
ELECTROMAGNETIC WAVES
PIERM 66

Progress

In

Electromagnetics

Research M

© 2018 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 66

Progress
In
Electromagnetics
Research M

Chief Editors: Weng Cho Chew and Sailing He

EMW Publishing
Cambridge, Massachusetts, USA

CONTENTS

Analysis of Polarization Interference-Type BPF Arrays for NIR Spectroscopic Imaging Utilizing All-Dielectric Planar Chiral Metamaterials	
Yasuo Ohtera, Jiyao Yu, and Hirohito Yamada	1
Carbon Nanotubes Composite Materials for Dipole Antennas at Terahertz Range	
Yaseen N. Jurn, Mohamedfareq Abdulmalek, and Hasliza A. Rahim	11
Stability Assessment of Pipeline Cathodic Protection Potentials under the Influence of AC Interference	
Thabane Hendry Shabangu, Purva Shrivastava, Bolanle Tolulope Abe, and Peter A. Olubambi	19
Bandwidth Improvement of Compact Planar Antenna for UWB Application with Dual Notch Band Performance Using Parasitic Resonant Structure	
Swarnaprava Sahoo, Mihir N. Mohanty, and Laxmi P. Mishra	29
Characteristics of Scattering for Anisotropic Particles in Photoelectric Electromagnetic Beam	
Jin Li and Xiaoyi Feng	41
Design of Compact Wideband Serpentine Patch Antenna for Ingestible Endoscopic Applications	
Shikha Sukhija, Rakesh Kumar Sarin, and Nitesh Kashyap	53
Reconfigurable Cylindrical Plasma Antenna	
Oumar Alassane Barro, Mohammed Himdi, and Olivier Lafond	65
Fast DOA Estimation in the Spectral Domain and Its Applications	
Le Zuo, Jin Pan, and Boyuan Ma	73
Pattern Synthesis for the Cylindrical Polarimetric Phased Array Radar (CPPAR)	
Mohammad-Hossein Golbon-Haghighi, Hadi Saeidi-Manesh, Guifu Zhang, and Yan Zhang	87
A Novel Method for Cogging Torque Reduction in Permanent Magnet Brushless DC Motor Using T-shaped Bifurcation in Stator Teeth	
M. Arun Noyal Doss, R. Brindha, K. Mohanraj, Shubranshu S. Dash, and K. M. Kavya	99
Symplectic Pseudospectral Time-Domain Scheme for Solving Time-Dependent Schrödinger Equation	
Jing Shen, Wei E. I. Sha, Xiaojing Kuang, Jinhua Hu, Zhixiang Huang, and Xianliang Wu	109
Two Dimensional Green's Function for a Half Space Geometry due to Two Different Non-Integer Dimensional Spaces	
Muhammad A. Fiaz and Qaisar A. Naqvi	119

Torque Constant Density in Different Type of Double Stator Permanent Magnet Brushless DC Motor

Raja Nor Firdaus Kashfi Raja Othman, Nor Aishah Md Zuki, Suhairi Rizuan Che Ahmad
Fairul Azhar Abdul Shukor, Siti Zulaika Mat Isa, Erwan Sulaiman, and Zulkuffi Zakaria 127

Experimental Study of Metal-to-Metal Contact Shapes Effects on Passive Intermodulation

Gilles Duteil, Patrick Le Cam, Franck Colombel, Stephane Avrillon, Jérôme Plet
and Jean Pierre Harel 143

A ‘Divide and Conquer’ Regularization Imaging Method for Forward-Looking Scanning Radar Azimuth Super-Resolution

Ke Tan, Wenchao Li, Yulin Huang, Qian Zhang, and Jianyu Yang 151

Four-Wave Mixing Suppression Method Based on Odd-Even Channels Arrangement Strategy

Noora Salim, Haider J. Abd, Ahmed N. Aljamal, and Alaaldin H. Jaber 163

Direction Finding for Bistatic MIMO Radar with Non-Circular Sources

Hao Chen, Xinggan Zhang, Yechao Bai, and Jinji Ma 173

Insertable Waveguide Verification Standards for the Electromagnetic Characterization of Materials

Jonathan L. Frasch, Edward J. Rothwell, Premjeet Chahal, and John Doroshewitz 183

Broadband and High Efficiency Single-Layer Reflectarray Using Circular Ring Attached Two Sets of Phase-Delay Lines

Fei Xue, Hongjian Wang, Yinghui Wang, and Longjun Zhang 193

Beam Switchable Vehicular Antenna for Increased Communication Range

Bilal Khan, Markus Berg, Seppo Rousu, and Aarno Pärssinen 203