

2010 Proceedings of the Fourth European Conference on Antennas and Propagation

(EuCAP 2010)

**Barcelona, Spain
12-16 April 2010**

Pages 1-856



**IEEE Catalog Number: CFP1077B-PRT
ISBN: 978-1-4244-6431-9**

TABLE OF CONTENTS

Wideband,Balanced-FED 60 GHz Antennas for Integrated Transceivers on LTCC Substrate	1
<i>Martínez-Vázquez, Marta; Holzwarth, S.; Oikonomopoulos-Zachos, C.; Rivera, A.</i>	
Urban Measurements and Propagation Models Comparison of a 3.5 GHz Signal for Broadband Wireless Systems	6
<i>Ramos, Glauccio; Vieira, Robson; Rego, Cassio; Pereira, Paulo; Siqueira, Glauccio</i>	
Miniaturised Frequency Selective Surface	11
<i>Ford, K. L.; Liu, H; Langley, R. J.</i>	
X-Band Acquisition Aid Antenna for Ground Stations Application	15
<i>Migl, Josef; Hoetzel, Christian; Hartwanger, Christian; Hong, Un Pyo; Concaro, Filippo; Arza, Maite; Besso, Piermario; Heuer, Detlef</i>	
Antenna Polarization Mismatch in Body Area Network Communications	20
<i>Yekeh Yazdandoost, Kanya; Hamaguchi, Kiyoshi</i>	
Internal Planar Loop/Monopole Combo Antenna for Eight-Band LTE/GSM/UMTS Porationn in the Laptop Computer	24
<i>Wong, K.-L.; Kang, T.- W.</i>	
Differential Phase Shift Characteristics of Normal TEon Modes in an Azimuthally Magnetized Coaxial Ferrite Waveguide	28
<i>Georgieva-Grosse, Mariana Nikolova; Georgiev, Georgi Nikolov</i>	
Rapid Surrogate-Based Optimization of UWB Planar Antennas	33
<i>Koziel, Slawomir; Ogurtsov, Stanislav</i>	
Analysis of a Reconfigurable Reflectarray Cell Comprising a Multitude of MEMS Control Elements	37
<i>Perruisseau-Carrier, J.; Girard, E.; Legay, H.</i>	
The Shark Antenna : A Miniature Antenna for Transient Ultra Wide Band Applications in the Frequency Band 800MHz - 8GHz	41
<i>Desrumaux, L.; Lalande, M.; Andrieu, J.; Bertrand, V.; Jecko, B.</i>	
Intracranial Pulsation Detected by Ultra-Wideband Radar: Detectability Analysis Using Synthetic Signals	44
<i>Thiel, Florian; Kreiseler, D.; Seifert, F.</i>	
Investigation of Novel Microstrip Antennas for an Implantable Retinal Prosthesis	47
<i>Bahrami, Siroos; Cheldavi, Ahmad</i>	
Design and Characterization of a Planar Artificial Magnetic Conductor in the RFID SHF Band	51
<i>De Cos Gómez, M^a Elena; Alvarez Lopez, Yuri; Las-Heras Andres, Fernando</i>	
Improved Estimation of the K-factor for Rician Channels Emulation in a Reverberation Chamber	56
<i>Lemoine, Christophe; Amador, Emmanuel; Besnier, Philippe</i>	
Contrast Agent Based Tumour Detection by Ultra-Wideband Radar: A Model Approach	61
<i>Thiel, Florian; Kosch, O; Seifert, F.</i>	
New Dipole Slot Antenna Design for RFID Communications	64
<i>Kimouche, Hocine; Zemmour, Hamadache; Atrouz, Brahim</i>	
Small Size Microstrip Slot Antennas for Ultra-Wideband Communications	68
<i>Kimouche, Hocine; Abed, Djamel; Atrouz, Brahim</i>	
Effectiveness of a Fading Emulator in Valuating the Performance of MIMO Systems by Comparison with a Propagation Test	73
<i>Yamamoto, Atsushi; Sakata, Tsutomu; Hayashi, Toshiiteru; Ogawa, Koichi; Nielsen, Jesper; Pedersen, Gert; Takada, Jun-Ichi; Sakaguchi, Kei</i>	
An Ultra-Wideband Printed Monopole Antenna with the Gain Enhanced Using a Surface-Mounted Short Horn	78
<i>Ranga, Yogesh; Esselle, Karu; Weily, Andrew; Verma, A. K.</i>	
Foliage Penetration up to Millimeterwave Frequencies	82
<i>Essen, Helmut; Nuessler, D.; Von Wahl, N.; Heinen, S.; Sieger, S.</i>	
Concurrent 2.4/5-GHz Multi-Loop MIMO Antennas with Wide 3-dB Beamwidth Radiation for Access-Point Applications	85
<i>Su, S.-W.</i>	
Near Region of Antennas in Piecewise-Homogeneous Media	90
<i>Levin, Boris; Bank, M.; Levy, Y.; Haridim, M.; Rechels, T.</i>	
Design of IFS Patch Antenna Using PSO Optimization	95
<i>Capek, Miloslav; Hazdra, Pavel</i>	
Wide Band Planar Monopole Antenna with Asymmetric Parasitic Elements	100
<i>Iwasaki, Hisao; Sugimoto, Shota</i>	
X-Band Transmit-Arrays with Linear and Circular Polarization	104
<i>Kaouach, Hamza; Dussopt, Laurent; Sauleau, R; Koleck, T</i>	
Resonator-Loaded Monopole Antenna with Triple Band Performance for WLAN/WiMAX Applications	109
<i>Gemio, Joan; Parron, Josep; Junkin, Gary</i>	
High-Gain Dual-WLAN-Band Dual-Loop Antennas for MIMO Access Points	113
<i>Su, S.-W.; Chang, F.-S.</i>	
Dual and Triple Band Stacked Patch Antenna with Slots	118
<i>Lee, K F; Luk, K M; Mak, T; Yang, S</i>	

Antenna Array Enhancement Using Mushroom-Like Electromagnetic Band Gap(EBG)	123
<i>Tan, Md; Nor, Mohd ; Tharek, Abd Rahman; Rahim, Abd; Kamal, Sharul ; Ali, Mohd Tarmizi; Jamlos, Mohd Faizal</i>	
Integration of RFID Technology into Reconfigurable Aperture Coupled Patch Array (RACPA) Antenna System	128
<i>Jamlos, Mohd Faizal; Rahman, Abd; Tharek, Kamarudin; Muhammad Ramlee; Ali, Mohd Tarmizi; Tan, Md; Nor, Md; Saad, Puteh</i>	
Reconfigurable Orthogonal Antenna Array (ROAA) Based on Separated Feeding Network	133
<i>Ali, Mohd Tarmizi; Rahman, Abd Tharek; Kamarudin, Muhammad Ramlee; Tan, Md Mohd Nor; Sauleau, Ronan; Jamlos, Muhammad Faizal</i>	
Design of Printed Dipole Array with Reflector	138
<i>Floc'H, Jean Marie; Denoual, Jm; Renaudin, P</i>	
Enhanced Analysis of Propagation Over Irregular Terrain	142
<i>Schejbal, Vladimir; Fiser, Ondrej</i>	
The Volumetric Sources Reconstruction Method and its Applications to Geometry Reconstruction	146
<i>Alvarez Lopez, Yuri; Dominguez Casas, Belen Aranzazu; Garcia Gonzalez, Cebrian; Las-Heras Andres, Fernando</i>	
Design of a Dual-Focus Offset Reflector Antenna for a Rotating Mirror Microwave Scanner	151
<i>Knott, Peter; Von Wahl, N.; Heinen, S.</i>	
Element Correlation of MIMO Antennas on Small Terminals	155
<i>Martens, Robert; Manteuffel, Dirk</i>	
A Wide Range Propagation Model	160
<i>Michael, Willis; Bacon, D; Craig, K; Rudd, R</i>	
A High Gain Planar Antenna with Improved Bandwidth Using a Fabry-Pérot Resonator	165
<i>Mirbach, M.; Menzel, W.</i>	
On the Use of an Intelligent Ray Launching for Indoor Scenarios	169
<i>Lai, Z.; Bessis, N.; De La Roche, G.; Kuonen, P.; Zhang, J.; Clapworthy, G.</i>	
Impact of Number of Probe Antennas for MIMO OTA Spatial Channel Emulator	174
<i>Okano, Yoshiki; Kitao, Koshiro; Imai, Tetsuro</i>	
Fresnel Spiral Antenna for Detection at Visible and Far-Infrared Bands	179
<i>González, F. J.; Alda, J.</i>	
Optical Antennas as Nano-Probes in Photonic Crystals and Dielectric Waveguide Structures	183
<i>Gonzalez, Francisco J.; Alda, Javier</i>	
Wide Angle SAR for Stationary Applications	186
<i>Essen, Helmut; Wahlen, A; Sommer, R.; Johannes, W.</i>	
Measured and Computed In-Vehicle Field Distributions	189
<i>Low, L; Zhang, H; Rigelsford, J; Langely, R. J.</i>	
Electromagnetic Field Mitigation within a Cavity with Vehicle-like Features	192
<i>Zhang, H; Low, L; Rigelsford, J; Langley, R. J.</i>	
An Array Lens for Circular Polarization with Emphasis on Aperture Efficiency	196
<i>Phillion, R.; Okoniewski, M.</i>	
Design of 60-GHz CPW-Fed CMOS On-Chip Integrated Antenna-Filter	200
<i>Tsai, Kai-Hsiang; Yeh, Lung-Kai; Kuo, Pei-Chun; Chuang, Huey-U</i>	
Double-Layer Slotted Waveguide Array Antennas with Corporate-Feed by Diffusion Bonding of Laminated Thin Metal Plates	203
<i>Hirokawa, J.; Zhang, M.; Miura, Y; Ando, M.</i>	
Numerically Efficient Design Optimization of a Printed 2.45 GHz Yagi Antenna	208
<i>Koziel, Slawomir; Ogurtsov, Stanislav</i>	
Electro-Optical-Sensor for Near-Field Measurements of Large Antennas	211
<i>Thiele, L.; Geise, R.; Spieker, H.; Schüür, J.; Enders, A.</i>	
Compact Planar Monopole for Broad Band Applications	216
<i>Monti, Giuseppina; Tarricone, Luciano; Corchia, Laura; Valentino, Luca</i>	
Impact of Regulations on Feasible Distance Between 60GHz Devicex	219
<i>Smulders, Peter</i>	
Correlation on the Object Surface at mm-Wave	223
<i>Yoon, Youngkeun</i>	
A Slotted Waveguide Setup as Scaled Instrument-Landing-System for Measuring Scattering of an A380 and Large Objects	227
<i>Geise, R.; Schüür, J.; Thiele, L.; Nottè, K.; Beckers, T.; Enders, A.</i>	
Multi-Beam Leaky Wave Pillbox Antenna for Millimetre-Wave Applications	232
<i>Ettorre, M.; Sauleau, R.</i>	
Tunable Pass-Band FSS for Beam Steering Applications	235
<i>Russo, I.; Boccia, L.; Amendola, G.; Di Massa, G.</i>	
Building Penetration Loss Measurements for Satellite-to-Indoor Systems: Preliminary Results	239
<i>Kvicera, M.; Horak, P.; Korinek, T.; Zela, J.; Simunek, M.; Pechac, P.</i>	
Reduced Sideband Levels in Time-modulated Linear Arrays Using Time-symmetric Switching	243
<i>Tong, Y; Tennant, A.; Langley, R. J</i>	
Diversity Textile Antenna Systems for Firefighters	247
<i>Van Torre, P.; Vallozzi, L.; Rogier, H.; Verhaevert, J.</i>	
Experimental Investigation of a Smoothly Curved Antenna Array on a UAV-Nose Mock-up	252
<i>Pettersson, L.; Gunnarsson, R.; Lundén, O.; Leijon, S.; Gustafsson, A.</i>	
Composite Right-/Left-Handed Interdigital Leaky-Wave Antenna on a Substrate Integrated Waveguide	257
<i>Weitsch, Y.; Eibert, T. F.</i>	

Integration of Linearly- and Circularly- Polarized Arrays in Packages for 60-GHz Radios in LTCC Technology	262
<i>Sun, M.; Zhang, Y. P.; Ong, L. C.; Guo, Y. X.; Karim, M. F.</i>	
60 GHz Antennas in HTCC and Glass Technology	266
<i>Lanteri, J.; Dussopt, L.; Pillard, R.; Gloria, D.; Yamamoto, S. D.; Cathelin, A.; Hezzeddine, H.</i>	
Antenna Characterization Using the Sources Reconstruction Method	270
<i>Alvarez Lopez, Yuri; Las-Heras, Fernando; Rodriguez-Pino, Marcos</i>	
Calculation of Interference from Fixed Services to a Deep Space Earth Station	275
<i>Valtr, P.; Martellucci, A.</i>	
Wideband Multibeam Antenna for Integration in Small Platforms	280
<i>Ouacha, A.; Gunnarsson, R.; Pettersson, L.; Huss, L.-G.; Samuelsson, C.; Lindström, S.; Leijon, S.; Alfredsson, M.</i>	
Optimal Phase Distributions for Polygonal Fresnel Lenses	285
<i>Alda, Javier; Salgado-Remacha, F. J.; Sanchez-Brea, L. M.; Rico-Garcia, J. M.; Gonzalez, F. J.</i>	
Retrodirective Array Based RADAR	290
<i>Fusco, V.; Buchanan, N</i>	
Scanning Vehicular Lens Antennas for Satellite Communications	294
<i>Komljenovic, Tin; Sipus, Zvonimir; Daniel, Jean-Pierre</i>	
Modeling the Evolution of Number of Clusters in Indoor Environments	298
<i>Poutanen, Juh; Haneda, K.; Salmi, J.; Kolmonen, V.-M.; Vainikainen, P.</i>	
Low Profile Small Antenna Using Ferroelectrics Cube Based Artificial Magnetic Conductor	303
<i>Zhang, F; Lippens, D; Borja, A</i>	
Pencil Beam Patterns Obtained by a Planar Array of Parasitic Dipoles Fed by Only One Active Element	308
<i>Marcos, Alvarez-Folgueiras; Antonio, J. Rodríguez-González; Ares-Pena, Francisco J.</i>	
Helix Antenna with Parasitic Element for Axial Ratio Improvement	312
<i>Werker, Stephan; Kronberger, R.; Wienstroer, V.</i>	
SE-IT Joint M-AESA Program: Overview and Status	316
<i>Ouacha, A.; Fredlund, A.; Andersson, J.; Hindsefelt, H.; Rinaldi, V.; Scattoni, C.</i>	
Statistics of Multipath Component Clustering in an Office Environment	321
<i>Tanghe, E.; Joseph, W.; Lienard, M.; Nasr, A.; Stefanut, P.; Martens, L.; Degauque, P.</i>	
Infrared Focusing Mirror Based on Multilevel Reflectarray	326
<i>Ginn, James C.; Alda, Javier; Boreman, Glenn D.</i>	
Fast Array Thinning Using Global Optimization Methods	331
<i>Fernandez-Delgado, M.; Rodriguez-Gonzalez, J. A.; Iglesias, R.; Barro, S.; Ares-Pena, F.</i>	
The Multipath Simulator for Over the Air Testing	334
<i>Welinder, J; Fast, L; Bohlin, T; Manholm, L; Fast, L; Bohlin, T; Manholm, L; Welinder, J; Fast, L; Bohlin, T; Manholm, L</i>	
Angular Dispersion of Radio Waves Due to Rough Surface Scattering in Mobile Channels	338
<i>Kwakkernaat, Mrjae; Herben, Mhaj</i>	
Investigations and Design of Small-Size Printed Antennas on a Reactive Impedance Substrate	343
<i>Ren, C; Bernard, L; Sauleau, R</i>	
Experimental Validation of the UWB "Eared" Antenna for Impulse Radio Applications Tanyer-Tigrek, F. Muge; Lager, Ioan; Light	
<i>Ren, C; Bernard, L; Sauleau, R</i>	
Interference of Antenna and RF Front-End in an Integrated Radio	353
<i>Enayati, A.; Brebels, S.; Vasylychenko, A.; Deraedt, W.; Vandenbosch, G. A. E.</i>	
A Vialess Vertical Transition at Millimeter Wave Frequencies	357
<i>Enayati, Amin; Brebels, S.; Vasylychenko, A.; Deraedt, W.; Vandenbosch, G. A. E.</i>	
Route Diversity Characteristics on Two 38 GHz Star Terrestrial Paths	360
<i>Kvicera, Vaclav; Grabner, Martin</i>	
Different Aspects of the Interferences Caused by Wind Farms Over TV Signals	363
<i>Calo, Alejandro; Calvo, Miguel; De Haro Y Ariet, Leandro; Blanco-González, Pedro</i>	
Near-Field Ultra-Wideband Imaging with Two-Dimensional Sparse MIMO Array	368
<i>Zhuge, X.; Yarovoy, A</i>	
Combination of Geometric and Finite Difference Models for Radio Wave Propagation in Outdoor to Indoor Scenarios	372
<i>De La Roche, Guillaume; Flipo, Paul; Lai, Zhihua; Villemaud, Guillaume; Zhang, Jie; Gorce, Jean-Marie</i>	
Highly Integrated 8x8 Antenna Array Demonstrator on LTCC with Integrated RF Circuitry and Liquid Cooling	377
<i>Holzwarth, Sybille; Litschke, Oliver; Simon, Winfried; Kassner, Jürgen; Fischer, Horst; Serwa, Alexandra</i>	
A Low-Profile Dipole Type Passive UHF Band RFID Tag Antenna	381
<i>Wu, Sungjung; Lin, Chia-Ti; Tarn, Jenn-Hwan; Chao, Chi-Hung</i>	
Characteristics of Wristband Type RFID Antenna	385
<i>Takahashi, M; Nakajima, T; Saito, K; Ito, K</i>	
Design and Measurement Considerations for Implantable Antennas for Telemetry Applications	389
<i>Merli, F.; Skrivervik, A. K.</i>	
Experimental Comparison of MIMO OTA Testing Methodologies	394
<i>Kurita, D; Okano, Y; Nakamatsu, S; Okada, T</i>	
A Novel Paradigm for High Isolation in Multiple Antenna Systems with User's Influence	399
<i>Pelosi, Mauro; Knudsen, M. B.; Pedersen, G. F.</i>	
Quasi Optical Circulator X-Band Scale Model Utilizing a Circular Polarization Frequency Selective Surface	404
<i>Fusco, Vincent; Euler, M</i>	
Slot Arrays on Integrated Micromachined Waveguides	408
<i>Costanzo, Sandra; Di Massa, G.; Venneri, I.; Borgia, A.; Mazzarella, G.; Montisci, G.; Casula, A.</i>	

