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**ELECTROMAGNETIC  
WAVES                      PIERL 02**

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**Progress**

**In**

**Electromagnetics**

**Research Letters**

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E-ISSN 1937-6480

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**Chief Editor: J. A. Kong**

EMW Publishing

Cambridge, Massachusetts, USA



**CONTENTS**

**A PLANAR U TYPE MONOPOLE ANTENNA FOR UWB APPLICATIONS**

*X.-C. Yin, C.-L. Ruan, C.-Y. Ding, and J.-H. Chu*

1	Introduction.....	1
2	Antenna Design.....	2
3	Conclusions.....	8

**RADIATION OF A HERTZIAN DIPOLE IN A SHORT-ENDED CONDUCTING CIRCULAR CYLINDER WITH NARROW CIRCUMFERENTIAL SLOTS**

*J. S. Ock and H. J. Eom*

1	Introduction.....	11
2	Theory.....	12
3	Computations.....	14
4	Conclusion.....	18
	Appendix A. Series Representations of Integrals.....	18

**MODEL OF MAN-MADE TARGET BENEATH FOLIAGE USING POLINSAR**

*B. Zou, H. Cai, L. Zhang, and M. Lin*

1	Introduction.....	21
2	Generalized Coherence Scattering Model.....	22
3	Model of Man-Made Target beneath Random Volume (MTBRV).....	23
4	Experimental Results.....	26
5	Conclusions.....	27

**HYBRID CT-BEM METHOD ANALYSIS OF UNSCREENED SLAB LINES**

*Q. Zheng, F. Xie, B. Yao, and W. Cai*

1	Introduction.....	29
2	Calculation Procedure and Results.....	30
3	Conclusion.....	34

**CPW-TO-STRIPLINE VERTICAL VIA TRANSITIONS  
FOR 60 GHZ LTCC SOP APPLICATIONS**

*Y. C. Lee*

1	Introduction.....	37
2	Design and Analysis of CPW-to-Stripline Vertical Via Transitions.....	38
3	Fabrication and Measurement.....	42
4	Conclusion.....	43

**STARK EFFECT IN P-TYPE DELTA-DOPED QUANTUM  
WELLS**

*A. M. Miteva, S. J. Vlaev, V. Donchev, and V. Donchev*

1	Introduction.....	46
2	Model and Method.....	46
3	Results and Discussion.....	47
4	Conclusions.....	50

**FINITE ELEMENT METHOD SIMULATION OF  
PHOTOINDUCTIVE IMAGING FOR CRACKS**

*C.-C. Tai and Y.-L. Pan*

1	Introduction.....	53
2	The Photoinductive Imaging Method.....	54
3	Specimen and Simulation.....	55
4	Results and Discussion.....	56
5	Conclusions.....	60

**ESTIMATION OF RELATIVE PERMITTIVITY OF  
SHALLOW SOILS BY USING THE GROUND  
PENETRATING RADAR RESPONSE FROM  
DIFFERENT BURIED TARGETS**

*L. Capineri, D. J. Daniels, P. Falorni, O. L. Lopera  
and C. G. Windsor*

1	Introduction.....	64
2	Experimental Measurements.....	64
3	Electromagnetic Model of the Experiment.....	67
4	Estimation of Soil Relative Permittivity.....	68
5	Results.....	69
6	Conclusions.....	70

**HARMONIC SUPPRESSION OF BRANCH-LINE AND RAT-RACE COUPLER USING COMPLEMENTARY SPILT RING RESONATORS (CSRR) CELL**

*J. Zhang and X.-W. Sun*

1	Introduction.....	73
2	Frequency Elective Properties Study of CSRRs .....	74
3	Design and Measurement .....	77
4	Conclusion .....	78

**TRANSPORT PROPERTIES OF DELTA DOPED FIELD EFFECT TRANSISTOR**

*O. Oubram and L. M. Gaggero-Sager*

1	Introduction.....	81
2	Theoretical Background.....	82
3	Results and Discussion .....	84
4	Conclusions .....	86

**A CONCEPT OF MOVING DIELECTROPHORESIS ELECTRODES BASED ON MICROELECTRO-MECHANICAL SYSTEMS (MEMS) ACTUATORS**

*L. Li and D. Uttamchandani .....* 89

**WAVEGUIDE STRUCTURES FOR GENERATION OF TERAHERTZ RADIATION BY ELECTRO-OPTICAL PROCESS IN GAAS AND ZNGEP<sub>2</sub> USING 1.55 μM FIBER LASER PULSES**

