *Y. H. Liew and J. Joe* 2056
- A Vertically Integrated Micromachined Filter. *L. Harle and L. P. B. Katehi* 2063
- Low-Loss Compact Butler Matrix for a Microstrip Antenna *M. Bona, L. Manholm, J. P. Starski, and B. Svensson* 2069
- Probe-Tone *S*-Parameter Measurements *J. Martens and P. Kapetanac* 2076
- Measurement of a Filter Using a Power Detector *N. Vasudev and O. M. Collins* 2083
- A Comprehensive Explanation of Distortion Sideband Asymmetries *N. Borges de Carvalho and J. C. Pedro* 2090
- An Optimized Parallel Admittance Matrix Approach Using the Adjacency-Graph Recursive-Thresholding Technique *A. Esposito, F. Malucelli, and L. Tarricone* 2102
- A Fast Reduced-Order Model for the Full-Wave FEM Analysis of Lossy Inhomogeneous Anisotropic Waveguides. *F. Bertazzi, O. A. Peverini, M. Goano, G. Ghione, R. Orta, and R. Tascone* 2108
- Precise Measurements of the *Q* Factor of Dielectric Resonators in the Transmission Mode—Accounting for Noise, Crosstalk, Delay of Uncalibrated Lines, Coupling Loss, and Coupling Reactance *K. Leong and J. Mazierska* 2115
- Automatic Measurement of Complex Tensorial Permeability of Magnetized Materials in a Wide Microwave Frequency Range *P. Quéffelec, S. Mallégo, and M. Le Floc'h* 2128
- Calibration of Millimeter-Wave Polarimeters Using a Thin Dielectric Sheet . . . *C. W. O'Dell, D. S. Swetz, and P. T. Timbie* 2135
- Efficient Evaluation of Reaction Integrals in the EFIE Analysis of Planar Layered Structures With Uniaxial Anisotropy *F. Mesa, G. Plaza, and F. Medina* 2142
- A New Class of Multisection 180° Hybrids Based on Cascadable Hybrid-Ring Couplers *K. S. Ang, Y. C. Leong, and C. H. Lee* 2147
- Design of an Interdigital Hairpin Bandpass Filter Utilizing a Model of Coupled Slots. *A. N. Deleniv, M. S. Gashinova, I. B. Vendik, and A. Eriksson* 2153
- Some Aspects of Stability and Numerical Dissipation of the Finite-Difference Time-Domain (FDTD) Technique Including Passive and Active Lumped Elements *W. Thiel and L. P. B. Katehi* 2159

(Contents Continued on Back Cover)



Wide-Scan Spherical-Lens Antennas for Automotive Radars.	
..... <i>B. Schoenlinner, X. Wu, J. P. Ebling, G. V. Eleftheriades, and G. M. Rebeiz</i>	2166
Theory and Design of an Ultra-Linear Square-Law Approximated LDMOS Power Amplifier in Class-AB Operation.	
..... <i>M. P. van der Heijden, H. C. de Graaff, L. C. N. de Vreede, J. R. Gajadharsing, and J. N. Burghartz</i>	2176
On the Fast Approximation of Green's Functions in MPIE Formulations for Planar Layered Media.	
..... <i>N. V. Shuley, R. R. Boix, F. Medina, and M. Horno</i>	2185

SHORT PAPERS

A 23.8-GHz SOI CMOS Tuned Amplifier	<i>B. A. Floyd, L. Shi, Y. Taur, I. Lagnado, and K. K. O</i>	2193
Effect of Conductive Perturber Diameter on Nonresonant Measurement of Interaction Impedance for Helical Slow-Wave Structures	<i>S.-S. Jung, A. V. Soukhov, and G.-S. Park</i>	2196
A 7.5-GHz Super Regenerative Detector	<i>N. B. Buchanan, V. F. Fusco, and J. A. C. Stewart</i>	2198
An Improved Prediction of Series Resistance in Spiral Inductor Modeling With Eddy-Current Effect.		
..... <i>B.-L. Ooi, D.-X. Xu, P.-S. Kooi, and F.-J. Lin</i>		2202
Multilayer and Anisotropic Planar Compact PBG Structures for Microstrip Applications	<i>C. Caloz and T. Itoh</i>	2206

LETTERS

Corrections to "Microwave Power Applications"	<i>J. M. Osepchuk</i>	2209
---	-----------------------	------

Information for Authors		2210
-----------------------------------	--	------

CALLS FOR PAPERS

ARFTG 60th Microwave Measurement Conference		2211
Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems		2212
Special Issue on Electromagnetics-Based Optimization of Microwave Components and Circuits		2213