Integral Equation Macromodel of a Slot-Excited Microstrip Antenna	412
<i>Kucharski, Andrzej</i>	
Realization of a Horizontally Polarized, Low-profile, Omnidirectional Antenna with an EBG Reflector	416
<i>Nakano, Hisamatsu; Satake, R; Yamauchi, J</i>	
Vegetation Attenuation Measurements at 2 GHz Using a Remote-Controllable Airship: Initial Results	421
<i>Horak, P; Kvicera, M; Simunek, M; Pechac, P</i>	
In Body Path Loss Model for Homogeneous Human Muscle, Brain, Fat and Skin Tissues	425
<i>Kurup, Divya; Joseph, W; Vermeeren, G; Martens, L</i>	
Automated Synthesis of Shaped Beam Antenna Patterns with Implied Cross Coupling	429
<i>Reck, Christoph; Berold, U.; Schmidt, L.-P.</i>	
Frequency Selective Coupler for W Band Based on Power Transfer in Dielectric Rod Waveguides	433
<i>Pousi, J. P.; Dudorov, S. N.; Lioubtchenko, D. V.; Räsänen, A. V.</i>	
Channel Model for Tyre Pressure Monitoring Systems (TPMS)	437
<i>Lasser, Gregor; Mecklenbräuer, Christoph F.</i>	
Pulsed Radiation from a Loop Antenna in the Ionospheric Plasma	442
<i>Kudrin, A.; Shmeleva, N.</i>	
Oblique Incidence Optimisation of a Pyramidal Absorber Using a Frequency Selective Surface	447
<i>Ford, Kenneth; Chambers, B; Holtby, D</i>	
Optical and Modal Features of Hemielliptic Dielectric Lenses	451
<i>Boriskin, A. V.; Sauleau, R.; Nosich, A. I.</i>	
Application of the Shared Aperture Antenna Concept to Radar Front-Ends: Advantages and Limitations	456
<i>Lager, Ioan; Trampuz, C.; Simeoni, M.; Coman, C. I.; Lighthart, L. P.</i>	
Calibration Methods for Wideband Forward RCS Measurements	460
<i>Larsson, C; Gustafsson, M; Kristensson, G</i>	
Antenna Front-End Concepts of a Low-Cost Coherent Radar Demonstrator for S-Band Application	465
<i>Loecker, C.; Bertuch, T.; Knott, P.; Erkens, H.; Wunderlich, R.; Heinen, S.</i>	
Active Antenna Arrays at Ka-Band: Status and Outlook of the SANTANA Project	470
<i>Holzwarth, Sybille; Jacob, Arne; Dreher, Achim; Hunscher, Christian; Fischer, Horst; Stark, Alexander; Rohrdantz, Benjamin; Geise, Alexander; Kuhlmann, Karsten; Gieron, Roman; Litschke, Oliver; Lohmann, Dirk; Simon, Winfried; Buchner, Peter; Heckler, Marcos; Greda, Lukasz</i>	
Efficient Analysis of Slotted SIW	475
<i>Arneri, Emilio; Amendola, Giandomenico; Boccia, Luigi</i>	
Experimentally Assessed Underground Mines Propagation Model at High UHF Frequencies	479
<i>Moutairou, M. M.; Delisle, G. Y.; Genier, D.</i>	
Millimeter Wave Scattering and Attenuation Prediction from a Canopy of a Tree – Radiative Transport Theory	483
<i>Torrico, Saul; Lang, Roger</i>	
Distributed Multi-Function Antenna System for Micro-and Nano-Satellites	487
<i>Marrocco, G.; Mattioni, L.; Potenza, A; Milani, F; Giacomini, A.; Sabbadini, M.</i>	
Dual-Band Surface Wave Suppression Using Isolated Soft Surface Structures	491
<i>Cho, T. J.; Lee, H. M.</i>	
A Capacitively-Loaded PIFA Based Reader Antenna for Portable RFID Application	496
<i>Chao, Chi-Hung; Wu, Sungjung; Tarng, Jenn-Hwan</i>	
Low Specific Absorption Rate Wearable Antenna for WLAN Band Applications	500
<i>Kim, J. H.; Lee, H. M.</i>	
Wideband Shorted Backfire Antenna with L-Probe Fed Microstrip Patch	505
<i>Hazdra, Pavel; Mazánek, Miloš</i>	
UWB Receiving Photonic Antenna for Radio-over-Fiber Systems	508
<i>Yashchyshyn, Yevhen; Chizh, Alexander; Malyshev, Sergei; Modelski, Jozef</i>	
A Compact Ultra-Wideband Double Balun Feeding Network on a Single Layer PCB	512
<i>Zietz, C.; Armbrecht, G.; Rolfes, I.</i>	
Long Term Rain Attenuation Statistics from Short Term Experiments	517
<i>Matricciani, Emilio</i>	
Antenna Optimization Using Multi-Objective Algorithms	521
<i>Travassos, X. L.; Lima, M. M. B.; Vieira, D. A. G.; Lisboa, A. C.; Ida, N.</i>	
Loop Antenna for UHF Near-Field RFID Reader	526
<i>Chen, Z. N.; Goh, C. K.; Qing, X.</i>	
Investigation of Antenna Pattern Synthesis Through Higher Order Inverse Equivalent Current Method	530
<i>Ismatullah, Eibert, T. F.</i>	
Unidirectional Transmission Using Non-Symmetric Photonic-Crystal Gratings Made of Isotropic Materials	535
<i>Serebryannikov, A. E.</i>	
Characterization of the C-Band Wideband Satellite-to-Indoor Channel for Navigation Services	539
<i>Perez Fontan, F.; Nuñez, A; Hovinen, V; Schönhuber, M; Teschl, F.; Prieto Cerdeira, R; Kyrolainen, J; Roivainen, A</i>	
Antenna Frontends for Radar Applications	544
<i>Litschke, Oliver; Betray, Andreas; Holzwarth, Sybille; Lauer, Andreas; Martínez-Vazquez, Marta; Otto, Simon; Sanadgol, Bahram</i>	
Conformal Superstrate Loaded Automotive Radar Antenna for Integration in Polymer Car Body Panels	545
<i>Kilian, A.; Schmidt, L.-P.</i>	
Small Offset Parabolic Reflector Antenna Design and Analysis	550
<i>Krzysztofik, Wojciech</i>	

Mutual Coupling Between Multiple-Band Antennas on Small Ground Plane	554
<i>Chen, Z. N.; Yang, F.; See, Terence S. P.</i>	
Simulation Based Comparison of Metrics and Measurement Methodologies for OTA Test of MIMO Terminals	558
<i>Feng, Yifei; Krewski, Aleksander; Schroeder, Werner L.</i>	
Theoretical Analysis of Adequate Number of Probe Antennas in Spatial Channel Emulator for MIMO Performance Evaluation	563
<i>Imai, T.; Okano, Y.; Kitao, K.; Saito, K.; Miura, S</i>	
2GHz Channel Measurement in the Urban Environment and the Investigation of Channel Dynamic Properties	568
<i>Kitao, K.; Saito, K.; Imai, T.; Okano, Y.; Miura, S</i>	
Theoretical Design of a Simultaneous Ku/Ka-Band Feed-System	573
<i>Granet, Christophe; Davis, I. M.; Kot, J. S.; Pope, G.</i>	
TRP Measurement System by Compact Field Simulator	577
<i>Arai, Hiroyuki; Tanaka, T</i>	
A Novel Circular-Polarized Array Antenna Based on Substrate Integrated Waveguide for Satellite Communication	581
<i>Seo, T. Y.; Jung, E. Y.; Kang, J. H.; Lee, J. W.; Lee, T. K.; Lee, W. K.</i>	
An Efficient Propagation Model for Automatic Planning of Indoor Wireless Networks	585
<i>Dimitriou, Antonis; Siachalou, S.; Bletsas, A.; Sahalos, J. N.</i>	
Radiation Characteristics of a Planar Monopole Antenna Integrated with a 60GHz Band WPAN Module Using Organic Substrates	590
<i>Yoshida, Satoshi; Kameda, Suguru; Takagi, Tadashi; Tsubouchi, Kazuo</i>	
A SBR Code with GO-PO for Calculating Scattered Fields from Coated Surfaces	594
<i>Weinmann, F.; Nitschkowski, J.</i>	
Study of the Behaviour of a Two Layered High Impedance Surface with Electromagnetic Band Gap	598
<i>Capet, Nicolas; Martel, Cedric; Sokoloff, Jerome; Pascal, Olivier</i>	
Trade-Offs in Multi-Element Receiving Antennas with Superconducting Feed Lines	602
<i>Iacono, A.; Coenen, T. J.; Bekers, D. J.; Neto, A.; Gerini, G.</i>	
Super-Resolution UWB Radar Imaging Algorithm Based on Extended Capon with Reference Signal Optimization	607
<i>Kidera, Shouhei; Sakamoto, T; Sato, T</i>	
Performance of Ultra Wideband Antennas for Monitoring Water Accumulation in Human Bodies	612
<i>Pancera, Elena; Li, X.; Zwiello, L.; Zwick, T.</i>	
Tunable Multiband Antenna Using ENG ZORs	617
<i>Kim, Jeongpyo; Lee, Y; Choi, J</i>	
Effects of Bending a Planar Antenna Array on Its Scan Performance	621
<i>Huang, Mingda; Herben, M. H. A. J.</i>	
Multi-Standard UHF and UWB Low Profile Reader and TAG Antennas for RFID and Positioning Applications	626
<i>Deleryelle, Thibaut; Pannier, Philippe; Egels, Matthieu; Alarcon, Juvenal; Bergeret, Emmanuel</i>	
Frequency Reconfigurable Vivaldi Antenna	630
<i>Hamid, M.; Hall, P. S.; Gardner, P.; Ghanem, F.</i>	
A Method to Control Phased Array Antenna for Rain Fading Mitigation of 21-GHz Band Broadcasting Satellite	634
<i>Nakazawa, S; Nagasaka, M; Tanaka, S; Shogen, K</i>	
Impact of Internal Dielectric Components for Vehicle Models	639
<i>Ruddle, A.</i>	
Near-Field Mapping of Passive Intermodulation in Printed Circuits	644
<i>Shirvov, Alexey; Schuchinsky, Alexander; Zelenchuk, Dmitry</i>	
Computed SAR and Field Exposure Threat Assessment for Vehicle Occupants	648
<i>Ruddle, A.; Low, L.; Zhang, H.; Rigelsford, J.; Langley, R.</i>	
Frequency-Tunable Mobile Phone Antennas with Matching Circuits	653
<i>Liu, L.; Langley, R. J.</i>	
Could We Use UWB for Breast Cancer Detection?	657
<i>Hilger, I.; Geyer, C.; Rimkus, G.; Helbig, M.; Sachs, J.; Schwarz, U.; Hein, M. A.; Kaiser, W. A.</i>	
Half Truncated Icosahedral Passive Electromagnetic Deflector for the 60 GHz Band	661
<i>Kazim, M. I.; Herben, M. H. A. J.; Huang, M. D.</i>	
60 GHz Time-Variant Shadowing Characterization within an Airbus 340	666
<i>Garcia, A. Paolo; Kotterman, W.; Trautwein, U.; Brückner, D.; Kunisch, J.; Thomä, R. S.</i>	
A Dual-Band and Dual-Polarised Patch Antenna for Body Area Network	671
<i>Ma, Da; Zhang, Wen-Xun</i>	
Probe Based Radiation Pattern Measurements for Highly Integrated Millimeter-Wave Antennas	676
<i>Beer, S.; Zwick, T.</i>	
Simulation of Human Body Exposure in Extremely Low Frequency Electromagnetic Fields	681
<i>Chen, Xi Lin; Benkler, Stefan; Chavannes, Nicolas; Kuster, Niels</i>	
Pharmacist Cross Phase-Shifting Cell Loaded with MEMS Switches for Reconfigurable Reflectarrays	685
<i>Salti, H.; Fourn, E.; Gillard, R.; Girard, E.; Legay, H.</i>	
On the Frequency Dependence of UWB Indoor Channel Parameters: 3D Ray Tracing and Measurement	689
<i>Haddad, E.; Malhouroux, N.; Pajusco, P.; Ney, M.</i>	
Virtual Prototyping and Optimization of Mobile Phone Antennas with Genetic Algorithms	694
<i>Chen, Xi Lin; Ofli, Erdem; Chavannes, Nicolas; Kuster, Niels</i>	
Planar Antennas and Beamforming Devices for a Multi Gigabit 60 GHz Demonstrator with Quality of Service	698
<i>Herrero, Pablo; Schoebel, Joerg</i>	

A High Gain Array Antenna with Serially Fed Dipole Elements	703
<i>Liao, Wen-Jiao; You, Shen-Je</i>	
MM-Wave Lens Antenna with an Integrated LTCC Feed Array for Beam Steering	707
<i>Ala-Laurinaho, J.; Karttunen, A.; Säily, J.; Lamminen, A.; Sauleau, R.; Räsänen, A. V.</i>	
A Small Quad-Band Automotive Antenna	712
<i>Abbasi, Nisar A.; Langley, Richard J.</i>	
Magnetic Nanoparticles as a Contrast Agent for Microwave Breast Cancer Imaging	717
<i>Bellizzi, Gennaro; Bucci, O. M.; Catapano, I.</i>	
Novel Wide Tunable Dual-Band Reconfigurable Chassis-Antenna for Future Mobile Terminals	722
<i>Hu, Z. H.; Kelly, J. R.; Song, C. T. P.; Hall, P. S.; Gardner, P.</i>	
Reusing Antenna Radiator and Amplifier for FM and Other Complementary Bands in Mobile Terminals	727
<i>Kaikkonen, Andrei; Lindberg, Peter; Irmscher, Stefan</i>	
Towards GUI Interfaces Handling Complex Multi-Domain Antenna Siting Computations	730
<i>Barka, Andre; Martel, Cédric; Douchin, Nicolas; Rasoanaivo, Lalaina</i>	
Polarization Reconfigurable MEMS-CPW Antenna for Mm-Wave Applications	735
<i>Balcells, J.; Damgaci, Y.; Cetiner, B. A.; Romeu, J.; Jofre, L.</i>	
Advanced Radar Cross Section Clutter Removal Algorithms	740
<i>Bati, Andre; To, Long; Hilliard, Don</i>	
Incorporating Diffuse Scattering in Geometry-based Stochastic MIMO Channel Models	745
<i>Salmi, J.; Poutanen, J.; Haneda, K.; Richter, A.; Kolmonen, V.-M.; Vainikainen, P.; Molisch, A. F.</i>	
60 GHz Channel Characterization Using a Scatterer Mapping Technique	750
<i>Papio, A.; Grau, A.; Balcells, J.; Romeu, J.; Jofre, L.; De Flaviis, F.</i>	
Improved Butler Matrix Configuration for Smart Beamforming Operations	755
<i>Gotsis, K. A.; Kyriacou, G. A.; Sahalos, J. N.</i>	
A Reconfigurable H-Shape Antenna for Wireless Applications	759
<i>Abutarboush, Hattan; Nilavalan, R.; Nasr, K.; Al-Raweshidy, H.; Budimir, D.</i>	
Omnidirectional Dual-Reflector Shaping by Concatenating Conic Sections	763
<i>Moreira, F. J. S.; Bergmann, J. R.</i>	
Reconfigurable Multilayer Patch Antennas Based on Metamaterials	766
<i>Sanchez-Fernandez, Carlos J.; Quevedo-Teruel, Oscar; Ng Mou Kehn, Malcolm; Rajo-Iglesias, Eva</i>	
Target Location and Tracking Using Hybrid Sensor Networks	770
<i>Palaniappan, R.; Wahid, P.</i>	
A Rigorous Simulator of ILS Perturbations	774
<i>Thain, A.; Estienne, J-P; Peres, G; Spitz, B; Evain, L</i>	
Can A Physically Secure RFID Be Produced? A Review of RFDNA	779
<i>Dejean, G; Kirovski, D</i>	
Comparisons of Different Approaches for ILS Simulation	783
<i>Thain, A.; Estienne, J-P; Peres, G; Spitz, B; Evain, L; Kumar, M</i>	
An ITD Formulation for the Double Diffraction by a Pair of Wedges Illuminated by an EM Complex Source Point Expansion	788
<i>Canta, S. M.; Erricolo, D.; Toccafondi, A.</i>	
Reducing Complexity and Improving the Reliability of Frequency Reconfigurable Antennas	793
<i>Costantine, J.; Tawk, Y.; Christodoulou, C. G.; Abdallah, C. T.</i>	
Performance Comparison of Corrugated and Smooth-Walled Spline-Profile 31.3-45 GHz Horns for ALMA	797
<i>Granet, Christophe; Mena, P.; Zorzi, P.; Davis, I. M.; Kot, J. S.; Pope, G.</i>	
Design, Manufacture and Test of an Optimized Horn for a Holography Experiment	800
<i>Granet, Christophe; Kesteven, M. J.; Smart, K. W.</i>	
Indoor Service Coverage Predictions: How Good is Good Enough?	805
<i>Wagen, J.-F.</i>	
Novel Antenna Configuration for HF- and UHF-Band Hybrid Card-Type RFID Tags	810
<i>Nishioka, Yasuhiro; Hitomi, Kenzaburo; Mizuno, Tomohiro; Okegawa, Hirokatsu; Fukasawa, Toru; Miyashita, Hiroaki; Konishi, Yoshihiko</i>	
A Modified Printed Monopole Antenna for Ultra-Wideband Applications	815
<i>Adnan, Shahid; Abd-Alhameed, Raed; Hraga, Hmeda; Bin-Melha, Mohammad; Elkhazni, Elmahdi; Jones, Steve</i>	
Extended Hemispherical Silicon Lens Excited by a Leaky Wave Waveguide Feed	819
<i>Llombart, N.; Chattopadhyay, G</i>	
Dipole Uniform Circular Array Backed by a Cylindrical Reflector	823
<i>Cai, Yong; Guo, Y. J.</i>	
A Miniature Circularly Polarization Patch Antenna Using E-Shaped Shorting Strip	828
<i>So, K. K.; Wong, H.; Luk, K. M.; Chan, C. H.; Xue, Q.</i>	
Non-Foster Networks for Improvement of Radiation Efficiency and Effective Diversity Gain of a Multi-Port Antenna	831
<i>Karlsson, Kristian; Carlsson, Jan</i>	
60 GHz Substrate Integrated Waveguide Fed Steerable LTCC Antenna Array	835
<i>Sanadgol, B.; Holzwarth, S.; Milano, A.; Popovich, R.</i>	
Benefitting from Spatial Diversity in KA and W Band Deep-Space Communications	839
<i>Arapoglou, P.-D. M.; Panagopoulos, Athanasios D.</i>	
Quantification of the Effect of the Non-Idealities in Impulse Radio UWB Systems	844
<i>Pancera, E.; Timmermann, J.; Zwick, T.; Wiesbeck, W.</i>	

