APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY JOURNAL

February 2015
Vol. 30 No. 2
ISSN 1054-4887

The ACES Journal is abstracted in INSPEC, in Engineering Index, DTIC, Science Citation Index Expanded, the Research Alert, and to Current Contents/Engineering, Computing & Technology.

The illustrations on the front cover have been obtained from the research groups at the Department of Electrical Engineering, The University of Mississippi.
EMERITUS EDITORIAL ASSISTANTS

Khaled ElMaghoub
University of Mississippi, EE Dept.
University, MS 38677, USA

Christina Bonnington
University of Mississippi, EE Dept.
University, MS 38677, USA

Anne Graham
University of Mississippi, EE Dept.
University, MS 38677, USA

Mohamed Al Sharkawy
Arab Academy for Science and Technology, ECE Dept.
Alexandria, Egypt

FEBRUARY 2015 REVIEWERS

Rene Allard
Marco Arjona
Rezaul Azim
Abdul Ali Babar
Mohamed Bakr
Istvan Bardi
Payam Beigi
Ahmed Boutejdar
Lela Bralovic
William Coburn
Said El-Khamy
Ali Farahbakhsh
Teixeira Fernando
Christophe Fumeaux
Andrew Greenwood
Andrey Grigoryev
Guiru Gu

Renzhou Gui
Naftali Herscovici
Ming Jin
Yun-Fei Mao
Abri Mehadji
Lotfi Osman
Binay Sarkar
Nvsn Sarma
Levent Sevgi
Hamed Shirzad
Ashish Singh
Rensheng Sun
Margarita Tecpoyotl-Torres
Jiangong Wei
Qianyin Xiang
Ravindra Yadav
TABLE OF CONTENTS

“Comparison of Calculation Methods of Braided Shield Cable Transfer Impedance Using FSV Method”
Jinjun Bai, Gang Zhang, Lixin Wang, Alistair Duffy, Chao Liu, and Tianyu Shao .................. 140

“Hybrid IE-DDM-MLFMA with Gauss-Seidel Iterative Technique for Scattering from Conducting Body of Translation”
Ming Jiang, Jun Hu, Ran Zhao, Xiang Wei, and Zai-ping Nie.............................................. 148

“An Improved MLPG Method and Application in the Calculation of Electro-Thermal Field of Transmission Line”
Bing Gao, Fan Yang, Minyou Chen, Pan Duan, Qing-jun Peng, and Yongming Yang.......... 157

“Truncation Error Analysis of a Pre-Asymptotic Higher-Order Finite Difference Scheme for Maxwell's Equations”
Yu Shao and Shumin Wang.................................................................................................. 167

“Development of Diplexers Based on Dual-Mode Substrate Integrated Waveguide Cavities”
Hui Chu, Rong Mao, and Jian-Xin Chen............................................................................... 171

“UWB Monopole Antenna with Dual Band-Notched Function”
Y. Ojaroudi, S. Ojaroudi, and N. Ojaroudi................................................................. 178

“UWB-MIMO Quadruple with FSS-Inspired Decoupling Structures and Defected Grounds”
Tayyab Shabbir, Rashid Saleem, Adeel Akram, and Farhan Shafique ............................... 184

“A Novel U-Shaped Parasitic Asymmetric Microstrip Cap Loaded Compact Patch Antenna”
M. R. Zaman, M. T. Islam, and Salehin Kibria.............................................................. 191

“Wideband Power Divider Using Novel Split-Ring Resonator”
Tao Huang, Di Jiang, and Hongzhi Hu.............................................................. 204

“Circular Ring Optically Transparent Antenna for Ultra-Wideband Applications”
M. R. Haraty, M. Naser-Moghadasi, A. A. Lotfi-Neyestanak, and A. Nikfarjam................. 208

“A New Meandered-Stripline Fed Dual Band Patch Antenna”
M. R. Ahsan, M. T. Islam, and M. Habib Ullah........................................................... 213

© 2015, The Applied Computational Electromagnetics Society
“Design of a Compact Planar Antenna for Ultra-Wideband Operation”
M. N. Shakib, M. Moghavvemi, and W. N. L. Mahadi ........................................................... 222

“Pattern Synthesis for a Conformal Array Antenna Mounted on a Paraboloid Reflector Using Genetic Algorithms”
M. A. Nikooohar Fakher ........................................................................................................... 230

“An Efficient Approach for Reducing the Complexity of Reconfigurable Antennas”
Chang-Ying Wu, Yan-Ping Ma, and Jin Xu ............................................................................ 237

“Liquid Crystal-Based Dielectric-Loaded Plasmonic Ring Resonator Filter”
Seyed Mohammad Alavi and Hamed Armand ........................................................................... 245