
ELECTROMAGNETIC WAVES
PIERC 84

Progress

In

Electromagnetics

Research C

© 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
PIERC 84

Progress
In
Electromagnetics
Research C

Chief Editors: Weng Cho Chew and Sailing He

EMW Publishing
Cambridge, Massachusetts, USA

CONTENTS

A Preliminary Research on Skull Healing Utilizing Short Pulsed Radar Technique on Layered Cranial Surgery Phantom Models	
Doojin Lee, Jacob Velander, Daniel Nowinski, and Robin Augustine	1
Statistical Moments and Scintillation Level of Scattered Electromagnetic Waves in the Magnetized Plasma	
George Jandieri, Akira Ishimaru, Banmali Rawat, Vladimir Gavrilenko, and Oleg Kharshiladze .	11
The Direction-of-Arrival and Polarization Estimation Using Coprime Array: A Reconstructed Covariance Matrix Approach	
Wen Dong, Ming Diao, and Lipeng Gao	23
Research on the Key Issues in Power and Data Wireless Transmission of Implantable Medical Devices	
Xueping Li, Yuan Yang, and Ningmei Yu	35
Characterization Method of an Automotive Random-LOS OTA Measurement Setup	
Aidin Razavi, Andrés Alayón Glazunov, Sadegh Mansouri Moghaddam, Rob Maaskant and Jian Yang	47
Compact UWB MIMO Antenna with Metamaterial-inspired Isolator	
Fei Wang, Zhaoyun Duan, Shifeng Li, Zhanliang Wang, and Yubin Gong	61
An 8-Element Frequency-Agile MIMO Communication Antenna System for CR Front-End Applications	
Sharjeel Riaz and Xiongwen Zhao	75
Torque Ripple Suppression Control of Bearingless Brushless DC Motor in Wide Speed Regulation Range	
Yukun Sun, Kuan Zhang, Ye Yuan, and Fan Yang	87
Directive and Reconfigurable Loaded Antenna Array for Wireless Sensor Networks	
Akimu Dihissou, Aliou Diallo, Philippe Le Thuc, and Robert Staraj	103
Design and Fabrication of Antennas Using 3D Printing	
Jason Bjorgaard, Michael Hoyack, Eric Huber, Milad Mirzaee, Yi-Hsiang Chang and Sima Noghianian	119
Single-Fed Low-Profile Circularly Polarized Antenna Using Quarter-Mode Substrate Integrated Waveguide with Enhanced Bandwidth	
Ni Wang, Xiaowen Xu, and Murilo H. Seko	135
The Properties of the Electromagnetic Scattering from a Sinusoidal Water Wave	
Yunhua Wang, Yue Yu, Yanmin Zhang, and Honglei Zheng	147

A Miniaturized Decagonal Sierpinski UWB Fractal Antenna	
Tanweer Ali, Subhash B K, and Rajashekhar C. Biradar	161
Design of Differential Source Fed Circularly Polarized Rectenna with Embedded Slots for Harmonics Suppression	
Deepak Kumar and Kalpana Chaudhary	175
A Wideband Circularly Polarized Antenna with Wide Beamwidth for GNSS Applications	
Chao Li, Fushun Zhang, Fan Zhang, and Kaiwen Yang	189
CPW-Fed Body Worn Monopole Antenna on Magneto-Dielectric Substrate in C-Band	
Pragyan Jyoti Gogoi, Satyajib Bhattacharyya, and Nidhi S. Bhattacharyya	201
Study on a New Remote Sensing Image Classification Method and Its Application	
Wu Deng, Danqin Wang, and Huimin Zhao	215
GNSS Imaging: A Case Study of Tree Detection Based on Beidou GEO Satellites	
Songhua Yan, Hui Zhou, and Jianya Gong	227
A Penta-Band Printed Monopole Antenna for MIMO Applications	
Sajad Mohammad-Ali-Nezhad and Hamid Reza Hassani	241
Theory of a Strip Antenna Located at the Interface of an Isotropic Medium and a Magnetoplasma	
Alexander V. Kudrin, Anna S. Zaitseva, Tatyana M. Zaboronkova, and Catherine Krafft	255