Simulation Approaches for Resonant Environments	848
<i>Davenport, E. M.; El Hachemi, M.</i>	
Post-Wall Slotted Waveguide Array Antennas for a Broadband Communication System in 60GHz	852
<i>Yamaguchi, Satoshi; Goto, Jun; Takahashi, Toru; Otsuka, Masataka; Nishino, Tamotsu; Konishi, Yoshihiko</i>	
Miniaturization Techniques Applied to Standard CMOS Technology Integrated Antennas	857
<i>Gemio, Joan; Parron, Josep; Sacristan, Jordi; Vila, Fortia; Serra, Francesc; Baldi, Antoni; De Paco, Pedro</i>	
Shirt Collar Tag for Wearable UHF RFID Systems	861
<i>Kellomaki, Tiiti; Bjorninen, Toni; Ukkonen, Leena; Sydanheimo, Lauri</i>	
Design of Inclined and Displaced Slotted Waveguide Array Antennas with Low Sidelobe Radiation Patterns	866
<i>Yamaguchi, Satoshi; Miyashita, Hiroaki; Takahashi, Toru; Nishino, Tamotsu; Konishi, Yoshihiko</i>	
Textile Microstrip Array Antenna on Three Dimensional Orthogonal Woven Composites	871
<i>Zhong, Shun-Shi</i>	
Compact Two-Arm Slot Spiral Array Antenna without Bulun	873
<i>Shun-Shi, Zhong</i>	
Behavioral Model of Solid State Power Amplifiers (SSPAs) for Agile Antennas Application	876
<i>Zakka El Nashef, G.; Torres, F.; Reveyrand, T.; Mons, S.; N'Goya, E.; Monediere, T.; Quere, R.</i>	
Control of the Radiation Properties of a FSS Loaded Leaky-Wave Antenna	880
<i>Garcia-Vigueras, M.; Guzman-Quiros, R.; Gomez-Tornero, J. L.; Quesada-Pereira, F. D.; Alvarez-Melcon, A.</i>	
Development of an Electromagnetic Macro-model for Reconfigurable Array Application	884
<i>Zakka El Nashef, G.; Torres, F.; El Sayed Ahmad, A.; Monediere, T.; Thevenot, M.; Mons, S.; N'Goya, E.; Quere, R.</i>	
Optimal Compromise in the Channels of Monopulse Antennas: Use of Subarrays and Distributions with Common Aperture Tail	888
<i>Alvarez-Folgueiras, M.; Rodriguez-Gonzalez, J. A.; Ares-Pena, F.</i>	
Antenna Pattern Correction Using Cauchy-Gauss Modelling	892
<i>Gonzalez-Ayestaran, Rafael; Leon, German; Lored, Susana; Las-Heras, Fernando</i>	
Dual Printed Dipole Design Method	896
<i>Reig, C.; Ávila-Navarro, E; Carrasco, J. A.</i>	
Evaluation of Diffuse Scattering Contribution for Delay Spread and Crosspolarization Prediction in an Indoor Scenario	900
<i>Mani, Francesco; Oestges, Claude</i>	
Numerical Examination of EM Wave Shadowing by Human Body	904
<i>Yokota, Mitsuhiro; Ikegami, T.; Ohta, Y.; Fujii, T.</i>	
Rigorous Solutions of Scattering Problems Involving Red Blood Cells	908
<i>Ergul, Ozgur; Arslan-Ergul, Ayca; Gurel, Levent</i>	
Empirical Time-Spatial Propagation Formula for Outdoor LOS Environments	912
<i>Fujii, Teruya; Ohta, Yoshichika; Omote, Hideki; Sugita, Y</i>	
Design, Fabrication and Measurement of a Dual-Band Circularly-Polarized Stacked Microstrip Antenna for Galileo and GPS	916
<i>Ramirez, M.; Parron, J.</i>	
Multipoint Antenna Systems for MIMO and Diversity	920
<i>Chaudhury, S. K.; Chaloupka, H.; Zirot, A.</i>	
Particle Swarm Optimization Applied to Planar Arrays Synthesis Using Subarrays	925
<i>Lanza, M.; Perez, J. R.; Basterrechea, J.</i>	
Physical Channel Modeling for Static Mobile Terminals in Indoor Environments	930
<i>Fujii, Teruya; Ohta, Yoshichika</i>	
Extension of the Hybrid FE/MLFMM-UTD Method to Finite Curved Objects	935
<i>Balasubramanian, Manushanker</i>	
Antenna Diversity with Opportunistic Combining for ASK Systems with Single Channel Receivers	939
<i>Jobs, M.; Gruden, M.; Hallbjörner, P.; Rydberg, A</i>	
Chipless Tags for RF and THz Identification	944
<i>Tedjini, S.; Perret, E.; Deepu, V.; Bernier, M.; Garet, F.; Duvillaret, L.</i>	
Characterization of Phantom Size and Link Budget for Off-Body Communications	949
<i>García, J.; Arriola, A.; Sasiain, G.; Valderas, D.; Sancho, J. I.; Chen, X.</i>	
Multilayer Antennas for Directive Beam Steering Broadside Radiation and Circular Polarization	954
<i>Podilchak, Symon; Freundorfer, A. P.; Antar, Y. M. M.</i>	
Propagation Model for Estimating VOR Bearing Errors in the Presence of Windturbines	959
<i>Morlaas, Christophe; Chabory, Alexandre; Souny, Bernard</i>	
Comparison of Different Strategies for Conversion of Triangular Mesh into Quadrilateral Mesh	964
<i>Kolundzija, B.; Kostic, M.; Mrdakovic, B.; Sunic, D.</i>	
Low Profile Dipole Antenna Backed by Isotropic Artificial Magnetic Conductor Reflector	969
<i>Al-Nuaimi, M. K. T.; Whittow, W. G</i>	
Near Field / Far Field RFID Tag Antenna	974
<i>Iliev, Plamen; Le-Thuc, P.; Staraj, Robert; Luxey, C.</i>	
Compact Microstrip Band Stop Filter Using SRR and CSSR:Design,Simulation and Results	978
<i>Al-Nuaimi, M. K. T.; Whittow, W. G</i>	
Large Antennas Characterization: Far - Field Reconstruction Using Outdoor Transient Measurements for Narrow and Wide Band Radiating Sources	983
<i>Rammal, Rabia; Lalande, Michele; Martinod, Edson; Feix, Noel; Jouvet, Marc; Jecko, Bernard</i>	
Recent Advances in Submillimetre Wave FSS Technology for Passive Remote Sensing Instruments	986
<i>Dickie, R; Cahill, R; Mitchell, N; Gamble, H; Fusco, V; Munro, Y; Rea, S</i>	

High-Efficient Slot-Coupled Superstrate Antenna for 60Ghz WLAN Applications	991
<i>Vettikalladi, Hamsakutty; Lafond, Olivier; Himdi, Mohamed; Le Coq, Laurent</i>	
An Innovative Multibeam Antenna Based on an Active Aperiodic Lens	996
<i>Ruggerini, G; Toso, G; Angeletti, P</i>	
Wearable Textile GPS Antenna for Integration in Protective Garments	1000
<i>Vallozzi, L.; Vandendriessche, W.; Rogier, H.; Hertleer, C.; Scarpello, M.</i>	
RFID-Network Planning by Particle Swarm Optimization	1004
<i>Di Giampaolo, E.; Marrocco, G.; Forni, F.</i>	
A Novel Phase Only Excitation Law for Omnidirectional Arrays	1009
<i>Petrolati, Daniele; Angeletti, P; Toso, G</i>	
A Compact Circular Horn with High Aperture Efficiency	1014
<i>Ruggerini, G</i>	
Issue of IEEE 802.20 Vehicular-A Delay Profile Model on Estimating Received Signal Level Variation of Wideband Signal	1017
<i>Kameda, S.; Oguma, H.; Izuka, N.; Asano, Y.; Yamazaki, Y.; Takagi, T.; Tsubouchi, K.</i>	
Analysis of Antennas in the Presence of Large Composite 3-D Structures with Linear Embedding via Green's Operators (LEGO) and a Modified EFIE	1022
<i>Lancellotti, V.; De Hon, B. P.; Tijhuis, A. G.</i>	
Integrated Miniaturized Antennas for Automotive Applications	1027
<i>Orefice, Mario; Vietti, G; Dassano, G</i>	
An Efficient Technique to Accelerate the Simulation of Passive Shielded Microwave Circuits	1031
<i>Golestani-rad, Laleh; Mattes, Michael; Mosig, Juan R.</i>	
Circularly Polarized Electronically Steerable Parasitic Array Radiator for Satellite Communication	1035
<i>Liu, Haitao; Gao, Steven; Loh, Tian Hong</i>	
Simulation and Performance Prediction for the Radiation Patterns of Few-Moded and Multi-Moded Corrugated Horns	1039
<i>Peacocke, Tully; Murphy, J. A.</i>	
Improvement and Validation of Design Tools for MM-Wave Instrument Antennas by Advanced Measurement Techniques	1044
<i>Hartmann, Juergen; Steiner, Hans-Juergen; Habersack, Juergen; Paquay, Maurice</i>	
Recent Developments on Reconfigurable Band-Filtering Antennas	1049
<i>Perruisseau-Carrier, Julien; Pardo-Carrera, Pablo</i>	
A Long Read Range RFID Tag Design for Metallic Objects	1053
<i>Chen, S.-L.; Mittra, R.</i>	
Metamaterial-Enabled Transformation Optics Lenses for Antenna Applications	1056
<i>Turpin, J. P.; Jiang, Z. H.; Kwon, D.-H.; Werner, P. L.; Werner, D. H.</i>	
Modeling of Magnetic and Conductive Heterostructures for Computation of Microstrip Antenna Characteristics	1061
<i>Grange, F.; Delaveaud, C; Mahdjoubi, K</i>	
Application of Characteristic Modes Analysis in the Design of Multi-Access Antennas for an Opportunistic Radio System	1066
<i>El Hajj, W.; Gallee, F.; Person, C.</i>	
Scattering from Rough Surfaces at Low Grazing Incidence	1071
<i>Saillard, Marc; Soriano, Gabriel</i>	
Physical Optics for Large Scale Electromagnetic Scattering Problems	1074
<i>Pouliguen, Philippe; Hémon, Régis; Damiens, Jean-François</i>	
Combined Lego-Eigencurrent Approach for Enhanced Solution of Electrically Large 2-D EBG Structures	1078
<i>Duque, D.; Lancellotti, V.; De Hon, B. P.</i>	
Combined Effects of Wind Speed and Wind Direction on Received Signal Strength in Foliated Broadband Fixed Wireless Links	1083
<i>Chua, T. H.; Wassell, I. J.; Rahman, T. Abd</i>	
Frequency Agile Small Smart Antenna	1088
<i>Liu, Haitao; Gao, Steven; Loh, Tian Hong</i>	
Broadband Cloaking of Struts Using Transmission-line Networks	1092
<i>Siaka, Francis; Laurin, J-J; Koodiani, S. F.; Demers, Y.; Demaagt, P.</i>	
Ultra-Narrow Bandwidth Filters Based on Highly Dispersive Metamaterial Basic Cells	1097
<i>Lucas Borja, Alejandro; Carbonell, Jorge; Cascon, Joaquín; Boria, Vicente E.; Lippens, Didier</i>	
Modeling of Multipath Propagation Components Caused by Trees and Forests	1102
<i>Schubert, F. M.; Fleury, B. H.; Robertson, P.; Prieto-Cerdeira, R.; Steingass, A; Lehner, A</i>	
Planar Metamaterial Guiding from the Perspective of Geometrically Induced Surface Plasmons	1107
<i>Navarro-Cia, M.; Agrafiotis, S.; Beruete, M.; Falcone, F.; Sorolla, M.; Maier, S. A.</i>	
Design and Analysis of MIMO Antennas for UWB Communications	1110
<i>Najam, Ali Imran; Duroc, Y.; Tedjini, S.</i>	
Antenna Directivity Enhancement Using a Metamaterial Parabolic Lens	1115
<i>Navarro-Cia, M.; Beruete, M.; Falcone, F.; Sorolla, M.; Campillo, I.</i>	
Electrically Small Magnetic Dipole Antennas with Magnetic Core	1118
<i>Kim, O. S.; Breinbjerg, O.</i>	
Anisotropic Behaviour and Negative Refraction in Stacked Subwavelength Hole Arrays Metamaterials	1122
<i>Navarro-Cia, M.; Beruete, M.; Falcone, F.; Sorolla, M.; Campillo, I.</i>	

Near-Field Amplitude-Only Measurement System to Validate Performance of mm-Wave Antennas	1125
<i>Deshpande, Manohar; Zhaonan, Z.; Star, David; Racette, Paul; Hersey, Ken; Marx, Cathy; Cornelis, Dutoit; Mahnad, Ali; Deshpande, Manohar</i>	
Optimized Dimensions of Ultra Wideband Quasi-Complementary Antenna with Switching Capability	1130
<i>Senkki, M.; Ferrando-Bataller, M.; Antonino-Daviu, E.; Salonen, E.</i>	
Mini Cell Metallo Dielectric Antenna Based on Extraordinary Transmission Principle	1134
<i>Francisco, Falcone; Illescas, J.; Estevez, A.; Marcotegui, A.; Beruete, M.</i>	
Behaviour of Subwavelength vs Propagating Holes in Extraordinary Transmission Based Prisms	1137
<i>Navarro-Cia, M.; Beruete, M.; Falcone, F.; Sorolla, M.; Campillo, I.</i>	
Interpolation Scheme for Efficient Computation of the Reaction Terms in the Characteristic Basis Functions Method (CBFM)	1141
<i>Della Giovampaola, C.; Mittra, R.; Du, K.; Toccafondi, A.</i>	
Terahertz Subsurface Imaging System	1145
<i>Nova, E.; Abril, J.; Guardiola, M.; Capdevila, S.; Broquetas, A.; Romeu, J.; Jofre, L.</i>	
Design & Characterization of an Antenna System for UWB-MIMO Communications Systems	1150
<i>Najam, Ali Imran; Duroc, Y.; Tedjini, S.</i>	
Hierarchical Fast MoM Analysis of Large Multiscale Wire-Surface Structures	1155
<i>Viptiana, F.; Francavilla, M. A.; Vecchi, G.; Wilton, D. R.</i>	
Wideband Multielement Antenna with Symmetrical Chassis Coupling	1159
<i>Senkki, Marko; Antonino-Daviu, E.; Ferrando-Bataller, M.; Salonen, E.</i>	
How Much Can Be Reduced the Internal FM Antenna of Mobiles Phones?	1162
<i>Borja, Carmen; Anguera, Jaume; Puente, Carles; Verges, Jordi</i>	
FIDA3: A Novel Active Array Design for the Mid-Frequency Range of the Square Kilometre Array	1167
<i>Garcia-Muñoz, L. E.; Garcia-Perez, O.; Gonzalez-Posadas, V.; Vazquez-Roy, J. L.; Segovia-Vargas, D.; Serna-Puente, J. M.; Finn, T.; Lopez-Fernandez, J. A.</i>	
Measurement of the Electrical Characteristics of Vegetation in a Dense Jungle	1171
<i>Assis, Mauro; Pinto Filho, Rafael</i>	
Active Antenna Oscillator Systems in Substrate Integrated Waveguide (SIW) Technology	1175
<i>Giuppi, F.; Georgiadis, A.; Bozzi, M.; Collado, A.; Perregrini, L.</i>	
A High-impedance Surface Based Antenna - Lose the Antenna	1179
<i>Liuukkonen, O.; Karilainen, A. O.; Vehmas, J.; Simovski, C.; Tretyakov, S. A.</i>	
Spherical Modal Analysis of a Patch Array Dielectric Lens Antenna	1184
<i>Ravishankar, S; Rukmini, T S; Ravishankar, A</i>	
SAR Reduction of Wearable Antennas Using Polymeric Ferrite Sheets	1188
<i>Augustine, Robin; Alves, Thierry; Zhadobov, Maxim; Poussot, Benoit; Sarrebourg, Thierry; Sauleau, Ronan; Mathew, Thomas. K; Laheurte, Jean Marc</i>	
Experimental Analysis of Electromagnetic Scattering by Rotating Blades	1191
<i>Meng, Z. J.; Lu, M. Y.; Wu, Z.</i>	
Efficient Analysis of Radiating Problems by Hybrid FDTD/PO Method	1194
<i>Noga, A.; Topa, T.</i>	
Pattern and Polarization Reconfigurable CRLH Leaky Wave Antenna	1198
<i>Piazza, D; D'Amico, M</i>	
Evaluation of Array Calibration Methods for DOA Estimation in Presence of Ground, Mutual Coupling and Near Zone Objects	1203
<i>Mirkamali, A.; Nateghi, J.; Hadidian, H.</i>	
A Multistatic Radar Concept for Increased Robustness in Level Measurements	1207
<i>Rabe, Hanno; Denicke, E.; Zietz, C.; Armbrrecht, G.; Rolfes, I.</i>	
Channel Characterization for Intra-Vehicle WSN in the ISM Bands	1212
<i>D'Errico, Raffaele; Rudant, L.; Keignart, J.</i>	
A Circularly Polarized Broadside Scanning Patch Array	1217
<i>Cameron, T. R.; Sutinjo, A. T.; Okoniewski, M.</i>	
Delay Dispersion of the On-Body Dynamic Channel	1220
<i>D'Errico, R.; Ouvry, L.</i>	
Recent Advances in EM Cancer Treatments	1225
<i>Neufeld, Esra; Paulides, Maarten; Capstick, Myles; Van Rhoon, Gerard; Kuster, Niels</i>	
Beam-Steering MEMS-Loaded Antenna Based on Planar Transmission Lines	1228
<i>Tomas, Zvolensky; Chicherin, D; Raisanen, A; Simovski, C</i>	
Design of Steerable Concentric Rings Array Using Rotation Properties and Evolutionary Optimization	1232
<i>Reyna, A; Panduro, M</i>	
Mobile User Location in Dense Urban Environment Using Unified Statistical Model	1237
<i>Tsalolihin, E.; Bilik, I.; Blaunstein, N.</i>	
2D Microwave Tomographic System for Extremities Imaging: Initial Performance Assessment in Animal Trial	1242
<i>Semenov, Serguei; Kellam, J.; Williams, T.; Quinn, M.; Nair, B.</i>	
A Design Guide for Co-Siting and Sharing of Mobile Radio Access Network Resources	1244
<i>Romo, Juan Antonio; Del Portillo, Álvaro; Fernández Anitzine, Ignacio</i>	
Array Antennas for Passive Covert Radar Applications	1249
<i>Coman, Cristian; Gelsema, S.; Stolk, C.</i>	
A Compact Hybrid Internal MIMO Antenna for LTE Application	1253
<i>Yu, Yeonsik; Kim, Giho; Ji, Jeongkeun; Seong, Wonmo</i>	

