
ELECTROMAGNETIC WAVES
PIERC 117

Progress

In

Electromagnetics

Research C

© 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
PIERC 117

Progress
In
Electromagnetics
Research C

Chief Editors: Weng Cho Chew and Sailing He

EMW Publishing
Cambridge, Massachusetts, USA

CONTENTS

Numerical Analysis of a ITO Based Circularly Polarized Optically Transparent THz Antenna Employing Characteristic Mode Analysis	
Muhammad Asad Rahman, Md. Sarwar Uddin Chowdhury, Md. Azad Hossain and Ahmed Toaha Mobashsher	1
Staired-Slitted Flag Central Resonator Based Wide Band Bandpass Filter for Super Spurious HarmonicSuppressions	
Ami Iqbal and Parambil Abdulla	17
A Miniaturized MIMO Antenna for C, X, and Ku Band Applications	
Ajit K. Singh, Santosh K. Mahto, and Rashmi Sinha	31
Accurate Fault Location for Long-Distance Electric Transmission Lines	
Lihui Zhao, Jingwei Zhu, Hongzhe Yang, and Tianhuai Qiao.....	41
Research on Shielding and Electromagnetic Exposure Safety of an Electric Vehicle Wireless Charging Coil	
Wenting Mou and Mai Lu.....	55
Compact Differential Tri-Band Bandpass Filter with Multiple Zeros Using Sext-Mode Stepped-Impedance Square Ring Loaded Resonator	
Ziyue Guo, Litian Wang, Rong Guo, Yang Xiong, Ming He, Lu Ji, and Xu Zhang	73
Design and Analysis of Rectenna at 2.42 GHz for Wi-Fi Energy Harvesting	
Rashmi Pandey, Ashok K. Shankhwar, and Ashutosh Singh	89
Compact Dual-Band Printed MIMO Antenna with Very Low Mutual Coupling for WLAN, Wi-MAX, Sub-6 GHz 5G and X-Band Satellite Communication Applications	
Kommanaboyina V. Babu, Sudipta Das, Soufian Lakrit, Shobhit K. Patel Boddapati T. P. Madhav and Hicham Medkour	99
A Crescent-Shaped Monopole MIMO Antennas with Improved Isolation for Dual-Band WLAN Applications	
Likaa S. Yahya, Loay S. Yahya, and Khalil H. Sayidmarie	115
MIMO Antenna for N48, N77, N78 5G Applications	
Walaa M. Hassan, Khalid M. Ibrahim, and Ahmed M. Attiya.....	129
Dual-Band Waveguide Fed Hollow Cylindrical Dielectric Resonator Antenna	
Varghese Sheeba, Parambil Abdulla, Baby Ann Mary, Puthenveetil Muhammed Jasmine and Kunnath Kodakkat Ansha	145
Performance Analysis and Impedance Modeling of Rectangular and Circular Split-Ring Resonator Antennas in 2.4/5.2 GHz Bands	
Puneet Sehgal and Kamlesh Patel.....	159

Wideband Four-Port Compact Millimeter-Wave MIMO Antenna Configuration through Defected Ground Structure for Forthcoming 5G Handheld Devices

Abdullah, Hamza Ahmad, MuhibUr Rahman, Muhammad Haris, and Muhammad Salman 173

Frequency Diverse ISAR Two-Dimensional Imaging Method and Resolution Analysis

Xiu-Ping Li, Ke-Fei Liao, and Bo Wen 185

Wideband Designs of Regular Shape Microstrip Antennas Using Modified Ground Plane

Venkata A. P. Chavali and Amit A. Deshmukh 203

Design of a Coplanar UWB-MIMO Ground Antenna Based on the Theory of Characteristic Modes

Zhijun Tang, Jie Zhan, Bin Zhong, Long Chen, and Guocai Zuo 221

Optimized Cancer Cells Sensor Based on 1D Photonic Crystal Vertical Slot Structure

Faiza Bounaas and Amel Labbani 239

Millimeter Wave Switched Beam Rectangular Loop Dipole Antenna Array Using a 4×4 Butler MatrixKunooru Bharath, Srujana Vahini N, Rama K. Dasari, Mahesh P. Abegaonkar
and Vijay M. Pandharipande 251**Modified Spokes Wheel Shaped MIMO Antenna System for Multiband and Future 5G Applications: Design and Measurement**

Sumeet S. Bhatia and Narinder Sharma 261

Design and Fabrication of a Triple Band Microstrip Antenna for WLAN, Satellite TV and Radar Applications

Prem Pal Singh and Sudhir Kumar Sharma 277