*T. Yang, S. Song, H. Dong, and R. Ba*

1	Introduction.....	95
2	Coherent Length .....	97
3	Dielectric Planar Waveguide for THz Waves .....	99
4	Conclusions .....	101

**AN SUPPORT VECTOR REGRESSION BASED NONLINEAR MODELING METHOD FOR SIC MESFET**

*Y. Xu, Y. Guo, R. Xu, L. Xia, and Y. Wu*

1	Introduction.....	103
2	Support Vector Regression .....	104
3	Nonlinear Modeling of SiC MESFETs Based on SVR Techniques .....	106

4	Model Verification .....	110
5	Conclusion .....	113

**HOLOGRAPHIC FEMTOSECOND LASER PROCESSING  
AND THREE-DIMENSIONAL RECORDING IN  
BIOLOGICAL TISSUES**

*Y. Hayasaki*

1	Introduction.....	115
2	Fingernail Memory .....	116
3	Dental Memory .....	117
4	Holographic Femtosecond Laser Processing .....	119
5	Conclusions .....	122

**INTERFEROMETRIC ISAR IMAGING ON SQUINT  
MODEL**

*C. Z. Ma, T. S. Yeo, H. S. Tan, and G. Y. Lu*

1	Introduction.....	125
2	Signal Model .....	126
3	Three Dimensional Imaging Algorithms .....	129
4	Simulation Results .....	130
5	Conclusions .....	132

**MULTIPLE CAVITY MODELING OF A FEED  
NETWORK FOR TWO DIMENSIONAL PHASED  
ARRAY APPLICATION**

*D. K. Panda and A. Chakraborty*

1	Introduction.....	135
2	Problem Formulation .....	136
3	Solving for the Electric Field .....	138
4	Numerical Results and Discussion .....	139

**A NOVEL BANDPASS WAVEGUIDE FILTER  
STRUCTURE ON SIW TECHNOLOGY**

*Z. Sotoodeh, B. Biglarbegian, F. H. Kashani, and H. Ameri*

1	Introduction.....	141
2	Microstrip to SIW Transition .....	142
3	Filter Design on SIW Tech. ....	143
4	Simulation Results .....	145
5	Conclusion .....	146



**TRANSMITTANCE AND FRACTALITY IN A  
CANTOR-LIKE MULTIBARRIER SYSTEM**

*D. S. Díaz-Guerrero, F. Montoya, L. M. Gaggero-Sager  
and R. Pérez-Álvarez*

1	Introduction . . . . .	149
2	Methodology . . . . .	150
3	$q$ Dependent Dimensions . . . . .	152
4	Conclusion . . . . .	153

**DESIGN OF SINGLE PIN SHORTED  
THREE-DIELECTRIC-LAYERED SUBSTRATES  
RECTANGULAR PATCH MICROSTRIP ANTENNA FOR  
COMMUNICATION SYSTEMS**

*A. Sharma and G. Singh*

1	Introduction . . . . .	157
2	Antenna Configuration . . . . .	159
3	Results and Discussion . . . . .	160
4	Conclusion . . . . .	164

**TRIANGULAR RESONATOR BANDPASS FILTER WITH  
TUNABLE OPERATION**

*J.-K. Xiao*

1	Introduction . . . . .	167
2	Resonant Performance of Equilateral Triangular Resonator . .	168
3	New Design of Triangular Patch Resonator Bandpass Filter with Tunable Operation . . . . .	171
4	Conclusion . . . . .	175

**MULTIPLE ANTENNA TRANSMISSION TECHNIQUE  
FOR UWB SYSTEM**

*B.-W. Koo, M.-S. Baek, and H.-K. Song*

1	Introduction . . . . .	177
2	System Model . . . . .	178
3	Preamble Design for Multiple Antennas of MB-OFDM . . . . .	180
4	Performance Evaluation and Discussion . . . . .	181
5	Conclusions . . . . .	183

**WIDE SCANNING PHASED ARRAY ANTENNA USING  
PRINTED DIPOLE ANTENNAS WITH PARASITIC  
ELEMENT**

*H.-W. Yuan, S.-X. Gong, P.-F. Zhang, and X. Wang*

1	Introduction . . . . .	187
2	Antenna Design . . . . .	188
3	Evaluation of Beam Formation and Scanning Characteristics of Phased Array Antenna . . . . .	190
4	Conclusions . . . . .	192