Enhancement of H-Plane Scanning Characteristics in Beam-Steering Grids	1255
<i>Martynyuk, Alexander E.; Iturri-Hinojosa, Alejandro; Martynyuk, Ninel A.</i>	
Design of an Internal Broadband Antenna Using Zeroth Order Resonator for Mobile Terminals	1259
<i>Kim, Gihoo; Yu, Yeonsik; Ji, Jeongkeun; Seong, Wonmo</i>	
Omnidirectional Circularly Polarized Antenna Using Zeroth-Order Resonance of Metamaterial Transmission Line.....	1261
<i>Park, Byung-Chul; Lee, Jeong-Hae; Tae, Heung-Sik</i>	
Low Complexity MIMO Beamforming Scheme for Millimeter-Wave Wireless Personal Area Network	1263
<i>Lee, Hyun-Ho; Jeon, Taehyun; Ko, Young-Chai</i>	
Design and Analysis of an Optimized Cavity-Backed Zigzag Archimedean Spiral Antenna.....	1268
<i>Rahman, N; Sharma, A; Afsar, M. N.; Cheung, R; Palreddy, S</i>	
Development of a THz Photoconductive Horn Antenna	1272
<i>Huang, Yi; Li, D; Shen, Y; Vickers, A</i>	
Fading Channel Modelling for Fixed Terminal in Outdoor NLOS Condition.....	1276
<i>Ohta, Yoshichika; Fujii, T</i>	
A Portable Broadband Monitoring System for Electromagnetic Radiation Assessment.....	1281
<i>Mavromatis, Fanis; Samaras, Theodoros; Koukourlis, Christos; Sahalos, John</i>	
Reconstruction of Antenna Radiation Pattern at 310 GHz Using Image Compression Methods.....	1286
<i>Puskely, Jan; Novacek, Zdenek</i>	
Arrival Angular Profile Modeling at Mobile Station for Cellular Systems	1291
<i>Omote, Hideki; Ohta, Yoshichika; Fujii, Teruya</i>	
A Study of Extended Hemispherical Lenses for a High-Gain Beam-Steering Antenna.....	1296
<i>Karttunen, A.; Ala-Laurinaho, J.; Sauleau, R.; Räsänen, A. V.</i>	
Advanced Antenna of Microwave Imager/Sounder for Spacecraft "Meteor-M"	1301
<i>Cherny, I. V.; Chernyavsky, G. M.; Gorobets, N. N.</i>	
A Novel Three-Dimensional Hybrid Spatial Model for Wideband MIMO Channel in Indoor Environments.....	1303
<i>Tamg, Jenn-Hwan; Chang, Wei-Ju; Wu, Sung-Jung</i>	
Optimization of an X-Band Spline-Profile Horn for a Military SATCOM Terminal.....	1308
<i>Granet, C.; Davis, I. M.; Kot, J. S.; Pope, G.; Verran, K.</i>	
Perspectives for Mobile Satellite Communications in Ka-Band (MOSAKA)	1311
<i>Hein, Matthias; Bayer, H; Krauss, A; Stephan, R; Volmer, C; Heuberger, A; Eberlein, E; Keip, C; Mehnert, M.; Mitschele-Thiel, A; Driess, P; Volkert, T</i>	
Beamforming Networks Using Reduced Size and Cascaded Butler Matrices.....	1316
<i>Rahim, A. S. K; Muhammad, N. A; Rahman, A. T</i>	
Circular Polarization Generating Coaxial to Waveguide Adapter for Horn Antenna	1320
<i>Jeon, K. J.; Lee, K; Lee, T. K.; Lee, J. W.; Lee, W. K.</i>	
A New Concept for Dual Gridded Reflectors.....	1324
<i>Ekstrom, H; Petersson, M; Baunge, M; Ingvarson, P</i>	
Urban Indoor Signal Level Characterization in the Medium Wave Band	1329
<i>Fernandez, Igor; De La Vega, David; Angueira, Pablo; Guerra, David; Abaigar, Andoni</i>	
Application of the Bilateral Dual-Grid FDTD Method to the Calculation of Specific Absorption Rate in Fetal Brain.....	1334
<i>Miry, Celine; Bosch-Gayan, M.; Loison, R.; Gillard, R.</i>	
Miniaturized Multipurpose Dual UHF RFID Band Antenna	1337
<i>Ali Babar, A.; Ukkonen, L.; Sydanheimo, L.</i>	
Versatile Ultrawideband Sensor for Near-Field Microwave Imaging.....	1341
<i>Bourqui, J.; Fear, E. C.; Okoniewski, M.</i>	
Time Domain Reflection Technique for Microwave Non Destructive Testing of Steel Fiber Reinforced Concrete.....	1346
<i>Roqueta Crusats, Gemma; Romeu, J.; Jofre, L.</i>	
Improvement of Channel Capacity of Near-Field Mimo	1351
<i>Hirayama, Hiroshi; Matsui, Gen; Kikuma, Nobuyoshi; Sakakibara, Kunio</i>	
Analyses of the Frequency and Time Variation of Radio Signals Scattered by a Wind Turbine	1355
<i>Etayo, I; Satrustegui, A; Yabar, M; Lopez, A; Falcone, F</i>	
The Influence of Dynamic Changes of Indoor Scenarios on Electromagnetic Wave Propagation	1358
<i>Subrt, Ludek; Pechac, Pavel</i>	
Study on the Sensitivity of Image Reconstruction to the Measurement Uncertainty in Microwave Tomography.....	1363
<i>Zeng, X; Fhager, A; Persson, M</i>	
The Use of Infinitesimal Dipoles and the Spherical Wave Expansion for Planar Antennas Modeling	1367
<i>Serhir, Mohammed; Besnier, Philippe; Ribiere-Tharaud, Nicolas; Drissi, M'Hamed</i>	
Comparison of the Satellite-to-Indoor Broadband Channel at 1.51 GHz and 5.2 GHz.....	1372
<i>Jost, Thomas; Wang, Wei; Urda-Munoz, Jesus; Fiebig, Uwe-Carsten; Perez-Fontan, Fernando</i>	
Modified Equivalent Current Approximation (MECA) Applied to Radioelectric Coverage Evaluation in Rural Scenarios.....	1377
<i>Gutierrez-Meana, J; Martinez-Lorenzo, J. A.; Rappaport, C; Las-Heras, F</i>	
New Method for Estimating Outage Intensity for Various Propagation Path Categories.....	1381
<i>Ito, T; Kita, N; Sugiyama, T</i>	
RFID Array Sensing.....	1386
<i>Capdevila, S.; Jofre, L.; Romeu, J.; Bolomey, J. Ch.</i>	
Optimization of Multilayer Frequency Selective Surfaces Using the Binary Particle Swarm Optimization Algorithm	1391
<i>Gutierrez, Angel; Perez, Jesus Ramon; Basterrechea, Jose</i>	

Design of 2-Bit Dual-Polarised Unit-Cell for Reflectarray Applications	1396
<i>Pereira, Roger; Gillard, Raphael; Sauleau, Ronan; Potier, Patrick; Le Coq, Laurent; Delestre, Xavier; Soiron, Michel</i>	
Reconfigurable Active Reflector Based on High Impedance Surface	1400
<i>Ratajczak, Philippe; Baracco, J. M.; Brachat, P.; Fargeas, J. M.</i>	
Aperture Antenna Modelling by a Finite Number of Elemental Dipoles from Truncated Spherical Field Measurement.....	1404
<i>Serhir, Mohammed; Geffrin, Jean-Michel; Litman, Amelie; Ribiere-Tharaud, Nicolas; Besnier, Philippe</i>	
New Measurement Method of the Reflection Phase Coefficient of High Impedance Surface	1409
<i>Ratajczak, Philippe; Baracco, J. M.; Brachat, P.</i>	
Negative Index Subwavelength Arrays Operating at 0.5 THz	1413
<i>Lheurette, Eric; Garet, F; Croenne, C; Carbonell, J; Coutaz, J-L; Lippens, D</i>	
Design of a Balanced-Fed Patch-Excited Horn Antenna at Millimeter-Wave Frequencies	1417
<i>Methfessel, Sebastian; Schmidt, Lorenz-Peter</i>	
Surface Wave Losses in Printed Antennas Over Magneto-Dielectric Materials.....	1421
<i>Niamien, Constant; Collardey, Sylvain; Mahdjoubi, Kouroch; Sharaiha, Ala</i>	
Boundary Versus Core Conditions for the Control of Electromagnetic Waves by Electromagnetic Transformations.....	1425
<i>Lippens, Didier; Croenne, Charles</i>	
Robust Antenna Diagnostics Method Using Equivalent Elemental Dipoles and the Spherical Wave Expansion.....	1427
<i>Serhir, Mohammed; Ribiere-Tharaud, Nicolas; Picard, Dominique</i>	
Different Feeding Mechanisms for Aperture Coupled Patch Arrays.....	1432
<i>Hertl, Ivo; Strycek, Michal</i>	
Optical Approximations for Simulations of Submillimeter Systems	1435
<i>Zvanovec, Stanislav; Subrt, Ludek</i>	
A Self-Consistent FDTD Model of Plasma Antennas	1438
<i>Vecchioni, Eleonora; Cerri, Graziano; Russo, Paola</i>	
Branches Modelling in Forest Electromagnetic Propagation and Scattering at L and P Bands.....	1442
<i>Borderies, Pierre; Villard, Ludovic</i>	
Power Divider in Ridge Gap Waveguide Technology	1446
<i>Alfonso, E; Baquero, M; Valero-Nogueira, A; Herranz, J. I; Kildal, P.-S</i>	
An Eight Element Broadband Antenna for AMPS+GSM Applications	1450
<i>Perikos, G.; Rigelsford, J.</i>	
Simulation of Indoor LTE Behaviour	1453
<i>Esparza, F; Torres, V; Beruete, M; Lopez, A; Falcone, F</i>	
Review and Update of Mobile Data Processing for the Land Mobile Satellite Channel Modelling.....	1456
<i>Montenegro Villacieros, Belen; Oestges, Claude; Vanhoenacker Danielle, Danielle; Prieto Cerdeira, Roberto; Martellucci, Antonio</i>	
Multi-Purpose 3D Spherical System for Electromagnetic Tests	1460
<i>Poyatos, D.; Escot, D.; Aguilar, J. A.; Montiel, I.</i>	
Comparison and Application of FDTD and Ray Optical Method for Indoor Wave Propagation Modeling.....	1465
<i>Nagy, Lajos</i>	
Analysis of Parabolic Reflectarray in Dual-Reflector Configuration.....	1468
<i>Tienda, C.; Arrebola, M.; Encinar, J. A.; Toso, G.</i>	
Specific Usage of a Wire-Grid Polarizer for Millimeter Waves.....	1473
<i>Piksa, Petr; Zvanovec, Stanislav</i>	
The Wireless Power Supply with the Use of Coupling Surface.....	1476
<i>Kracek, J.; Mazanek, M.</i>	
Design for License Plate RFID Tag Antenna with Dual Resonance to Improve Identification Ratio	1479
<i>Park, Dea-Hwan; Kyeong-Sik, Min</i>	
Analysis of Abilities to Achieve Overlapped Radiating Apertures Using Multi-Feed EBG Structure Loaded by Passive Filters.....	1483
<i>Chreim, H.; Chantalat, R.; Thevenot, M.; Naeem, U.; Bila, S.; Verdeyme, S.; Monediere, T.; Dumon, P.; Diez, H.; Palacin, B.; Pacaud, D.; Cailloce, Y.; Caille, G.</i>	
Evaluation of a Wideband Crossed Exponentially Tapered Slot Printed Antenna with Cavity Back for Wireless Access Points	1488
<i>Medeiros, C.; Lima, E.; Costa, J.; Fernandes, C.</i>	
A New Spiral Antenna for Passive Uhf RFID Tag on Different Substrates	1492
<i>Alarcon, Juvenal; Deleruyelle, T.; Pannier, P.; Egels, M.</i>	
Simple Electromagnetic Sensor for Simultaneous Measurement of Three Orthogonal Linear Polarizations	1496
<i>Ivsic, B.; Bonefacic, D.; Bartolic, J.</i>	
Microstrip Log Periodic Array Antenna for Mimo Application.....	1501
<i>Lofti Neyestanak, Abbas Ali; Azadi, Mohammad Reza</i>	
Analyses of an Array of Waveguides with Semitransparent Walls for shaping Flat-Topped Element Patterns	1504
<i>Skobelev, Sergei</i>	
True Polarization Diversity for Non-Isotropic Fading Scenarios	1508
<i>Valenzuela-Valdes, Juan Fco; Sanchez-Heredia, Diego; Garcia-Fernandez, Angel</i>	
Wideband Millimetre Wave End-Fire Antenna and Array for Wireless Short-Range Applications.....	1512
<i>Lamminen, A.; Saily, J.</i>	
Simulation of Propagation through a Frequency Selective Wall at 3GHz.....	1517
<i>Yang, M; Brown, A. K.</i>	

Printed Antennas Over Lossy Magneto-dielectric Substrates	1522
<i>Niamien, Constant; Collardey, Sylvain; Mahdjoubi, Kouroch</i>	
A New Accurate Model for Receiving Antennas	1525
<i>Niamien, Constant; Collardey, Sylvain; Mahdjoubi, Kouroch</i>	
Application of Gaussian-Beam Based Techniques to the Quasi-Optical Systems of Radiofrequency Radiometers	1529
<i>Chabory, Alexandre; Sokoloff, Jérôme; Bolioli, Sylvain; Elis, Kevin</i>	
First Prototyping of a Compact Mobile Ku-Band Satellite Terminal	1534
<i>Baggen, Rens; Vaccaro, Stefano; Llorens Del Río, Daniel; Torres Sánchez, Roberto</i>	
A Study of the Attenuation and Rainfall Rate Relationship Between 10-95 GHz in the U.K.	1538
<i>Townsend, A J; Watson, R J</i>	
Performances of Transparent Monopole Antennas Versus Meshed Silver Layers (AgGL)	1543
<i>Hautcoeur, Julien; Colombel, Franck; Castel, Xavier; Himdi, Mohamed; Motta Cruz, Eduardo</i>	
Scaling of the MultiLevel Physical Optics Parallel Algorithm on a Large Grid	1546
<i>Parrot, C.; Millot, D.; Letrou, C.; Boag, A.</i>	
The German Heinrich Hertz Satellite Mission	1550
<i>Voigt, Siegfried</i>	
Case Study of Fog Attenuation on 830 nm and 1550 nm Free-space Optical Links	1554
<i>Grabner, Martin; Kvicera, Vaclav</i>	
Effect of Tropospheric Propagation on Ka Band Spaceborne Radar Altimeters	1558
<i>Jeannin, N.; Lemorton, J.; Steunou, N.</i>	
Development of an Accurate Tool for Path Loss and Coverage Prediction in Indoor Environments	1563
<i>Plets, David; Joseph, W.; Vanhecke, K.; Tanghe, E.; Martens, L.</i>	
A Novel Broadband and High Gain Antenna for GSM,UMTS, and LTE Wi-MAX Applications	1568
<i>Abbak, Mehmet; Akduman, Ibrahim; Karakus, Cahit</i>	
Study and Test of Rain Attenuation Time Series Synthesizers for Tropical and Equatorial Areas	1571
<i>Rodrigues, M. E. C.; Carrie, G.; Castanet, L.; Silva Mello, L. A. R.</i>	
Multi-wavelength Radar Performance Modeling During an Extreme Clear Air Propagation Event Over the Persian Gulf	1576
<i>Marshall, Robert; Wiss, V; Thornton, W; Horgan, K</i>	
Outdoor-to-Aircraft Cabin Measurements and Study of Interference Scenarios	1581
<i>Moraitis, Nektarios; Panagopoulos, Athanasios</i>	
Compact, Wideband and Multiband Antennas Based on Metamaterial Concepts	1586
<i>Eleftheriades, G. V.; Antoniadou, M. A.; Zhu, J.; Selvanayagam, M.</i>	
Graphene-Based Nano-Antennas for Electromagnetic Nanocommunications in the Terahertz Band	1591
<i>Jornet, J. M.; Akyildiz, I. F.</i>	
Low-Profile Array of Wire Patch Antennas	1596
<i>Zhang, Hongjiang</i>	
Influence of Finite High-Impedance Surface Dimensions on the Characteristics of a Planar Printed Dipole	1601
<i>Hampel, Sven Karsten; Kiral, I.; Schmitz, O.; Rolfes, I.</i>	
Circular Polarization Benefits in HSDPA and MIMO Networks	1605
<i>Urbano, J; Dominguez, F; Tenorio, S</i>	
Review of Instruments and Techniques for Tropospheric Calibration in Radio Science Experiments	1610
<i>Graziani, Alberto; Tortora, P; Martellucci, A</i>	
Fast Physical Optics for Smooth Surfaces	1614
<i>Ferrando-Bataller, M; Vico-Bondia, F; Valero-Nogueira, A.</i>	
Advances in Cylindrical Mathematical Absorber Reflection Suppression	1617
<i>Gregson, S. F.; Newell, A. C.; Hindman, G. E.; Carey, M. J.</i>	
High-Impedance Amplifier for a Novel 14cm Short AM/FM Automotive Active Antenna	1622
<i>Negut, A.; Reiter, L.; Hopf, J.; Lindenmeier, S.</i>	
Investigation of a Compact Antenna Diversity Set for Satellite Radio Applications	1627
<i>Müller, D. J.; Weikert, M.; Lindenmeier, S. M.</i>	
Efficient Spectral Domain Green's Function Analysis of Novel Metamaterial Bandgap Guiding Structures	1631
<i>Bosiljevac, M.; Sipus, Z.; Kildal, P. S.</i>	
Characterization of 3D-Stacked Nodes for Body Area Networks at 2.45 GHz	1635
<i>Arriola, A.; Irastorza, S.; Torfs, T.; Brebels, S.; De Raedt, W.</i>	
Continuing Engineering Education and Life-long Learning	1640
<i>Ferrando-Bataller, M.; Antonino-Daviu, E; Ripoll-Soler, C; Turro, C</i>	
Compact High Impedance Surface Based on Interdigital Capacitors	1643
<i>Arriola, A.; Sasiain, G.; Sancho, J. I.; Parron, J.; Gemio, J.; Villarino, R.</i>	
Studies of Propagation Loss in Semi-Confined Environments Using Parabolic Equations for Large Angles of Propagation	1647
<i>Cavalcante, Gervasio; Souza, João; Magno, Fatima; Cazzolino, Klaus; Costa, Jesse</i>	
Rain Cell Advection in High Temporal Resolution for Propagation Studies	1652
<i>Pastoriza, V.; Carpacho, M.; Nunez, A.; Marino, P.; Perez Fontan, F.; Fiebig, U.-C.</i>	
Broadband Antenna Measurement Comparisons	1655
<i>Huang, Yi; Loh, T; Foged, L; Lu, Y; Boyes, S</i>	
MEMS-Reconfigurable Antenna Based on a Multi-Size Pixelled Geometry	1660
<i>Rodrigo, D.; Damgaci, Y.; Biyikli, N.; Cetiner, B. A.; Romeu, J.; Jofre, L.</i>	
Synthesis of Linear Array and Null Steering with minimized Side-Lobe Level Using Particle Swarm Optimization	1664
<i>Abu-Al-Nadi, Dia; Ismail, T. H.; Mismar, M. J.</i>	

Combining Multiple Knife-Edge Diffraction and Ground Reflections for Terrain Path Loss Calculation.....	1668
<i>Komijani, J.; Mirkamali, A.; Nateghi, J.</i>	
Outage Performance of Terrestrial Radio Communication Networks Operating Above 50GHz: Impact of Rain Attenuation.....	1671
<i>Sakarellos, V.; Skraparlis, D.; Panagopoulos, A. D.; Kanellopoulos, J. D.</i>	
The MultiEXCELL Model For The Prediction Of The Radio Interference Due To Hydrometeor Scattering.....	1676
<i>Capsoni, C.; Luini, L.; D'Amico, M.</i>	
A Physically Based Methodology for the Evaluation of the Rain Attenuation on Terrestrial Radio Links	1681
<i>Luini, L.; Capsoni, C.</i>	
Airborne Measurements of DME Interferers at the European Hotspot	1686
<i>Steingass, Alexander; Denks, Holmer; Hornbostel, Achim</i>	
On the Optimum Estimation of 1-Minute Integrated Rainfall Statistics from Data with Longer Integration Time	1695
<i>Emiliani, L. D.; Luini, L.; Capsoni, C.</i>	
Multifrequency Single Patch Antennas Loaded with Split Ring Resonators	1700
<i>Montero-De-Paz, J.; Ugarte-Muñoz, E.; Herráiz-Martínez, F. J.; Segovia-Vargas, D.</i>	
Power and Rate Adaptation in Body-Area Networks	1704
<i>Ghanem, Khalida; Hall, P. S.</i>	
A Multibeam Antenna for Data Relays for the German Communications Satellite Heinrich-Hertz.....	1709
<i>Greda, L. A.; Knuepfer, B.; Knogl, J. S.; Heckler, M. V. T.; Bischl, H.; Dreher, A.</i>	
Final Design and Testing of the 94 GHz Quasi-Optical-Feed for the Earthcare's Cloud Profiling Radar	1713
<i>Hartmann, Juergener; Hartwanger, Christian; Cappellin, Celilia; Wylde, Richard</i>	
Characteristics of Indoor Millimeter-Wave Channel at 60 GHz in Application to Perspective WLAN Systems.....	1718
<i>Mal'tsev, A.; Maslennikov, R.; Sevastyanov, A.; Lomayev, A.; Khoryaev, A.; Davydov, A.; Ssorin, V.</i>	
Design of a Multi-Feed EBG Antenna as a Reflector Focal Array for KA-Band Space Applications	1723
<i>Chreim, H.; Chantalat, R.; Arnaud, E.; Thevenot, M.; Naeem, U.; Bila, S.; Verdeyme, S.; Monediere, T.; Dumon, P.; Palacin, B.; Diez, H.; Pacaud, D.; Cailloce, Y.; Caille, G.; De Maagt, P.</i>	
The Hilbert Monopole Revisited	1728
<i>Sanz, I.; Anguera, J.; Andujar, A.; Puente, C.; Borja, C.</i>	
Reconfigurable UWB Antenna Operating in Two Different Sub-bands.....	1732
<i>Davidovic, M. D.; Nikolaou, S.; Vryonides, P.; Kolundzija, B.; Nikolic, M.</i>	
Spatial Filters Based on EBG Structures with Anisotropic-Like Dispersion	1737
<i>Serebryannikov, Andriy; Cakmak, A. O.; Colak, E.; Ozbay, E.</i>	
Uncoupled Impedance Matching for Coupled Multi-Antenna Systems.....	1739
<i>Jensen, M. A.; Lau, B. K.</i>	
Study of the Excitation of a Silver Nano-Dipole	1743
<i>Vol'ski, Vladimir; Vandenbosch, G. A. E.</i>	
Outage Analysis of a Millimeter Wave Triple-Hop Configuration with Arbitrary Position of the Relay Nodes.....	1747
<i>Sakarellos, Vasileios; Chortatou, Maria; Skraparlis, Dimitrios; Panagopoulos, Athanasios; Kanellopoulos, John</i>	
A Frequency Switchable Antenna Based on MEMS Technology	1751
<i>Vasylchenko, Alexander; Rottenberg, X.; Broze, B. X.; Nuytemans, M.; De Raedt, W.; Vandenbosch, G. A. E.</i>	
Microwave Aperture Antennas Using Nanomaterials.....	1754
<i>Whittow, W. G.; Vardaxoglou, J. C.</i>	
Direct MoM Solution of Electrically Large Problems with N^2 Complexity.....	1758
<i>Heldring, A.; Rius, J. M.; Tamayo, J. M.</i>	
Antenna RF-System Simulation Tool Including Hardware Artifacts	1762
<i>Boman, T.; Malmqvist, R.; Samuelsson, C.; Gustafsson, A.; Baggen, R.</i>	
Nystrom-Type Method for Simulation of 2-D Dielectric Resonator Antennas	1767
<i>Smotrova, Elena; Sauleau, Ronan; Nosich, Alexander</i>	
Towards Routine Automated Error Assessment in Antenna Spherical Near-Field Measurements.....	1770
<i>Pelland, P.; Ethier, J.; Janse Van Rensburg, D.; McNamara, D.; Shafai, L.; Mishra, S.</i>	
Fast Macro Basis Function Approach to Irregular Array of Printed Dipole Antennas.....	1775
<i>Jha, S. N.; Gonzalez-Ovejero, D.; Hislop, G.; Craeye, C.</i>	
Extremely Wideband Rectangular Monopole Antenna with Modified Microstrip Feed.....	1779
<i>Liu, J.; Esselle, K.; Zhong, S.</i>	
Passive Microstrip Transmitarray Lens for Ku Band	1784
<i>Padilla, P.; Muñoz-Acevedo, A.; Sierra-Castañer, M.</i>	
mm-Wave DRW Antennas Phase Centre Determination	1787
<i>Padilla, P.; Pousi, P.; Tamminen, A.; Mallat J.; Ala-Laurinaho, J.; Sierra-Castañer, M.; Räsänen, A.</i>	
Widely Tunable Multiband Reconfigurable Patch Antenna for Wireless Applications	1791
<i>Abutarboush, Hattan; Nilavalan, R.; Nasr, K. M.; Al-Raweshidy, H.; Budimir, D.</i>	
Near-Field Electromagnetic Dosimetry for in vitro Studies at Millimeter Waves.....	1794
<i>Zhadobov, M.; Sauleau, R.; Thouroude, D.; Nicolas Nicolaz, Ch.; Le Quement, C.; Le Drean, Y.</i>	
On Efficient UHF RFID Coverage Inside a Room	1797
<i>Dimitriou, A. G.; Bletsas, A.; Polycarpou, A. C.; Sahalos, J. N.</i>	
Compact Spiral Loaded Printed Monopole Antenna	1802
<i>Bao, X. L.; Ammann, Max</i>	
Metamaterials in Antenna Design and Technology	1806
<i>Bilotti, Filiberto; Vegni, Lucio</i>	
CRLH Leaky Wave Antenna with Tunable Polarization	1809
<i>Piazza, D.; D'Amico, M.; Capacchione, M.</i>	

