
ELECTROMAGNETIC WAVES

PIERL 53

Progress

In

Electromagnetics

Research Letters

© 2015 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
PIERL 53

Progress
In
Electromagnetics
Research Letters

Chief Editors: Weng Cho Chew and Sailing He

EMW Publishing
Cambridge, Massachusetts, USA

CONTENTS

Dual-Band Slotted Patch Antenna with Defective Ground for WLAN/WiMAX Applications	
Chao-Ming Wu, Jia-Wun Syu, and Wen-Chung Liu	1
A Compact Wideband Bandpass Filter Using a Coupled-Line Quad-Mode Resonator	
Lixia Nan, Yongle Wu, Weimin Wang, Shulan Li, and Yuanan Liu	7
Complex Impedance-Transformation Out-of-Phase Power Divider with High Power-Handling Capability	
Lulu Bei, Shen Zhang, and Kai Huang	13
Novel Dual-Band Bandpass Filter Based on Shorted Rectangular Patch Resonator	
Kuan Deng, Caiyue Wen, Fei Li, and Wenquan Che	21
Planar Dual-Band Power Divider with Short-Circuited Stub	
Xin-Huai Wang, Yang Bing Xu, Le Kang, Xiao Shuang Li, Wei Jian He, and Xiao Wei Shi	29
Miniaturized Microstrip Patch Antenna with Spiral Defected Microstrip Structure	
Hanae Elftouh, Naima A. Touhami, and Mohamed Aghoutane	37
A New Omnidirectional Circular Polarization Microstrip Antenna	
Kun Wei, Jian-Ying Li, Ling Wang, and Zi-Jian Xing	45
A Novel Printed Helical Antenna for a Circularly Polarized Tilted Beam	
Xiaoqiang Yang, Zehong Yan, Tianling Zhang, and Binbin Fan	51
A Simple Dual-Band Circularly Polarized Rectangular Dielectric Resonator Antenna	
Meng Zou and Jin Pan	57
A Dual-Band Bandpass Filter for 2.4 GHz Bluetooth and 5.2 GHz WLAN Applications	
Lakhindar Murmu and Sushrut Das	65
Electromagnetically-Coupled Millimeter-wave Antenna Array with Non-Uniform Distribution for 60 GHz ISM Applications	
Osama M. Haraz	71
An Ultra-Wideband Twin-Patch Monopole Antenna with Band-Rejection Characteristic	
Chao-Ming Wu and Yi-Hong Liu	77
A Compact Antenna Design for UHF RFID Applications	
Bing Wang	83
High Selectivity Differential Bandpass Filter Using Dual-Behavior Resonators	
Xin Gao, Wenjie Feng, and Wenquan Che	89

Microstrip Monopolar Patch Antenna for Bandwidth Enhancement	
Qiao Zhang, Tongbing Yu, and Jundong Ye	95
A Low-Complexity Dual-Band Model for Dual-band Power Amplifiers Based on Volterra Series	
Tianjing Zhang, Cuiping Yu, Yuanan Liu, Shulan Li, and Bihua Tang	101
An Efficient Algorithm for the Novel Weakly Conditionally Stable FDTD Method	
Qi Liu, Xikui Ma, and Feng Chen	107
Wideband Balun Bandpass Filter Based on Substrate Integrated Waveguide and CSRRs	
Wenjie Feng, Shunyu Yao, Jialiang Shen, and Rui Cao	115
A Novel Dumbbell-Shaped Defected Ground Structure with Embedded Capacitor and Its Application in Low-Pass Filter Design	
Zhi-Yong Chen, Lin Li, and Si-Si Chen	121
Compact Differential Bandpass Filters Based on Coupled-Line Resonators with Improved Performance and Miniaturized Size	
Hui Wang, Yi Yang, Zhi-Hong Ren, and Cheng Feng	127