Progress
In
Electromagnetics
Research M
Progress
In
Electromagnetics
Research M

Chief Editors: Weng Cho Chew and Sailing He

EMW Publishing
Cambridge, Massachusetts, USA
CONTENTS

New Robust Adaptive Beamforming Method for Multipath Coherent Signal Reception
Min Tang, Dong Qi, Chengcheng Liu, and Yongjun Zhao ................................. 1

Secrecy Sustainable Transmission Design in Energy Harvesting Enable Relay Networks
Jianfeng Kong, Feng Zhou, and Zhenhai Liu ................................................. 11

Improving Efficiency of the Secondary Sources Method for Modeling of the Three-
Dimensional Electromagnetic Field
Dmitriy M. Filippov and Alexandr A. Shuyskyy ............................................. 19

Miniaturized Dual-Band Antenna with a Rectangular Patch and Symmetrically Placed
Circles in the Partial Ground Plane
Baudha Sudeep, Aman K. Goswami, and Manish V. Yadav .............................. 29

Analysis of Connection Way of a Three-Dimensional Receiving Coil Onboard a Capsule
Robot for Wireless Power Transmission
Jinyang Gao, Guozheng Yan, Yunbo Shi, Huiliang Cao, Kun Huang, Hui Gao, Jun Liu ...... 39

A Fast and Accurate Multi-Element Calibration Algorithm of an Active Phased Antenna
Array
Akinwale Oluwaseyi Fadamiro, Oluwole J. Famoriji, Abdul-Hafeez Ali, Rabiu Sale Zakariyya
Zhongxiang Zhang and Fujiang Lin ............................................................ 49

Pole-Zero Analysis of Microwave Filters Using Contour Integration Method Exploiting
Right-Half Plane
Eng Leong Tan and Ding Yu Heh ............................................................. 59

An Enhanced Forward-Looking SAR Imaging Algorithm Based on Compressive Sensing
Bo Pang, Hao Wu, Shiqi Xing, Dahai Dai, Yongzhen Li, and Xuesong Wang ......... 69

Investigations of Specific Absorption Rate and Temperature Variations for an UWB
Antenna for Wireless Applications
Mohandoss Susila, Thipparaju Rama Rao, Karthik Varshini, Palaniswamy Sandeep Kumar
and Marudappa Pushpalatha .......................................................... 83

An Asymmetric-Width Broad-Side Coupled Transformer to Reduce the Parasitic
Coupling Capacitance for CMOS Power Amplifier Applications
Jonghoon Park, Changhyun Lee, and Changkun Park .................................... 93

An Airborne VHF Printed Monopole Antenna for Platform Constrained Applications
Mary Rani Abraham, Sona O. Kundukulam, and Chandroth Karuvandi Aanandan .......... 103

Analysis and Reduction of Cogging Torque of Line-Start Permanent Magnet Motors
Libing Jing, Jun Gong, and Ying Lin ...................................................... 115
Solution of Wideband Scattering Problems Using Hierarchical Ultra-Wideband Characteristic Basis Functions
Wen-Yan Nie and Zhong-Gen Wang ................................................................. 125

A Novel Single PIN Diode Reconfigurable Impedance Matching Network with a Simplified Solution Method
Yuliang Liang, Junping Geng, Han Zhou, Tingting Fan, Xuan Wang, Rong-Hong Jin
Xianling Liang and Weiren Zhu ................................................................. 135

Spectral Characteristics of Segmented Optical Waveguides Immersed in a Fluid Medium
José Rodríguez García and Adrián Fernández Gavela ................................ 145

Compressed Sensing for Fast Electromagnetic Scattering Analysis of Complex Linear Structures
Xuehua Ma, Mingsheng Chen, Jinhua Hu, Meng Kong, Zhixiang Huang, and Xianliang Wu . . . 155

MWF-NW Algorithm for Space-Time Antijamming
Fulai Liu, Miao Zhang, Fan Gao, and Ruiyan Du ........................................ 165

Single Feed Circularly Polarized Antenna Loaded with Complementary Split Ring Resonator (CSRR)
Soumik Dey, Santanu Mondal, and Partha Pratim Sarkar .......................... 175

Beam Wander of the Multi-Gaussian Schell-Model Beam in Anisotropic Turbulence
Jie Shu, Huafeng Xu, Zheng-Lan Zhou, and Jun Qu ................................. 185

Compact Wideband Quad-Element MIMO Antenna with Reversed S-Shaped Walls
Fei Wang, Shifeng Li, Qing Zhou, and Yubin Gong ................................. 193