Estimating the Performance of Matching Circuits for Antennas	1814
<i>Rahola, J.</i>	
Nolen Matrix with Tapered Amplitude Law for Linear Arrays with Reduced Side Lobe Level	1817
<i>Fonseca, N. J. G.; Ferrando, N.</i>	
An Approach for the Design of Reflectarrays Using CG-FFT and PSO	1822
<i>Barriuso Lopez, Ivan; Perez Lopez, Jesus Ramon; Basterrechea Verdeja, Jose</i>	
Efficient Dispersion Analysis of 2D High-Gain Leaky-Wave Antennas	1827
<i>Mateo-Segura, C.; Garcia-Vigueras, M.; Goussetis, G.; Gomez-Tornero, J. L.; Feresidis, A. P.</i>	
Introduction of Radar Techniques in Urban Propagation to Model Far-Field Building Scattering	1832
<i>Ouattara, Y. B.; Picon, O.; Wiart, J.; Richalot, E.; Mostarshedi, S</i>	
A Bluetooth Antenna for On-Body Communications	1837
<i>Subramaniam, Sankaralingam; Gupta, Bhaskar</i>	
A Bandwidth-Improved Slotted Circular Microstrip Antenna (CMSA) for High Altitude Platform Stations (HAPS)	1841
<i>Aziz, Abdul; Ezanuddin, Muhammad; Malek, M. F.; Soh, P. J.; Ahmad, R. B.</i>	
Extremely Low Profile UHF RFID TAG Antennas for Identification of People	1846
<i>Svanda, Milan; Polivka, Milan</i>	
Microwave Imaging Using Amplitude-Only Data	1850
<i>Rubæk, Tonny; Zhurbenko, Vitaliy</i>	
The Reverberating Chamber as Emulator of Radar Ground Clutter Doppler Spectra	1854
<i>Sorrentino, Antonio; Ferrara, G.; Migliaccio, M.</i>	
Solid Reconfigurable Reflector Antenna by Means of Few Mechanical Actuators	1858
<i>Graña, M.; Arias, A. M.; Rubiños, J. O.; Varas, F.; Rivas, D.</i>	
RadioFrequency Radiation is Capable of Inducing Adaptive Response in Human Blood Lymphocytes	1862
<i>Sannino, A.; Zeni, O.; Sarti, M.; Vijayalaxmi, V.; Romeo, S.; Scarfi, M. R.</i>	
Multi-Link Level Simulation Model of Indoor Peer-to-Peer Radio Channels	1866
<i>Castiglione, P.; Oestges, C.; Czik, N.; Bandemer, B.; Kaltenberger, F.; Paulraj, A. J.</i>	
Capacitively Fed Annular Ring Microstrip Antenna with Reconfigurable Circular Polarisation	1870
<i>Debogovic, T.; Bartolic, J.</i>	
Bandwidth Performance of a Simplified Cloak Realized by Non-Magnetic Dielectric Cylinders	1874
<i>Bao, Di; Kallos, Efthymios; Argyropoulo, Christos; Hao, Yang</i>	
A View on the Planck LFI Optics	1878
<i>Sandri, M.; Villa, F.; Mandolesi, N.</i>	
A Nano-Optical Yagi-Uda Antenna Driven by Single Emitters	1883
<i>Curto, A. G.; Taminiau, T. H.; Volpe, G.; Kreuzer, M.; Quidant, R.; Van Hulst, N. F.</i>	
Toward 3D UWB Tomographic Imaging System for Breast Tumor Detection	1884
<i>Guardiola, M.; Jofre, L.; Capdevila, S.; Blanch, S.; Romeu, J.</i>	
An Accurate and Efficient Error Predictor Tool for CATR Measurements	1889
<i>Cappellin, Cecilia; Sørensen, S. B.; Paquay, M.; Østergaard, A.</i>	
Calibration of Adaptive Antennas in Satellite Navigation Receivers	1894
<i>Konovaltsev, A.; Basta, N.; Greda, L. A.; Cuntz, M.; Heckler, M. V. T.; Dreher, A.</i>	
Metamaterial Dual-Band Bandpass Filters Using CRLH Zero-Order-Resonators and Improving its Intermediate Stopband	1899
<i>Kahng, Sungtek; Jang, Geonho; Anguera, Jaume</i>	
Analogue Versus Digital for Baseband Beam Steerable Array Used for LEO Satellite Applications	1902
<i>Aliakbarian, H.; Volski, V.; Van Der Westhuizen, E.; Wolhuter, R.; Vandenbosch, A. E. G.</i>	
Automatic Channel and Aps Allocation in WiFi Networks Using Ray Tracing Techniques and Particle Swarm Optimization	1906
<i>Moreno Delgado, Jose; Domingo Gracia, M.; Basterrechea Verdeja, J.; Pérez López, J. R.; Valle López, L.</i>	
Back-Projection to the Aperture of a Planar Phased Array from Data Obtained with a Spherical Near-Field Arch	1911
<i>Hess, D. W.; McBride, S.</i>	
Indoor Channel Characterization: FDTD Simulations and Measurement	1915
<i>Ramirez, L.; Carvalho, A.; Trintinalia, L.; Hasselmann, F.; Silva Mello, L.</i>	
Applicability of IsoFilter™ Selectivity to Antenna Diagnostics	1918
<i>Hess, D. W.; McBride, S.</i>	
Dual-Band Implantable Antenna Based on Short-Circuited SRR	1923
<i>Sanchez-Fernandez, Carlos J.; Quevedo-Teruel, Oscar; Requena-Carrion, Jesus; Inclan-Sanchez, Luis; Rajo-Iglesias, Eva; Ng Mou Kehn, Malcolm</i>	
Constraints on the Temporal Dispersion of Metamaterials	1927
<i>Gustafsson, Mats; Sjöberg, D</i>	
2,4 and 6-Element Modified Batwing Antennas for Digital Terrestrial Broadcasting Antennas	1930
<i>Kawakami, Haruo</i>	
Analysis of Spiral-slot-loaded, Width-modulated, Periodic Microstrip Lines	1934
<i>Matekovits, L.; Orefice, M.; Esselle, K.</i>	
Lower Bounds for Radiation Q of Very Small Antennas of Arbitrary Topology	1937
<i>Vandenbosch, Guy; Volski, V.</i>	
Diffuse Multipath Component Characterization for Indoor MIMO Channels	1941
<i>Quitin, F.; Oestges, C.; Horlin, F.; De Doncker, Ph.</i>	
Applications of Sources Reconstruction Techniques: Theory and Practical Results	1946
<i>Cano, F.; Sierra-Castañer, M.; Burgos, S.; Besada, J. L.</i>	

Design of Antenna Based Microwave Sensors for Blade Tip Clearance Measurement in Gas Turbines	1951
<i>Violetti, M.; Zurcher, J-F.; Geisheimer, J.; Skrivervik, A. K.</i>	
A Circuit Model of Monopole Four-Square Array Antenna on a Finite Ground Plane Including Mutual Coupling Effects.....	1955
<i>Yazdanbakhsh, Pedram; Solbach, Klaus</i>	
Wideband E-Shaped Patch Antenna Design for Wireless Communications Using Self-adaptive Differential Evolution.....	1960
<i>Goudos, Sotirios; Nanos, A.; Samaras, T.; Siakavara, K.; Sahalos, J.</i>	
Rigorous Design of RF Multi-Resonator Power Harvesters.....	1964
<i>Costanzo, A.; Donzelli, F.; Masotti, D.; Rizzoli, V.</i>	
Impacts of Human Body on Built-in GPS Antennas for Mobile Terminal in Multipath Environment	1968
<i>Ur Rehman, Masood; Gao, Yue; Chen, Xiaodong; Parini, Clive; Ying, Zhinong</i>	
Software Framework for Integration of Method of Moments Kernels with Direct or Iterative Fast Solvers.....	1973
<i>Rius, J. M.; Herrero, J. A.; Tamayo, J. M.; Heldring, A.; Ubeda, E.; Parron, J.; Lopez-Penya, S.; Polimeridis, A. G.; Mosig, J. R.; Espinosa, H.; Boag, A.</i>	
Stochastic Optimization of Sparse Antenna Arrays.....	1975
<i>Minvielle, Pierre; Bérisset, Ph.</i>	
Comparison of RMS Delay Spread and Decay Time Measured in Reverberation Chamber	1977
<i>Chen, X.; Kildal, P.-S.</i>	
Design of a Wideband Single Layer Sub-reflectorarray for Space Applications.....	1980
<i>Chaharmir, Mr.; Shaker, J.; Legay, H.; Bresciani, D.</i>	
Approximated Closed Form Characteristic Impedance for the Bed of Nails-based Gap Waveguide.....	1985
<i>Polemi, A.; Maci, Sm; Kildal, P-S</i>	
Electronically Switchable-Beam Reflectorarray Antenna.....	1988
<i>Carrasco, E.; Barba, M.; Encinar, J.</i>	
In-Flight Retrieval of Reflector Anomalies for the Planck Space Telescope.....	1993
<i>Jensen, F.; Nielsen, P. H.; Tauber, J.; Martin-Polegre, A.</i>	
Performance of Transmission-Time Optimized Relaying Schemes in Real-World Channels.....	1998
<i>Sánchez González, Fernando; Bandemer, Bernd; Matz, Gerald; Oestges, Claude; Kaltenberger, Florian; Czink, Nicolai</i>	
Low-Complexity Geometry-Based Modeling of Diffuse Scattering.....	2003
<i>Czink, Nicolai; Kaltenberger, Florian; Zhou, Yi; Bernadó, Laura; Zemen, Thomas; Yin, Xuefeng</i>	
Supercomputing Challenges in Electromagnetics.....	2007
<i>Taboada, J. M.; Landesa, L.; Obelleiro, F.; Rodriguez, J. L.; Araujo, M. G.; Bertolo, J. M.; Mourino, J. C.; Gomez, A.</i>	
Dual-Polarization Reflectorarray Elements for Ku-Band TX/RX Portable Terminal Antenna	2011
<i>Carrasco, E.; Encinar, J.; Barba, M.; Vincenti, R.; Sorrentino, R.</i>	
Losses in Ridge Gap Waveguide Compared with Rectangular Waveguides and Microstrip Transmission Lines.....	2016
<i>Pucci, E.; Uz Zaman, A.; Rajo-Iglesias, E.; Kildal, P.-S.; Kishk, A.</i>	
2x2 Real-Time Code-Division Multiplexed MIMO Channel Sounder	2020
<i>García-Pardo, C.; Molina-García-Pardo, J. M.; Rodríguez, J. V.; Juan-Llácer, L.</i>	
Breast Surface Construction Algorithm for a Multi-Static Radar-Based Breast Imaging System.....	2025
<i>Sarafianou, M.; Gibbins, D. R.; Craddock, I. J.; Klemm, M.; Leendertz, J. A.; Preece, A.; Benjamin, R.</i>	
Subject-Specific Analysis of the On-Body Radio Propagation Channel Adopting a Parallel FDTD Code.....	2030
<i>Sani, A.; Hao, Y.; Zhao, Y.; Lee, S-L; Yang, G-Z</i>	
Measurements of High-Gain Antennas at THz Frequencies	2033
<i>Raisanen, A. V.; Ala-Laurinaho, J.; Karttunen, A.; Mallat, J.; Tamminen, A.; Vaaja, M.</i>	
Optimizing a Corrugated Horn for Telecommunication and Tracking Missions Using a New Flexible Horn Design Software.....	2036
<i>Pressense, J.; Frandsen, P. E.; Lunnholt, M.; Delepoux, F.; Frandsen, A.; Salghetti Drioli, L.</i>	
Directional Hybrid Channel Model for Ultra-Wideband MIMO Systems.....	2041
<i>Janson, Malgorzata; Pontes, J.; Zwick, T.; Wiesbeck, W.</i>	
Measurements and Simulations of Outdoor-to-Indoor WiMAX Relay Communication	2046
<i>Belhouji, A.; Fakh, K.; Mouhamadou, M.; Akhdar, O.; Reynaud, S.; Decroze, C.; Carsenat, D.</i>	
An Experiment and Preliminary Results for Narrow and Wideband Land Mobile Satellite Propagation at K-band	2050
<i>Schönhuber, M.; Teschl, F.; Hovinen, V.; Kyröläinen, J.; Peréz-Fontán, F.; Prieto-Cerdeira, R.</i>	
A Prototype 2D Direction Finding System with Passive RFID Tags	2054
<i>Hislop, G.; Lekime, D.; Drouguet, M.; Craeye, C.</i>	
Frequency-Dependent Effects of Platform and Wall Antenna Stirring on Measurement Uncertainty in Reverberation Chamber	2059
<i>Chen, X.; Kildal, P.-S.</i>	
A SIW Slot Array Antenna in Ku Band.....	2062
<i>Navarro, D.; Carrera, L.; Baquero, M.</i>	
Man-Made Noise Measurements in Indoor Locations in Medium Wave Band	2066
<i>Landa, I.; Arrinda, A.; Eizmendi, I.; Velez, M. M^a; Fernandez, I.</i>	
Wireless Data Transmission within an Aircraft Environment.....	2071
<i>Pinto, J.; Wright, B. H.; Lewis, R. A.; Lewis, G. M.; Lord, J. A.</i>	
A Wideband Circularly Polarized Rectangular Dielectric Resonator Antenna.....	2076
<i>Massie, Gabriel; Caillet, Mathieu; Clénet, Michel; Antar, Yahia M. M.</i>	
High Gain Conical Horn Antenna Integrated with a Planar Substrate for 60 GHz WPAN Applications	2081
<i>Caillet, N.; Person, C.; Favennec, J-F.; Quando, C.; Pinel, S.; Rius, E.; Laskar, J.</i>	

