
ELECTROMAGNETIC WAVES
PIERM 106

Progress

In

Electromagnetics

Research M

© 2021 EMW Publishing. All rights reserved.

No part of this publication may be reproduced. Request for permission should be addressed to the Publisher.

All inquiries regarding copyrighted material from this publication, manuscript submission instructions, and subscription orders and price information should be directed to: EMW Publishing, P. O. Box 425517, Kendall Square, Cambridge, Massachusetts 02142, USA.

ELECTROMAGNETIC WAVES
PIERM 106

Progress
In
Electromagnetics
Research M

Chief Editors: Weng Cho Chew and Sailing He

EMW Publishing
Cambridge, Massachusetts, USA

CONTENTS

Half-Mode Substrate Integrated Waveguide Evanescent-Mode Filters with Slots-Embedded Complementary Split-Ring Resonators for Depressed Machining Tolerance Sensitivity	
Bo Wang and Yong Mao Huang	1
Design and Optimization of Electromagnetic Parameters in a Linear Magnetic-Geared Generator Based on Orthogonal Statistical Method	
Qiaoling Yang, Haiping Zhang, Shenghui Guo, and Boliang Song	15
Optimal Magnetic Wake Detection in Finite Depth Water	
Mohammad-Amir Fallah and Mehdi Monemi	25
A Novel Circular Polarized Rectenna with Wide Ranges of Loads for Wireless Harvesting Energy	
Mustapha Bajtaoui, Otman El Mrabet, Mohammed A. Ennasar, and Mohsine Khalladi	35
Single-Feed Cylindrical Dielectric Resonator Antenna with Wide Angular Circular Polarization	
Hongmei Liu, Tuanyuan Yan, Shaojun Fang, and Zhongbao Wang	47
Sierpinski-Carpet Fractal Frequency Reconfigurable Microstrip Patch Antenna Design for Ku/K/Ka Band Application	
Iqra Masroor, Jamshed A. Ansari, Shadman Aslam, and Abhishek K. Saroj	59
Research on Pneumothorax Detection Based on Magneto-Acousto-Electrical Tomography	
Cailian Li, Yuanyuan Li, and Guoqiang Liu	71
Bandwidth Improvement of Bowtie Antenna for GPR Applications Using Antipodal Technique, Corner Bending, and Triangular Slot Modifications	
Osama Alali, Abdelrazak Badawieh, and Mohammad Alhariri	83
Design and Optimization of a TEM Cell Structure Suitable for Wider Bandwidth	
Ting Zhou, Xinwei Peng, Shoukun Huang, Jicong Zhao, and Haiyan Sun	93
Design of Y-Type Branch Broadband Dual-polarization Antenna and C-Type Slot Line Notch Antenna	
Yan Yan, Lan Li, Jifang Zhang, Heming Hu, Yonghao Zhu, Hua Chen, and Qing Fang	105
Validation of Grating Lobe Reductions in a Dual-Mode Scanning Phased Array Antenna	
Zabed Iqbal, Tanzeela H. Mitha, and Maria Pour	117
An Integro-Differential Approach for Eddy Currents Computation in Structures Having Heterogeneous Dimensions	
Lyes Aomar and Hicham Allag	127

Analyzing Effects of Satellite Attitude and Speed Errors on Ocean Current Retrieval for a Doppler Scatterometer	
Yuanjing Miao, Xiaolong Dong, and Di Zhu	139
A Continuous-Discontinuous Galerkin Method for Electromagnetic Simulations Based on an All-Frequency Stable Formulation	
Su Yan	153
A Novel Miniaturized C-Band Bandpass Filter	
Luyao Tang, Xiaoli Jiang, Hao Wei, and Weiwei Liu	167
Synthesis of Wideband Reconfigurable Array Antennas for Monopulse Radar Applications	
Le T. P. Bui, Nicola Anselmi, Giada M. Battaglia, Tommaso Isernia, Paolo Rocca and Andrea F. Morabito	179
Compensation Rotor Vibration of Outer Rotor Coreless Bearingless Permanent Magnet Synchronous Generator Using Variable Step Least Mean Square Adaptive Filter	
Huangqiu Zhu, Kai Zhou, and Junqi Huan	191
Spatially Squeezed Electromagnetic Modes of a Transformational Optics Based Cavity Resonator for Targeted Material Heating	
Barakathulla Asrafali, Chakravarthy Venkateswaran, and Natesan Yogesh	205
A Compact Dual Notch-Band Frequency Reconfigurable UWB Monopole Antenna	
Jing-Chang Nan, Jiu-Yang Zhao, and Yuan Wang	215
Reconfigurable Polarization MIMO Dielectric Resonator Antenna	
Masoumeh Rezvani, Saeid Nikmehr, and Ali Pourziad	227