

INTERNATIONAL JOURNAL OF  
**MICROWAVE AND WIRELESS TECHNOLOGIES**

## CONTENTS

### POWER AMPLIFIERS

- Dynamic behavioral modeling of RF power amplifiers based on decomposed piecewise machine learning technique**  
 Jialin Cai, Justin B. King, Chao Yu, Baicao Pan, Lingling Sun and Jun Liu 315

### FILTERS

- Compact dual-/tri-/quad-band bandpass filters with independently frequency-tunable and switchable passbands**  
 Zhao Li, Litian Wang, Ming He, Xiaqing Li, Zhelong Liang and Zhipeng Wang 322

### RADAR

- Phase noise performance stabilization of PLL system under dynamic vibration condition for airborne applications**  
 Vipin Kumar, R. Sivakumar, C. S. Jayasheela, Mahadev Sarkar and Shailendra Singh 335

### BIOMEDICAL APPLICATIONS

- A novel approach of high-resolution UWB microwave imaging system based on an improved 3D back-projection method for early-stage breast cancer detection applications**  
 M. Mehranpour, S. Jarchi, A. Ghorbani and A. Keshtkar 344

### METAMATERIALS AND PHOTONIC BANDGAP STRUCTURES

- Wideband and high-gain circularly-polarized L-shaped slot antenna array using metamaterial**  
 Qiang Chen, Guolin Zhang, Changhui He, Ya Fan, Zhenbo Zhu, Di Zhang, Jing Li and Yuanqing Zhao 359

- Rollable metamaterial screen for magnetic resonance coupling-based high-efficiency wireless power transfer**  
 Woosol Lee and Yong-Kyu Yoon 365

### ANTENNA DESIGN, MODELING AND MEASUREMENTS

- A simple method to simultaneously increase the gain and bandwidth of wearable antennas for application in medical/communications systems**  
 Farzad Khajeh-Khalili, Ali Shahriari and Fatemeh Haghshenas 374

- A planar triple-band monopole antenna loaded with an arc-shaped defected ground plane for WLAN/WiMAX applications**  
 Shiquan Wang, Fanmin Kong, Kang Li and Liuge Du 381

- Determining the input reflection coefficient of integrated antennas using over-the-air measurements under near-field conditions**  
 A.J. van den Biggelaar, D.P.P. Daverveld, A.C.F. Reniers, A.B. Smolders and U. Johannsen 390

- Analysis and design of inclined fractal defected ground-based circularly polarized antenna for CA-band applications**  
 Sonal Gupta, Shilpee Patil, Chhaya Dalela and Binod Kumar Kanaujia 397

- Compact CPW-fed super wideband planar elliptical antenna**  
 Umair Rafique, Sami ud Din and Hisham Khalil 407