Millimeter-Wave Printed Antennas on Ultrasoft Polymer Substrate	2086
<i>Hage-Ali, Sami; Tiercelin, Nicolas; Coquet, Philippe; Sauleau, Ronan; Le Coq, Laurent; Fujita, Hiroyuki; Preobrazhensky, Vladimir; Pernod, Philippe</i>	
Tunable Antenna for DVB-H and GSM 900 Standard	2091
<i>Canneva, Florian; Ribero, J-M; Staraj, R</i>	
New Approach to the Analysis of Bi-periodic Cylindrical Structures and its Application to a Wire Medium	2094
<i>Varela, J. E.; Esteban, J.; Camacho-Penalosa, C.</i>	
Comparison of In-Car UWB and 60 GHz Channel Measurements	2098
<i>Schack, M.; Jacob, M.; Kuerner, T.</i>	
Quasi-TEM H-Plane Horns with Wideband Open Hard Side-Walls	2103
<i>Kishk, Ahmed; Kildal, P-S</i>	
Millimeter-Wave Microstrip Array Antenna with Matching-Circuit-Integrated Radiating-Elements	2107
<i>Sakakibara, Kunio; Sugawa, S.; Kikuma, N.; Hirayama, H.</i>	
Antenna Measurement System at 300 GHz for the Terasense Project	2112
<i>Alfonso, Muñoz-Acevedo; Sierra-Castañer, M.; Besada, J. L.</i>	
State of the Art Methods for Low SAR Antenna Implementation	2117
<i>Gomez-Villanueva, R.; Jardon-Aguilar, H.; Linares Y Miranda, R.</i>	
Resolution Capabilities of Future THz Cameras	2121
<i>Del Río, Carlos; Lizarraga, Juan</i>	
Stroke Detection Using a Broad Band Microwave Antenna System	2125
<i>Phager, Andreas; McKelvey, T; Persson, M</i>	
Antenna System for Clinical Microwave Tomography	2128
<i>Phager, Andreas; Romputtal, A; Persson, M</i>	
Characterization of Second Order Moments of a Multi-Cluster Gaussian Scatterer Distribution Channel Model	2131
<i>Galaviz, G.; Covarrubias, D. H.</i>	
A Statistical Model of Handsets Effective Gain Accounting for User Influence and Local Propagation	2136
<i>Sibille, A.; Mellah, M. A.</i>	
Phase Synthesis of Reflectarray Subreflector in Dual-Reflector Configuration for Beam Scanning Applications	2140
<i>Arrebola, M; Encinar, J. A.</i>	
Reconfigurable Printed Antenna for a Wideband Tuning	2145
<i>Hossain, M. G. Sorwar; Yamagajo, Takashi</i>	
Application of Reflection on Curved Surfaces and Roughness on Surface in Ray Tracing for Tunnel Propagation	2149
<i>Kishiki, Y.; Takada, J.; Ching, G. S.; Lertsirisopon, N.; Kawamura, M.; Takao, H.; Sugihara, Y.; Matsunaga, S.; Uesaka, F.</i>	
Design of Two Way Multiantenna AF Relay Systems Under Perfect CSI	2154
<i>Taniguchi, T.; Karasawa, Y.; Nakajima, N.</i>	
Experimental Evaluation of Antenna Element Spacing with Mixed Polarized MIMO Antenna System in LOS Environment	2158
<i>Inoue, Yuki; Komiya, Kazuhiro; Yamaguchi, Ryo; Cho, Keizo</i>	
Experimental Study for Interference Estimation in Microwave Band in Coastal-Land Paths	2163
<i>Sotoyama, T; Kita, N; Sato, A</i>	
X- Band High Gain Antenna Qualified for Mars Atmosphere	2167
<i>Olea, A; Montesano, A; Montesano, C; Arenas, S</i>	
Mimo Channel Measurement Campaign in Subway Tunnels	2172
<i>Alonso, J</i>	
Two Port Small Antenna Characterization Through Impedance Modulation	2176
<i>Monsalve, B.; Blanch, S.</i>	
A Comparison of Radioelectric Propagation in Mature Forests at Wireless Network Frequency Bands	2180
<i>Cuiñas, Iñigo; Gay-Fernandez, José Antonio; Alejos, Ana; García Sánchez, Manuel</i>	
Multiple Element Antenna Placement and Structure Studies in Subway Environments	2185
<i>Alonso, J</i>	
Characterization of Small Antennas for Hearing Aids by Several Measurement Techniques	2190
<i>Pivnenko, S.; Zhang, J.; Khatun, A.; Laitinen, T.; Carlsson, J.</i>	
Comparing Ray Tracing Based MU-CoMP-MIMO Channel Predictions with Channel Sounding Measurements	2195
<i>Fritzsche, R.; Voigt, J.; Jandura, C.; Fettweis, G.</i>	
Reflection and Transmission Properties of Building Materials in D-Band for Modeling Future mm-Wave Communication Systems	2200
<i>Jacob, M.; Geise, R.; Piesiewicz, R.</i>	
Ferrimagnetic Composites in Building Material for Electromagnetic Wave Absorption Wireless Communication Systems	2205
<i>Pretorius, Johann; Maharaj, B. T.</i>	
Focusing Effects of Metallic Rim-Less Spectacles at Mobile Communication Frequencies on the Energy Absorbed in the Head	2210
<i>Panagamuwa, C. J.; Whittow, W. G.; Edwards, R. M.</i>	
Chiral Antennas Radiating Circularly Polarized Waves	2214
<i>Alitalo, Pekka; Karilainen, A.; Niemi, T.; Simovski, C. R.; Tretyakov, S. A.; De Maagt, P.</i>	
THz Propagation Research within the TERASENSE Project: Atmospheric Gases Attenuation	2219
<i>Riera, Jose Manuel; Siles, G.; Garcia, P.</i>	
Broadband Coupler Using Improved Vertically Installed Planar Structure	2224
<i>Zheng, S. Y.; Chan, W. S.; Man, K. F.</i>	

Optimum Design of a Scavenging Antenna System	2228
<i>Serrano, Raquel; Aguasca, A; Romeu, J; Jofre, L</i>	
Urban Indoor Noise Level Characterization in the medium Wave Band	2232
<i>Fernandez, Igor; Anqueira, Pablo; Arrinda, Amaia; Ordiales, Juan Luis; Soria, Francisco Luis</i>	
Design of Hollow Patch Microstrip Reflectarray Antenna at Ka-band Using Waveguide Simulator	2236
<i>Hajian, Mostafa; Dickhof, J. H.; Trampuz, C.; Lighthart, L. P.</i>	
A Dual-Band Planar Array of Connected Dipoles: Experimental Validation Based on Bistatic RCS Measurements	2241
<i>Cavallo, Daniele; Neto, Andrea; Gerini, Giampiero; Morello, Davide</i>	
Switched UWB to Narrowband Planar Monopole Antenna	2246
<i>Ghanem, F.; Kelly, J.; Hall, P. S.</i>	
Results from MIMO Channel Measurements and Comparison to the Extended Saleh-Valenzuela Model	2249
<i>Ferreira, I.; Mota, S.; Rocha, A.</i>	
Long Range Wideband Channel Measurements at 81-86 GHz Frequency Range	2254
<i>Kyrö, M.; Ramvier, S.; Kolmonen, V.-M.; Haneda, K.; Vainikainen, P.</i>	
UHF/VHF Air-to-Air Propagation Measurements	2259
<i>Walter, M.; Gligorevic, S.; Detert, T.; Schnell, M.</i>	
Near Field Preconditioner for the Fast Multipole Method	2264
<i>Bertolo, J. M.; Taboada, J. M.; Landesa, L.; Obelleiro, F.; Rodriguez, J. L.</i>	
Basic Cell of a Reconfigurable Antenna with Dual Polarization for WIMAX Applications	2268
<i>Masa-Campos, José Luis; Luzon-Mesas, V.; Lopez-Colino, R. J.</i>	
Active THz Inspection of Water Content in Plants	2273
<i>Iriarte, Jc.; Etayo, D.; Palacios, I.; Teniente, J.; Ederra, I.; Gonzalo, R.</i>	
Sparse Antenna Array for Earth-Coverage Satellite Applications	2275
<i>Viganó, Maria Carolina; Toso, G.; Angeletti, P.; Lager, I. E.; Yarovoy, A. G.; Caratelli, D.</i>	
Comparison of Two Decade-Bandwidth Feeds for Reflector Antennas: The Eleven Antenna and Quadridge Horn	2279
<i>Yang, J.; Pivnenko, S.; Kildal, P.-S.</i>	
Matching of Microstrip Patch Array Antenna with Reflectors	2284
<i>Fernández Anitzine, Ignacio; Romo Argota, Juan Antonio; Antón, Beatriz</i>	
A Systematic Method to Design Broadband Matching Networks	2288
<i>Andujar, A.; Anguera, J.; Puente, C.</i>	
Measurements of Diversity Gain and Radiation Efficiency of the Eleven Antenna by Using Different Measurement Techniques	2293
<i>Yang, J.; Pivnenko, S.; Laitinen, T.; Carlsson, J.; Chen, X.</i>	
Mitigation of Finger Loading Effect in Handset Antennas	2298
<i>Anguera, J.; Andujar, A.; Puente, C.; Camps, A.; Picher, C.</i>	
Edge Element Evaluation of Tapered-Slot Elements in Phased Arrays	2302
<i>Ellgardt, A; Norgren, M.</i>	
A Hybrid Space-Spectral Domain Approach for Quasi-3D Structure Analysis in Multilayered Media	2307
<i>Vaupel, Thomas</i>	
Microwave Antenna Near Field Power Estimation	2311
<i>Kizer, G.</i>	
Research Antenna Made of Gas Plasma on Microwave Band	2316
<i>Bezpalov, A. Y.; Gnatushenko, V. V.; Ovsyanikov, V. V.; Ovsyanikov, V. V.; Reuta, O. V.; Safonov, V. V.; Sydorenko, O. A.</i>	
Sensing the Human Body by Implanted RFID Tags	2320
<i>Occhiuzzi, C.; Marrocco, G.</i>	
Microstrip Patch Antenna Design Using Artificial Material Loadings	2325
<i>Calafell, Irena; Ferrer, Pere J.; Gonzalez-Arbesu, Jose M.; Romeu, Jordi</i>	
Radiation Pattern Optimization of Skobelev Networks	2330
<i>Petrolati, Daniele; Angeletti, P.; Morini, A.; Toso, G</i>	
Tefiku-Sierpinski Antenna Performance in Wireless Environments for WiMax and WLAN Applications	2335
<i>Carro, Pedro Luis; De Mingo, J</i>	
Linear Arrays with Maximally Flat Beams	2339
<i>Petrolati, Daniele; Angeletti, P.; Toso, G</i>	
Estimating MIMO Capacities from Broadband Measurements in a Cellular Network	2343
<i>Jaeckel, Stephan; Jungnickel, Volker</i>	
Analysis of Numerical Integration in the Evaluation of Hyper-singular Integrals in Galerkin Surface Integral Equation Formulations Via the Direct Evaluation Method	2348
<i>Tamayo, J. M.; Polimeridis, A. G.; Rius, J. M.; Heldring, A.; Mosig, J. R.</i>	
A Flip Test Procedure for Positioning System Errors and Antenna Phase Center Determinations	2353
<i>Le Coq, Laurent; Lafond, Olivier; Hindi, Mohamed</i>	
Statistical Characterization of the MW Field Spatial Variability in Urban Environments Using the Generalized Lee Method	2357
<i>Gil, Unai; Pena, I.; Angulo, I.; Anqueira, P.; De La Vega, D.; Guerra, D.</i>	
A Pattern Reconfigurable Slot Antenna with Hybrid Feed	2362
<i>John, Matthias; Ammann, Max J; Shynu, S. V.</i>	
Time Course of Compensatory Mechanism After GSM 900 MHz Radiation on Cerebral Activity Using a Picrotoxin-Model in Rats	2366
<i>López-Martín, Elena; Carballo-Quintás, Manuel; Martínez-Silva, Isabel; Cadarso-Suarez, Carmen; Jorge-Barreiro, Francisco J.; Alvarez-Folgueiras, Marcos; Ares-Pena, Francisco J.</i>	

Clinical Trials of a UWB Imaging Radar for Breast Cancer	2371
<i>Klemm, M.; Craddock, I.; Leendertz, J.; Preece, A.; Gibbins, D.; Shere, M.; Benjamin, R.</i>	
A New Analytical Model for Log-Periodic Terahertz Antennas	2375
<i>Scheuring, A.; Stockhausen, A.; Wuensch, S.; Ilin, K.; Siegel, M.</i>	
Mobile Satellite Channel with Angle Diversity: The MiLADY Project	2380
<i>Heyn, Thomas; Eberlein, Ernst; Arndt, Daniel; Matuz, Balazs; Lazaro Blasco, Francisco; Prieto-Cerdeira, Roberto; Rivera-Castro, Juan</i>	
Design of a Bidirectional Metamaterial Spacer at 2.45 GHz	2385
<i>Imbert, Marc; Ferrer, Pere J.; Gonzalez-Arbesu, Jose M.; Romeu, Jordi</i>	
Nano-optical Trapping by Resonant Optical Antennas of Rayleigh Particles and E-coli Bacteria	2390
<i>Righini, M.; Ghenuche, P.; Cherukulappurath, S.; Myroshnychenko, V.; Garcia De Abajo, F. J.; Quidant, R</i>	
Gaussian Beam Shooting Algorithm Based on Iterative Frame Decomposition	2394
<i>Ghannoum, I.; Letrou, C.; Beauquet, G.</i>	
A Systematic Approach to Determining the Constitutive Parameters of Metamaterials in the Context of Transformation Electromagnetics	2398
<i>Martini, E.; Cigni, G.; Sardi, G. M.; Caminita, F.; Maci, S.</i>	
Planar Bianisotropic Waveguides for Application in Microwave Devices	2402
<i>Osaretin, I.; Rojas, R.</i>	
Shaping the Optical Response of Nanoantennas	2406
<i>Volpe, G.; Cherukulappurath, S.; Juanola Parramon, R.; Molina-Terriza, G.; Quidant, R</i>	
A Direct Non Redundant Complex Source Point Expansion of the Electromagnetic Field Radiated by an Arbitrary Source	2410
<i>Martini, E.; Carli, G.; Maci, S.</i>	
Generalized Shannon Basis Functions for Curved Surfaces	2413
<i>Casaletti, M.; Maci, S.; Vecchi, G.</i>	
EM Modelling Design of a Conformal IFF System on an Aircraft	2416
<i>Benham, Simon; Murphy, T.; Totten, E.; Knights, D.; Schick, M</i>	
Modifications in Radiation Characteristics of a Yagi Antenna for TV	2420
<i>Fernández Anitzine, Ignacio; Romo Argota, Juan Antonio; Garate, Judit</i>	
Global Generalized Shannon Functions for the Scattering of 3-D Polyhedral Surfaces	2424
<i>Casaletti, M.; Petruzzello, M. G.; Maci, S.; Vecchi, G.</i>	
Analysis of the Specific Absorption Rate in Handset Antennas with Slotted Ground Planes	2427
<i>Picher, C.; Anguera, J.; Andujar, A.; Puente, C.; Kahng, S.</i>	
Ground Wave Propagation Analysis for DRM Local Coverage in the 26 MHz Band	2432
<i>Peña, I.; Lauterbach, T.; Gil, U.; Angueira, P.; Arrinda, A.; De La Vega, D.; Guerra, D.</i>	
Sky Wave Interfering Signals Evaluation for Digital Local Broadcasting Services in the 11 Meter Band	2437
<i>Peña, I.; Murga, A.; Angulo, I.; Angueira, P.; Velez, M.; Eizmendi, I.; Prieto, G.; Ordiales, J. L.</i>	
Electrically Small Band-Notch Reflected Inverse Parabolic Step Sequence Ultra Wideband Antenna	2442
<i>Saleem, Rashid; Brown, A. K.</i>	
Analysis of Varactor Diode-Tuned Frequency Agile Antennas	2445
<i>Hum, Sean</i>	
Reliability of Specific Absorption Rate Measurements in the Head Using Standardized Hand Phantoms	2450
<i>Douglas, M. G.; Derat, B.; Li, C-H.; Liao, X.; Ofli, E.; Chavannes, N.; Kuster, N.</i>	
Analysis of Multi-Slot Microstrip Patch Antennas Using Neural Networks	2454
<i>Mendonca, L.; Assuncao, A.; Araujo, W</i>	
Matrix Compression Technique Based on the Multilevel Characteristic Basis Function Method	2457
<i>García, E.; Catedra, F.; Delgado, C</i>	
Small-area Solar Antenna for Low-Power UWB Transceivers	2461
<i>Danesh, M.; Long, J. R.; Simeoni, M.</i>	
Combination of MLFMA and an Iterative Method to Compute Large Scattering or Radation Problems	2465
<i>Delgado, C.; García, E.; González, I.; Catedra, F</i>	
Impact of the Correlation Matrix Estimation Accuracy on the Computation of Stationarity Intervals	2469
<i>Reaudin, O.; Kolmonen, V. M.; Vainikainen, P.; Oestges, C.</i>	
Patch Antennas Based on a Pair of DPS and SNG Metamaterial	2474
<i>He, Sailing; Xiong, Jiang; Li, Hui; Jin, Yi</i>	
Techniques for Accurately Manufacture a Sub-mm Wavelength Mixer to Detect Sub-mm Wave Radiation	2477
<i>Palacios, I.; Ederra, I.; Teniente, J.; Gonzalo, R.</i>	
Design and Characterization of a 6x6 Planar Reconfigurable Transmitarray	2480
<i>Lau, J. Y.; Hum, S. V.</i>	
Through-the-Wall Sensing Using Time-Reversal Antenna Arrays	2485
<i>Yavuz, Mehmet E.</i>	
Measurement of Loop-Back Interference Channels for Outdoor-to-Indoor Full-Duplex Radio Relays	2489
<i>Haneda, K.; Kahra, E.; Wyne, S.; Icheln, C.; Vainikainen, P.</i>	
Multi-Bank Cylindrical Antenna Using Epsilon-Near-Zero Gap Launchers	2494
<i>Maci, Stefano; Alu', A.; Engheta, N.; Chen, P-Y; Engheta, N.; Maci, S.</i>	
Time Domain Integral Equation Modeling Based on Ordinary Differential Equation Solution Methods	2497
<i>Weile, D. S.; Wang, X.; Lin, Y. Q.</i>	
Large Radar Antennas Measurement Systems	2501
<i>Martín, F.; Torres, J.; Rengifo, L.</i>	

Bio-Inspired Optimization Techniques for the Design of Millimeter Wave Antireflective Surfaces	2505
<i>Kilic, Ozlem; Mirotznik, M.; Good, B.</i>	
Adaptive Refinement of Higher Order Method of Moment Applied to Surface Integral Equations	2508
<i>Kostic, M.; Kolundzija, B.</i>	
Active and Passive THz Systems for Short-Range Imaging Applications	2513
<i>Abril, J.; Nova, E; Capdevila, S; Broquetas, A; Torres, F; Jofre, L</i>	
A Circularly Polarized Dielectric Lens Antenna Designed by a Holographic Principle	2517
<i>Minatti, G.; Caminita, F.; Maci, Stefano</i>	
Military UHF Body-Worn Antennas for Armored Vests	2520
<i>Psychoudakis, D.; Lee, G. Y.; Chen, C-C.; Volakis, J. L.</i>	
Antenna Radiation Pattern Influence on UWB Ranging Accuracy	2524
<i>Dashti, Marzieh; Laitinen, Tommi; Ghorashi, Mir; Haneda, Katsuyuki; Toivanen, Juha; Takada, Jun-Ichi; Vainikainen, Pertti</i>	
Lens Effect in Parallel Plate Waveguide Realized by Using a Metamaterial Surface	2529
<i>Casaletti, M.; Caminita, F.; Maci, S.</i>	
Multilayer and Multidirectional Linearly-Tapered Slot Antenna for 300 GHz Applications	2532
<i>Jenning, M.; Plettemeier, D.</i>	
Analysis of Propagation Effects in LANs and WANs by FDTD and Ray Tracing Techniques	2537
<i>Pemock, S. R.; Watson, R</i>	
UWB Antennas for Communications and Ground Penetrating Radar	2542
<i>Pemock, Stephen; Naji, A; Zhang, Q; Shepherd, P; Redfern, M</i>	
The European School of Antennas: Triennium 2007-2009	2547
<i>Maci, Stefano</i>	
Holographic Antennas: Principle of Operation and Design Guidelines	2553
<i>Albani, M.; Bandinelli, M.; Caminita, F.; De Vita, P.; Freni, A.; Maci, S.; Mazzinghi, A.; Minatti, G.; Sabbadini, M.</i>	
Statistics of Duration and Number of Rainfall Events in Brazil	2556
<i>Miranda, Erasmus; Pudwell, M.; Souza, R.; Pontes, M.; Silva Mello, L.; Rodrigues, M.; Pina, T.</i>	
Extreme-Value Statistics of Attenuation and Rainfall in Slant Path Sites in Brazil	2561
<i>Miranda, Erasmus; Pudwell, M.; Souza, R.; Pontes, M.; Silva Mello, L.; Rodrigues, M.; Pina, T.</i>	
Comparison of Formulas Estimating Fog Attenuation on Free Space Optics Links	2566
<i>Fiser, Ondrej; Schejbal, Vladimir</i>	
Simplified Model of the Convex Obstacles Transition Zone Diffraction for Carrier UWB Signal Propagation	2570
<i>Gorniak, P.; Bandurski, W.</i>	
Wideband Microstrip Antenna with Inclined Radiation Pattern for C-Band Airborne Applications Design and Measurement	2575
<i>Bouaziz, Sofiene; Ali, Ahmed; Hebib, Sami; Aubert, Hervé</i>	
An Efficient Full-Wave Analysis of Irregular-Shaped Conformal Antennas in a Layered Spherical Media	2579
<i>Khamas, Salam</i>	
A Small High Performance Metal-Mountable RFID Tag Antenna	2583
<i>Popugaev, A. E.; Wansch, R.</i>	
Antenna Synthesis for Multiple Element Antenna Channels	2587
<i>Pontes, Juan; Zwick, T</i>	
Application of the Left-Handed Half-Loop Antenna with Wideband Tuning to a Cognitive Radio Terminal	2590
<i>Herraiiz-Martinez, Francisco Javier; Hall, Peter S.; Segovia-Vargas, Daniel</i>	
A Frequency-Selective U-Koch Monopole-type PCB Antenna for Wireless Applications	2594
<i>Ramadan, A.; Kabalan, K. Y.; El-Hajj, A.; Khoury, S.; Al-Husseini, M.</i>	
A Phase Conjugating Array for Spectrally Efficient Wireless Signal Retransmission	2599
<i>Marante, R.; Rizo, L.; Cabria, L.; Garcia, J. A.; Marante, F.; Mediavilla, A.</i>	
Low Profile Circular YAGI-UDA Array	2603
<i>Nagy, Lajos</i>	
A Novel Frequency/Pattern-reconfigurable Microstrip Antenna for WLAN Applications	2608
<i>Ramadan, A.; Al-Husseini, M.; Tawk, Y.; Kabalan, K. Y.; El-Hajj, A.</i>	
A Novel Low Loss Reflection-Type Phase Shifter in KU-Band	2611
<i>Lambard, T.; Lafond, O.; Himdi, M.; Jeuland, H.; Bolioli, S.</i>	
The Use of Signals of Opportunity for the Measurement of Atmospheric Refractivity	2615
<i>Watson, Robert; Coleman, Christopher</i>	
Diversity Performance of an Optimized Meander PIFA Array for MIMO Handsets	2620
<i>Wang, Q.; Plettemeier, D.; Zhang, H.; Wolf, K.; Ohlmer, E.</i>	
Design of a Low-Loss Low-noise Tapered Slot Phased Array Feed for Reflector Antennas	2625
<i>Arts, M.; Ivashina, M.; Iupikov, O.; Bakker, L.; Van Den Brink, R.</i>	
Experimental Investigation of Bent Patch Antennas on MID Substrate	2630
<i>Kornek, Daniel; Slotke, Eric; Orlob, Christian; Rolfes, Ilona</i>	
Measurements of Terrestrial Digital TV Signals at Two Cities in South America	2633
<i>Gonzalez Castellanos, P.; Perez Garcia, N.; Paredes, J.; Uzcategui, J.; Pena, J.; Da Silva Mello, L.; Lima De Souza, R.; Da Silva Mello, Luiz</i>	
Application of Genetic Algorithms to the Manufacturing of Large Planar Array Antennas on Radar Applications	2637
<i>Rengifo, L.; Martin, F.; Torres, J.; Burgos, S.; Sierra, M.; Vera, M.</i>	
Non Iterative Subreflector Shaping for Reflector Antenna Distortion Compensation	2642
<i>Gonzalez-Valdes, Borja; Martinez-Lorenzo, J. A.; Rappaport, C.; Pino, G. A.</i>	
MU and Epsilon-Near-Zero Metamaterial-Assisted Horn Antenna	2647
<i>Semenenko, Vladimir; Lagarkov, Andrey; Chistyayev, Vladimir; Krasnolobov, Igor; Basharin, Alexey</i>	

