

774
1-68/4m-1

IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES

A PUBLICATION OF THE IEEE MICROWAVE THEORY AND TECHNIQUES SOCIETY



MAY 2014

VOLUME 62

NUMBER 5

IETMAB

(ISSN 0018-9480)

Editorial	<i>D. Schreurs and J. Lin</i>	1101
-----------------	-------------------------------	------

PAPERS

EM Theory and Analysis Techniques

Transformation Electromagnetics Devices Based on Printed-Circuit Tensor Impedance Surfaces	<i>A. M. Patel and A. Grbic</i>	1102
The Unified-FFT Algorithm for Fast Electromagnetic Analysis of Planar Integrated Circuits Printed on Layered Media Inside a Rectangular Enclosure	<i>B. J. Rautio, V. I. Okhmatovski, A. C. Cangellaris, J. C. Rautio, and J. K. Lee</i>	1112
Wideband FDTD-Based Adjoint Sensitivity Analysis of Dispersive Electromagnetic Structures	<i>Y. Zhang, O. S. Ahmed, and M. H. Bakr</i>	1122
Parallel Space-Mapping Approach to EM Optimization	<i>F. Feng, C. Zhang, V.-M.-R. Gongal-Reddy, Q.-J. Zhang, and J. Ma</i>	1135

Devices and Modeling

Rotary Traveling-Wave Oscillator With Differential Nonlinear Transmission Lines	<i>M. Pontón, A. Suárez, and J. S. Kenney</i>	1149
---	---	------

Passive Circuits

Novel Multi-Stub Loaded Resonators and Their Applications to Various Bandpass Filters	<i>L. Gao, X. Y. Zhang, B.-J. Hu, and Q. Xue</i>	1162
Novel Bandpass Filters by Using Cavity-Loaded Dielectric Resonators in a Substrate Integrated Waveguide	<i>D.-D. Zhang, L. Zhou, L.-S. Wu, L.-F. Qiu, W.-Y. Yin, and J.-F. Mao</i>	1173
Optimal Design of Broadband Microwave Baluns Using Single-Layer Planar Circuit Technology	<i>T. Canning, J. R. Powell, and S. C. Cripps</i>	1183
Wideband In-Phase and Out-of-Phase Balanced Power Dividing and Combining Networks	<i>W. Feng, H. Zhu, W. Che, and Q. Xue</i>	1192
Coupled Loops for High-Frequency Chip-to-Antenna Interconnection at 24 GHz	<i>J. C. Johnstone, B. M. Frank, and Y. M. M. Antar</i>	1203

(Contents Continued on Back Cover)



Hybrid and Monolithic RF Integrated Circuits

A Harmonic Termination Technique for Single- and Multi-Band High-Efficiency Class-F MMIC Power Amplifiers	<i>G. Nikandish, E. Babakrpur, and A. Medi</i>	1212
A 2.7-mW 1.36–1.86-GHz LC-VCO With a FOM of 202 dBc/Hz Enabled by a 26%-Size-Reduced Nano-Particle-Magnetic-Enhanced Inductor	<i>H.-L. Cai, Y. Yang, N. Qi, X. Chen, H. Tian, Z. Song, Y. Xu, C.-J. Zhou, J. Zhan, A. Wang, B. Chi, and T.-L. Ren</i>	1221
Low-Noise and High-Linearity Wideband CMOS Receiver Front-End Stacked With Glass Integrated Passive Devices ..	<i>R.-F. Ye, T.-S. Horng, and J.-M. Wu</i>	1229

Instrumentation and Measurement Techniques

Optimum-Setting and Calibration Procedures for Heterodyne Measurements of Amplitude and Phase Noise in High-Frequency Amplifiers	<i>R. Jauregui and J. Portilla</i>	1239
--	------------------------------------	------

RF Systems and Applications

Accurate Indoor Ranging by Broadband Harmonic Generation in Passive NLTTL Backscatter Tags	<i>Y. Ma and E. C. Kan</i>	1249
--	----------------------------	------

CALLS FOR PAPERS

Special Issue on Power Amplifiers		1262
---	--	------

000642

118 052014
HELFERICH SCIENTIFIC INFO GMBH
URO RAN
HOLSTEINISCHE STR 44
10717 BERLIN
GERMANY