Modeling of Cooperative MIMO Channels in Urban Areas	2652
<i>Jandura, Carsten; Kaeske, Martin; Voigt, Jens; Fettweis, Gerhard P.</i>	
Transformation Circuits	2656
<i>Grbic, Anthony; Gok, Gurkan</i>	
Estimation of Dielectric Constant of Composite Materials in Buildings Using Reflected Fields and PSO Algorithm	2660
<i>Vilovic, Ivan; Burum, Niksa; Nadj, Robert</i>	
A Statistical Radio Coverage Prediction Approach for Cooperative Control in Relay Based Cellular Networks	2665
<i>Jiang, P; Bigham, J; Dubrovka, R; Wu, J</i>	
Efficient Wide-Band EM Simulation Based Upon Domain Decomposition and Interpolation of MoM-Generated Impedance Matrix	2670
<i>Noga, A.; Karwowski, A.</i>	
On-Body Patch Antenna with Parasitic PEC Wall for the Miners Cardiac Rhythm Sensor	2673
<i>Dubrovka, Rostyslav; Shirokov, I</i>	
Helmholtz-Stable Fast Solution of the Combined Field Integral Equation	2677
<i>Andriulli, F. P.; Vecchi, G.</i>	
Design of Multiband Reconfigurable Antennas	2681
<i>Raines, B. D.; Rojas, R. G.</i>	
Radio Propagation Models for DVB-H Networks	2686
<i>Salieto, Ariana; Roig, Gema; Gómez-Barquero, David; Cardona, Narcís</i>	
Entwined Spirals for Ultra Compact Wideband Frequency Selective Surface	2691
<i>Vallecchi, A.; Schuchinsky, A. G.</i>	
Multilayer Vivaldi Antenna for 60 GHz Applications	2694
<i>Plettemeier, D.; Jennings, M.; Liang, T.-J.</i>	
Broadband Log-periodical Antenna with Omni-Directional Radiation Pattern in the Horizontal Plane	2699
<i>Aghdam, M. P. Karim; Farsi, Saeed; Aliakbarian, Hadi; Faraji-Dana, Reza; Vandenbosch, A. E. Guy; De Raedt, Walter</i>	
CPS Fed Linearly-Tapered Cavity Backed Slot Antenna for 60 GHz Applications	2703
<i>Jenning, M.; Plettemeier, D.; Liang, T.-J.</i>	
Propagation Measurements a 3.5 GHz in a Dense Urban Area	2708
<i>Da Silva Mello, L.; Rodriguez Ron, C.</i>	
Validation of Estimated Dense Multipath Components with Respect to Antenna Calibration Accuracy	2712
<i>Käske, Martin; Thomä, Reiner</i>	
Fan and Pencil Beam Aperture Coupled Patch Antenna Array with Low Side Lobe Level	2715
<i>Aghdam, M. P. Karim; Faraji-Dana, Reza; Vandenbosch, A. E. Guy; De Raedt, Walter</i>	
Design, Integration, and Packaging of a Wireless Module for Location Finding and Healthcare Applications	2719
<i>Rida, Amin; Tan, Edward; Shaker, George; Nickolaou, Simos; Tentzeris, Manos; Nikolaou, Symeon</i>	
Design of a 45 Linearly Polarized M-PRS Sectoral Antenna	2722
<i>Haji, Mohamad; Jecko, Bernard; Chantalat, Régis; Monediere, Thierry</i>	
Atmospheric Refractivity Sensing Improvement Using Artificial Neural Networks	2727
<i>Mudroch, M.; Pechac, P.; Grabner, M.; Kvicera, V.</i>	
Wideband Over-the-Air Test-Bed Reproducing Channel Delay Dispersion Characteristics	2731
<i>Rudant, L.; D'Errico, R.</i>	
Automated Measurement Procedure for the Calibration of Planar Active Arrays	2736
<i>Salas Natera, M; Martínez Rodríguez-Osorio, R; De Haro Ariet, L</i>	
High Isolation Compact Four-port MIMO Antenna Systems with Built-in Filters as Isolation Structures	2741
<i>Li, H; Xiong, J; Ying, Z; He, S</i>	
UWB Leaky Lens Antenna as an Improved Performance Emitter in a THz Time Domain System	2745
<i>Llombart, N.; Neto, A.; Siegel, P. H.; Saeedkia, D.</i>	
Effect of Asymmetric Feeding and Meander in the Dual-Band Antenna Design	2749
<i>Costa, Crezo; Fontgalland, Glauco; Vuong, Tan-Phu; Pedro, Raimundo; Freire, Raimundo; Lima, Robson; Barbin, Silvio E.</i>	
Electromagnetic Characterization Method for On-Wafer Magnetic Dielectric Thin Film Materials	2754
<i>Lee, J. S.; Rojas, R. G.</i>	
SNR Estimation for on Body Communications in MB OFDM Ultra Wide Band Communications	2758
<i>Betancur, Leonardo; Barrera, Melisa; Navarro, Andres; Cardona, Narcis; Rodrigo, M. Vicent</i>	
A Method of Estimating a Room Shape Using a Single Antenna in a Multipath Environment	2763
<i>Sakamoto, T; Sato, T</i>	
Calderon Preconditioned CFIE with MLFMM for Acceleration	2768
<i>Stephanson, M. B.; Peng, Z.; Wei, J.; Lee, J.-F.</i>	
Improved Tissue Phantoms for Experimental Validation of Microwave Breast Cancer Detection	2773
<i>Porter, E; Fakhoury, J; Oprisor, R; Coates, M; Popovic, M</i>	
Reactive Near-Field Multiplexing and Reliable Diversity Communication Method	2778
<i>Kwon, D.-H.</i>	
Comparison of Single-Ended and Differential-Mode Beamforming of Checkerboard Focal Plane Array	2783
<i>Hay, S G</i>	
In-Situ Vehicular Antenna Integration and Design Aspects for Vehicle-to-Vehicle Communications	2788
<i>Thiel, A.; Klemp, O.; Paier, A.; Bernadó, L.; Karedal, J.; Kwoczek, A.</i>	
Series of Narrow Wall Windows to Feed Partially-Dielectric-Filled Oversized-Rectangular Waveguide with Slot Array	2793
<i>Samardžija, Miroslav; Hirokawa, Jiro; Ando, Makoto</i>	

Analysis of the Shorting Pin Effects on an Inverted-F Antenna Using an Equivalent Model for Impedance Matching	2798
<i>Lee, Woosung; Ko, Manjung; Kim, Jaeheung; Yoon, Young Joong</i>	
On the Diagnosis of Arbitrary Geometry Fully Active Arrays	2803
<i>Buonanno, A.; D'Urso, M.</i>	
Long Term Path Attenuation Measurement of the 71-76 GHz Band in a 70/80 GHz Microwave Link	2807
<i>Hansryd, J.; Chen, J.; Li, Y.; Ligander, P</i>	
Multi-Antenna Systems for Clamshell Mobile Phones	2811
<i>Addaci, R.; Chebihi, A.; Diallo, A.; Luxey, C.; Le Thuc, P.; Staraj, R</i>	
Sunflower Sparse Array for Space Applications: From Design to Manufacturing	2815
<i>Viganó, M. C.; Caille, G.; Mangenot, C.; Lager, I. E.; Toso, G.</i>	
Influence of Channel Modeling on V2X Physical Layer Performance	2819
<i>Ivan, I.; Besnier, P.; Crussiere, M.; Bunlon, X.; Le Danvic, L.; Drissi, M.</i>	
Investigation of the Chest-Ear Radio Propagation Channel	2824
<i>Kvist, Søren; Jakobsen, K. B.</i>	
A Novel Printed-Circuit-Board Feeding Structure for Common-Mode Rejection in Wide-Scanning Connected Arrays of Dipoles	2827
<i>Cavallo, D.; Neto, A.; Gerini, G.; Micco, A.</i>	
Antenna Miniaturization and Integration in a 2.4 GHz System in Package	2831
<i>Jeangeorges, Mickael; Staraj, R.; Luxey, C.; Le Thuc, P.; El Hassani, C.; Ciaï, P.</i>	
Application of the Iterative Probe Correction Technique for Compensating the Effect of the Mechanical Alignment Errors of Probe in Spherical Near-field Antenna Measurements	2835
<i>Laitinen, Tommi</i>	
Microstrip Heatsink Antenna for Integrated RF Transmitters	2838
<i>Atukari, Atef; Toutain, Serge; Scudeller, Yves; Guillemet, Philippe</i>	
A 2.45-GHz Low Cost and Efficient Rectenna	2843
<i>Takhedmit, H.; Merabet, B.; Cirio, L.; Allard, B.; Costa, F.; Vollaïre, C.; Picon, O</i>	
Research of Circular Polarisation Quality by Using Quad Ridged Horn Antenna	2848
<i>Hradecky, Zdenek; Hamouz, Pavel</i>	
Wide-band Wide-angle Circular Polarization of a Multilayer Patch Antenna	2853
<i>Koubeïssi, Majed; Abdallah, Yasser; Arnaud, Eric; Thevenot, Marc; Monediere, Thierry; Koleck, Thierry; Peragin, Eric</i>	
Effect of Propagation Phenomena on MIMO Capacity of Wireless Systems Between 3 and 10 GHz	2857
<i>Malhouroux-Gaffet, Nadine; Pajusco, P.; Haddad, E</i>	
CPW-Fed Slot Bow-Tie Antenna at 90 GHz for a mm-Wave Detector Matrix	2862
<i>Tavakol, Vahid; Qi, Feng; Ocket, Ilja; Schreurs, Dominique; Nauwleers, Bart</i>	
Microstrip Reflectarray Formed by Double Elliptical Ring Elements	2865
<i>Li, Y.; Bialkowski, M. E.; Sayidmarie, K. H.; Shuley, N. V.</i>	
Human-Body Shadowing Effects on Indoor MIMO-OFDM Channels at 5.2 GHz	2870
<i>Ziri-Castro, Karla; Tan, H.; Dasgupta, J.</i>	
Compact and Multiband Dielectric Resonator Antenna with Reconfigurable Radiation Pattern	2875
<i>Huïtema, Laure; Koubeïssi, Majed; Decroze, Cyril; Monediere, Thierry</i>	
Substrate Edge Effects in Leaky Wave Antenna based on Complementary Split Ring Resonators	2879
<i>Eggermont, S.; Huynen, I.</i>	
GPR Investigation on Buried Rocks in Martian Subsoil for "WISDOM" Projects: Numerical and Measurement Set-up Results	2883
<i>Valerio, Guido; Galli, A.; Barone, P. M.; Lauro, S. E.; Mattei, E.; Pettinelli, E.</i>	
Efficient Design of Finite Conformal Antenna Arrays Using VSIE Formulation and P-FFT Method	2886
<i>Xiao, K.; Li, L. W.; Zhao, W. J.; Chai, S.-L.; Mao, J.-J.</i>	
UHF Tag for Suitcase RFID Application in Airports	2890
<i>Medeiros R. Carla; Costa, R. J.; Fernandes, A. C.</i>	
A Comparison of Fractal Koch Antenna for UHF Band Applications	2895
<i>Nazri, A Karim Mohd; Rahim, A Kamal; Kamarudin, Muhammad Ramlee; Aziz, Abd Muhammad Zoinol</i>	
Dual Band Electromagnetic Band Gap Structure Incorporated with Ultra-Wideband Antenna	2900
<i>Ayop, Osman; Rahim, A. Mohamad Kamal; Kamarudin, Muhammad Ramlee; Aziz, Abdul Mohamad Zoinol Abidi; Abu, Maisarah</i>	
UWB Antenna Element for a Full-Polarimetric Antenna Array	2904
<i>Yarovoy, A; Haider, N.; Yang, B; Tran, D</i>	
A GPU Acceleration for FFT-Based Fast Solvers for Integral Equation	2909
<i>Francavilla, M. A.; Attardo, E. A.; Vipiana, F.; Vecchi, G.</i>	
Electromagnetic Power Flow Between Opposite Sides of a Lossy Dielectric Sphere Using Spherical Vector Wave Expansion	2913
<i>Nour, Baqer; Breinbjerg, Olav</i>	
3D Scattering by an Array of Rods Using the Gaussian Beam Formalism Coupled to the Scattering Matrix Method	2918
<i>Sokoloff, J.; Varault, S.; Bolioli, S.</i>	
Optically Reconfigurable RF Circuits	2923
<i>Draskovic, D; Christodoulou, C; Budimir, D</i>	
An Iterative MoM/PO Method Based on MBF/Krylov Approach	2926
<i>Andrés García, B; González-Ovejero, D; Craeye, C; García-Muñoz, L. E.; Segovia-Vargas, D</i>	
3D Localization Method Based on Ray-Tracing Considering the Presence of Moving People	2930
<i>Gomez, J.; Tayebi, A.; Saez De Adana, F.; Gutierrez, O.</i>	

Fade Duration Statistics of Millimetre Wavelength Terrestrial Line-of-Sight Links	2934
<i>Cheffena, M; Tjelta, T; Breivik, T</i>	
Investigation of a Crossed Exponentially Tapered Slot Printed Antenna for UWB Ranging	2939
<i>Costa, R. J.; Medeiros, R. C.; Fernandes, A. C.</i>	
Significance of Common Scatterers in Multi-Link Wave Propagation	2944
<i>Poutanen, Juh; Haneda, Katsuyuki; Salmi, Jussi; Kolmonen, Veli-Matti; Hult, Tommy; Tufvesson, Fredrik; Vainikainen, Pertti</i>	
Computation of False Echo Zones and Shadowing for Aeronautical and Weather Radars	2949
<i>Van Lil, Emmanuel; De Bleser, J-W; Trappeniers, D.; Van De Capelle, A.</i>	
Measurement Based Propagation Channels for Terrestrial Digital Television Broadcasting Systems	2953
<i>Montalban, J.; Velez, M.; Sancho, R.; Prieto, G.; Arrinda, A.; De La Vega, D.; Angueira, P.</i>	
Control System for Compensation of Antenna Mistuning and Absorption Caused by the User's Index Finger	2957
<i>Berg, M.; Salonen, E.</i>	
Balanced Antenna Structures of Mobile Terminals	2962
<i>Ivonen, J.; Holopainen, J.; Kivekas, O.; Valkonen, R.; Icheln, C.; Vainikainen, P.</i>	
T/R Module Design for GEODA Antenna	2967
<i>Arias Campo, M.; Montesinos Ortego, I.; Fernández Jambrina, J. L.; Sierra Perez, M.</i>	
Subsurface Imaging Method (SSIM) Based on Phase Compensation of Radar Echoes	2972
<i>Zhang, H.; Plettemeier, D.</i>	
LTCC or LCP, a Comparison Using Cavity Backed Slot Antennas with PIN Curtains at 60 GHz	2977
<i>Dumanli, S.; Paul, D. L.; Railton, C. J.</i>	
A 76GHz Phased Array Antenna Using a Waffle-iron Ridge Waveguide	2982
<i>Kirino, Hideki; Ogawa, Koichi</i>	
Characterization of WiMAX Propagation in Microcellular and Picocellular Environments	2987
<i>Barbiroli, Marina; Carciofi, C.; Degli Esposti, V.; Fuschini, F.; Grazioso, P.; Guiducci, D.; Robalo, D.; Velez, F. J.</i>	
Propagation Model Calibration for DVB-SH in Terrestrial Single Frequency Networks	2992
<i>Salieto, Ariana; Roig, Gema; Gómez-Barquero, David; Cardona, Narcís</i>	
A Self-Resonant Electrically Small Loop Antenna for Hearing-Aids Application	2997
<i>Zhang, J.; Breinbjerg, O.</i>	
Multi-Port Frequency-Reconfigurable Antenna Optimization	3002
<i>Araque Quijano, Javier Leonardo; Vecchi, Giuseppe</i>	
Hierarchical Simplex Optimization Applied to Antenna Array Problem	3006
<i>Olcan, D.; Kolundzija, B.</i>	
Clustering Characterization for UWB Indoor Communications	3010
<i>Geng, Suiyan; Vainikainen, Pertti; Geng, Suiyan</i>	
Enhanced Elliptical Fresnel Zone Plate Antenna	3015
<i>Jafari Jam, Reza; Oshaghi, S. Hamid; Lotfi Neyestanak, Abbas Ali</i>	
Performance of Directive Multi-element Antennas Versus Multi-beam Arrays in MIMO Communication Systems	3019
<i>Jamaly, Nima; Zhu, Hongxia; Kildal, Per-Simon; Carlsson, Jan</i>	
Source Reconstruction in Antenna Synthesis	3024
<i>Araque Quijano, Javier Leonardo; Vecchi, Giuseppe</i>	
Partial Treatment of Wind Turbine Blades with Radar Absorbing Materials (RAM) for RCS Reduction	3028
<i>Rashid, L.; Brown, A K</i>	
Reduced-Size, Dual-Band Printed Quadrifilar Helix Antenna	3033
<i>Sharaiha, Ala; Rabemanantsoa, Jr</i>	
An Alternative Technique for Stabilizing the Boundary Elements Method in Electromagnetics	3037
<i>De Bleser, Jan-Willem; Van Lil, Emmanuel; Van De Capelle, Antoine</i>	
Density and Element-Size Tapering for the Design of Arrays with a Reduced Number of Control Points and High Efficiency	3041
<i>Bucci, Ovidio Mario; Isernia, Tommaso; Morabito, Andrea Francesco; Perna, Stefano; Pinchera, Daniele</i>	
Confinement and Propagation Relations for Zenneck Surface Waves	3045
<i>Sihvola, A.; Qi, J.; Lindell, I. V.</i>	
Simple Models for the Analysis of Waveguiding Systems at the Terahertz Band Using Classical Microwave Approaches	3049
<i>Leal-Sevillano, C. A.; Ruiz-Cruz, J. A.; Montejo-Garai, J. R.; Rebolgar, J. M.</i>	
The Enhanced Leaky Lens Antenna: Prototype Demonstrators at mm-Wave Frequencies	3054
<i>Neto, A; Monni, S</i>	
A 433 MHz – 22 GHz Reconfigurable Dielectric Loaded Biconical Antenna	3058
<i>Ott, Arndt; Eibert, T. F.</i>	
Use of the HYCELL Model for Predicting Rain Attenuation on UAS Low Elevation Datalinks	3063
<i>Kougiorgas, C.; Feral, L.; Fabbro, V.; Jeannin, N.; Lemorton, J.</i>	
A New Physical-Statistical Model of the Land Mobile Satellite Propagation Channel	3068
<i>Abele, Anthony; Fontan, F. P.; Bousquet, M.; Valtr, P.; Lemorton, J.; Lacoste, F.; Corbel, E.</i>	
OFDM Interference Detection Using Flexible Subcarrier Channel Estimator	3073
<i>Kobayashi, T; Iwakiri, N</i>	
Synthesis on Transmission Coefficients for Deterministic Through-the-Wall Propagation Modelling	3078
<i>Plouhinec, E.; Uguen, B.</i>	
Low Cost Phased Array for Mobile Ku-Band Satellite Terminal	3083
<i>Vaccaro, Stefano; Llorens Del Río, D.; Torres Sánchez, R.; Baggen, R.</i>	
On the Number of OTA Antenna Elements for Plane-wave Synthesis	3088
<i>Laitinen, Tommi; Kyosti, P.; Nuutinen, J.; Vainikainen, P.</i>	

A New Multifunctional UWB Planar Antenna Based on Printed Dipoles in Rhombic Configuration	3093
<i>Mazzocchi, Simona; Valerio, G.; Zucca, M.; Ciattaglia, M.; De Luca, A.; Galli, A.</i>	
On Diversity Performance of Two-Element Coupling Element Based Antenna Structure for Mobile Terminal	3096
<i>Al-Hadi, Abdullah Azremi; Toivanen, Juha; Laitinen, Tommi; Vainikainen, Pertti; Jamaly, Nima; Chen, Xiaoming; Carlsson, Jan; Kildal, Per-Simon; Pivnenko, Sergey</i>	
Verification of a Large Broadband Electronically Scanned Array Aperture	3101
<i>Svensson, B; Jensen, Y</i>	
MIMO OTA Test Concept with Experimental and Simulated Verification	3104
<i>Kyosti, P.; Nuutinen, J-P.; Jamsa, T.</i>	
Performance Enhancement of Salisbury Screen Absorber Using a Resistively Loaded High Impedance Ground Plane	3109
<i>Che Seman, Fauziahanim; Cahill, Robert; Fusco, Vincent</i>	
Parametric Study of a Unit Cell with Elliptical Patch for Periodic Structures with Variable Number of Grounding Vias	3114
<i>Matekovits, L.; De Sabata, A.; Orefice, M.</i>	
Frequency-Reconfigurable Mobile Terminal Antenna with MEMS Switches	3117
<i>Valkonen, R.; Luxey, C.; Holopainen, J.; Icheln, C.; Vainikainen, P.</i>	
Radiotransparent Building Materials	3122
<i>Dubrovka, Rostyslav; Below, P</i>	
Innovative Technique for Indoor Large Radar Arrays Testings	3127
<i>D'Urso, Michele; Buonanno, Aniello; Prisco, Giancarlo</i>	
A Study of Perturbations in Linear and Circular Polarized Antennas in Close Proximity to the Human Body and a Dielectric Liquid Filled Phantom at 1.8 GHz	3130
<i>Khattak, M. I.; Edwards, R; Ma, J; Ullah, A; Panagamuwa, C</i>	
Cost-Effective THz Spectroscopy with Continuous-Wave Laser Sources	3134
<i>Hofmann, M. R.; Scheller, M.; Brenner, C.; Baaske, K.; Koch, M.</i>	
A Subject-Specific Numerical Study in UWB Body-Centric Wireless Communications	3138
<i>Sani, A; Hao, Y; Zhao, Y; Lee, S-L; Yang, G-Z</i>	
Spherical Wave Modelling of Radio Channels Using Linear Scanners	3141
<i>Khatun, Afroza; Laitinen, Tommi; Vainikainen, Pertti</i>	
A Solution to a 2D Electromagnetic Imaging Problem Based on Closed-form Radiating and Non-radiating Sources	3146
<i>Graghani, Gian Luigi; Diaz Mendez, M.</i>	
Bandwidth Improvement of 60GHz Micromachining Patch Antenna Using Gap Coupled U-Microstrip Feeder	3151
<i>Adane, A.; Gallee, F.; Person, C.</i>	
Orientation-Free XPD and CPR Model in Outdoor-to-Indoor and Indoor-to-Indoor Channels	3156
<i>Panahandeh, Ali; Quitin, Francois; Dricot, Jean-Michel; Horlin, Francois; Oestges, Claude; De Doncker, Philippe</i>	
A Dual-Band Reflectarray Antenna for Emergency Infomobility Service Systems	3161
<i>Pirinoli, Paola; Cong, P. T.; Mussetta, M.; Dassano, G.; Orefice, M.</i>	
Dynamic Array Thinning for Adaptive Interference Cancellation	3165
<i>Haupt, Randy; Rocca, Paolo</i>	
Study of Miniaturized Circular Patch Diversity Antenna for Mobile Terminals	3168
<i>Gao, Y; Falade, O.; Rehman, M.; Wang, S.; Chen, X.; Parini, C.</i>	
Ionospheric Propagation Activities During GIOVE Mission Experimentation	3172
<i>Prieto-Cerdeira, Roberto; Binda, S.; Hidalgo, I.; Rodriguez, D.; Borrel, V.; Giraud, J.</i>	
Time Evolution of Dense Multipath Statistics	3178
<i>Richter, A.; Salmi, J.; Kolmonen, V.-M.</i>	
Influence of the Finite Conductivity on RLSA Antenna Design	3183
<i>Albani, M.; Mazzinghi, A.; Freni, A.</i>	
Efficient Numerical Technique for the Analysis of the Actual Influence of a Radiating Element Embedded in a Reflectarray	3186
<i>De Vita, F.; De Vita, P.; Freni, A.</i>	
Aperiodic Phased Arrays for Space Situational Awareness Applications	3189
<i>Montagna, M.; Dauron, G.; Besso, P.; Bozzi, M.; Perregini, L.</i>	
Broadband Linear Array with Photoconductive Attenuators	3193
<i>Haupt, Randy; Flemish, J.</i>	
Active Optical Sensor for Electromagnetic Field Measurements in Time and Frequency Domains	3197
<i>Kuehn, Sven; Kuster, N.; Bomholt, F.; Chavannes, N.</i>	
Design of Low Profile Antipodal Vivaldi Antenna for Ultra-Wideband Near-Field Imaging	3199
<i>Zhuge, Xiaodong; Yarovoy, A</i>	
Antenna Design for a Direct-to-Earth Link of a Planetary Deep Space Probe	3204
<i>Eichelberger, H.; Prattes, G.; Schwingenschuh, K.; Tokano, T.; Jernej, I.; Besser, B.; Stachel, M.</i>	
A New Concept for High Performance Ka-band Reflectors	3208
<i>Petersson, M; Baunage, M; Ekstrom, H; Sohtell, V</i>	
Simulation of Large Circular Antenna Arrays Using the Array Scanning Method	3212
<i>Sarkis, Remi; Craeye, Christophe</i>	
Analysis of Conformal Arrays Using Spectral Domain Approach – Comparison of Different Asymptotic Extraction Methods	3216
<i>Bosiljevac, M.; Skokic, S.; Sipus, Z.</i>	
Analytical Modeling and Experimental Verification of Fabry-Perot Resonances in Partially-Reflecting Surfaces	3220
<i>Kaipa, C. S. R.; Butler, C. A. M.; Hibbins, A. P.; Sambles, J. R.; Medina, F.; Mesa, F.; Yakovlev, A. B.</i>	

Validation of Ridge Gap Waveguide Performance Using In-house TRL Calibration Kit	3225
<i>Zaman, A. Uz.; Kildal, P.-S.; Fern Dahl, M.; Kishk, A.</i>	
Lightweight Intersatellite Link Antenna (LISA_{MS}) Operating at Ka-Band	3229
<i>Nathrath, N.; Truemper, M.; Purschke, R.; Harder, J.; Wolf, H.</i>	
A Model for Forward-Diffuse Scattering Through a Wall	3233
<i>Fuschini, F.; Degli-Esposti, V; Vitucci, E.</i>	
A Frequency Agility Technique on a Miniature Omnidirectional Antenna	3237
<i>Stufyar, S.; Delaveaud, C.; Staraj, R.</i>	
Analytical Propagation Model of Body Area Network Channels Based on the Creeping Wave Theory	3241
<i>Alves, Thierry; Poussot, Benoit; Laheurte, Jean-Marc; Terchoune, Hanae; Wong, Man-Fai; Fouad Hanna, Victor</i>	
Epoxy Bonded Ferrimagnetic Compounds as Patch Antenna's Substrate	3246
<i>Zervos, Theodore; Alexandridis, A. A.; Lazarakis, F.; Stamopoulos, D.; Pissas, M.; Dangakis, K.</i>	
New Method for Design Implementation of Vivaldi Antennas to Improve Its UWB Behavior	3251
<i>Javashvili, Otar; Andersson, Daniel</i>	
Characterization of Microstrip Reflectarray Square Ring Elements by Means of an Artificial Neural Network	3256
<i>Mussetta, M.; Pirinoli, P.; Cong, P. T.; Orefice, M.; Zich, R. E.</i>	
Plasma Capillary Application to Switchable and Tunable EBG Coupler	3260
<i>Varault, Stefan; Bolioli, Sylvain; Sokoloff, Jerome</i>	
Evolutions in Naval Phased Array Radar at Thales Nederland B. V.	3264
<i>Van Werkhoven, G. H. C.; Van Aken, R. H.</i>	
Optimal Waveform Selection for Software Defined Data Acquisition System	3268
<i>Ruuben, T.; Berdnikova, J; Mütürsepp, I; Madar, U</i>	
Propagation Over a Parabolic Valley: Model Comparison to Data	3273
<i>Chizhik, Dmitry; Drabeck, L.; Macdonald, W. M.</i>	
On the Computation of the Beam Coupling Factor in Large Irregular Arrays	3277
<i>Gonzalez, D; Craeye, C; Angeletti, P; Toso, G; Roederer, A.</i>	
Design of a Closed Cylindrical Beam Forming Network Fed Circular Array for Space Diversity Applications	3282
<i>Fonseca, Nelson J. G.; Ferrando, Nicolas</i>	
Active MIMO Performance Measurements in Connected Reverberation Chambers	3286
<i>Orlenius, Charlie; Franzén, Magnus; Aijaz, Naveed</i>	
Design and Prototyping of a Microstrip Transmit-Receive Array Antenna for Mobile Ku-Band Satellite Terminals	3289
<i>Manrique, R; Torres, R; Dominguez, C; Tiezzi, F; Mosig, J. R.</i>	
Propagating and Radiating Properties of Broadband Hollow Core Fibers in Terahertz Spectral Region	3294
<i>Polemi, A; Vincetti, L; Setti, V</i>	
A Study of the Horizontal Structure of Rain Cells in the U.K. Using the EXCELL Model	3298
<i>Townsend, Adrian; Watson, R J</i>	
Design and Analysis of an UTE_m antenna	3303
<i>Misman, Dalila; Aziz, Abd. Mohd Zoinol Abidin; Husain, Mohd Nor</i>	
Through-Wall Radar Imaging System Utilizing a Light-Weight Low-Profile Printed Array	3307
<i>Browne, K.; Burkholder, R.; Volakis, J.</i>	
Planar Antenna Arrays at 60 GHz Realized on a New Thermoplastic Polymer Substrate	3312
<i>Al Henawy, Mahmoud; Schneider, Martin</i>	
Interference Minimisation of Antenna-to-Range Interface for Pattern Testing of Electrically Small Antennas	3317
<i>Loh, Tian Hong; Alexander, Martin; Miller, Philip; Betancort, Andrés López</i>	
Highly Directive 2-D Leaky-Wave Antennas Based on Double-layer Meta-Surfaces	3322
<i>Mateo-Segura, C; Feresidis, A; Gousssetis, G</i>	
Comparison of Macrocell Propagation Channels at 2.2 and 3.8 GHz	3327
<i>Lacoste, Frédéric; Carvalho, F.; Scot, G.; Ros, B.</i>	
Verification of Cloak Designs Based on Transformation Optics via Rigorous Numerical Simulation	3332
<i>Mitra, R.; Huang, Neng-Tien</i>	
A New Miniaturized Antenna for ISM 433MHz Band	3336
<i>Lach, C.; Rudant, L.; Delaveaud, C.; Azoulay, A.</i>	
An Overview on the Design and Properties of EBG Antennas	3341
<i>Mahdjoubi, Kourosh; Vu, T. H.; Tarot, A. C.; Collardey, S.</i>	
MISO and SIMO Measurements of the Land Mobile Satellite Propagation at S-Band	3344
<i>Lacoste, Frédéric; Carvalho, F.; Fontan, F. P.; Nunez, A.; Fabbro, V.; Scot, G.</i>	
Mobile WiMAX: System Performance on a Vehicular Multipath Channel	3349
<i>Colda, Rebeca Maria; Palade, T.; Puschita, E.; Vermesan, I.; Moldovan, A.</i>	
Dual Use Ku/K Band Corrugated Horn for Telecommunication Satellite	3354
<i>Addamo, Giuseppe; Peverini, O. A.; Tascone, R.; Virone, G.; Cecchini, P.; Mizzoni, R.; Orta, R.</i>	
Element Position Error Compensation in Active Phased Array Antennas	3359
<i>Svensson, B; Lanne, M; Wingard, J</i>	
Small Wideband Antenna for GSM and WLAN Applications	3362
<i>Hraga, H; See, C. H.; Abd-Alhameed, R. A.; Zhou, D; Adnan, S; Elfegani, Ite; Excell, P</i>	
Scattering Analysis of Flat Electric Dipoles on Multilayer Chiral Structures	3366
<i>Rabelo, N.; Santama, S.; Lacava, J.; Fernandes, D.</i>	
RF Performance of the GAVRT Wideband Radio Telescope	3371
<i>Imbriale, William; Weinreb, S.; Jones, G.; Mani, H.</i>	

Modeling EMC/EMI Effects of Antenna Arrays on Large Platform Using Multi-Solver Domain Decomposition Method	3375
<i>Wang, X.; Peng, Z.; Stephanson, M. B.; Lee, J.-F.</i>	
Miniature Antenna Radiation Pattern Measurement Using Fiber-Optic Link	3380
<i>Hachemi, Mohamed; Bories, S; Haj Khelifa, K; Delaveaud, C</i>	
Review of Radiofrequency Exposure Systems for in Vitro Biological Experiments	3385
<i>Paffi, Alessandra; Apollonio, F.; Liberti, M.; Pinto, R.; Lovisolo, G. A.</i>	
Coupling and Correlation Reduction in Compact Arrays with Embedded Ground Defects: Experimental Verification	3389
<i>Kakoyiannis, Constantine; Constantinou, P.</i>	
Spectral Response of a Multi-layered Sphere Applied in Microwave Breast Imaging	3394
<i>Zhu, Guangran; Popovich, Milica</i>	
Improved Efficiency of Spatial Mixed-Potential Green's Function Computation for Coated Cylinders	3398
<i>Galvis Salzburg, C.; Bertuch, Thomas; Vecchi, Giuseppe</i>	
Wideband Zero-Mode Circular Patch Antenna	3402
<i>Vazquez-Roy, J. L.; De Inclan-Sanchez, L.; Quevedo-Teruel, O.; Rajo-Iglesias, E.</i>	
Time-Reversal System for Microwave Hyperthermia	3405
<i>Hana, Dobsicek Trefna; Togni, Paolo; Shiee, Reza; Persson, Mikael</i>	
Guidelines for Effective Microwave Breast Imaging: An Accurate Numerical Assessment Against 3D Anthropomorphic Phantoms	3408
<i>Catapano, Ilaria; Crocco, L.; Di Donato, L.; Angiulli, G.; Isernia, T.; Morabito, A.; Tringali, S.; Bucci, O. M.</i>	
Estimation of the Effective Permeability of Stacking Dispersive Conductor Magnetic Layers	3413
<i>Rialet, Damien; Sharaiha, A; Tarot, A-C; Delaveaud, C; Viala, B</i>	
Molecular Simulations of a Water-Micelle System Exposed to High Intense Electric Fields	3417
<i>Marracino, Paolo; Apollonio, Francesca; Liberti, Micaela; Amadei, Andrea; D'Inzeo, Guglielmo</i>	
Angular Plane Wave Spectrum Analysis of TM Modes in a 2d Reverberation Chamber Using A Root-Music Based Method	3420
<i>Nafkha, Kamel; Mengue, S; Richalot, E; Picon, O</i>	
Vital Signs Monitoring with a UWB Radar Based on a Correlation Receiver	3425
<i>Leib, Mario; Menzel, Wolfgang; Schleicher, Bernd; Schumacher, Hermann</i>	
Fourier Series Expansion Method for Floquet-Mode Analysis of Photonic Crystal Waveguides Formed by Circular Cylinders	3430
<i>Watanabe, K; Nakatake, Y</i>	
Broad Band Analysis of Arbitrarily Shaped Microwave Filters Using a Novel Singular Value Decomposition Technique	3435
<i>Quesada Pereira, Fernando Daniel; Vidal, A; Pérez Soler, F. J.; Berenguer, Andrés; San Blas, A.; Mira, F.; Boria Esbert, V. E.; Gimeno, B.; Álvarez Melcón, A.</i>	
Design and Measurement of High Impedance Surface	3438
<i>Linot, Fabrice; Cousin, R.; Begaud, X.; Soiron, M.</i>	
New Algorithm to Speed-Up the Analysis of Large Antennas and Antenna Interaction with Structures	3442
<i>Lozano, L; Algar, M^aJ.; González, I; Catedra, F.</i>	
Influence of Propagation Models in 802.11p Car-to-Car Network Simulations	3447
<i>Ferreiro-Lage, J. A; Aguado-Agelet, F.; Galvez, J.; Rubinos, O.; Ferreiro-Lage, J. A</i>	
dRET Modelling of Time-Variant Foliage Channels	3450
<i>Morgadinho, S; Caldeirinha, R.; Fernandes, T; Al-Nuaimi, M; Richter, J</i>	
Broadband Axial Excitation of Fabry-Perot Resonator	3455
<i>Cerny, Petr; Korinek, Tomas; Piksa, Petr; Zvanovec, Stanislav; Mazanek, Milos</i>	
Low Frequency Analysis of Multi-scale Problems with a Multi-resolution Clipping Technique	3459
<i>Bercigli, M.; Vipiana, F.; Andriulli, F. P.; Guidi, R.; Vecchi, G.; Bandinelli, M.</i>	
Modeling of VLF/LF Antenna Insulators with an Arbitrarily Oriented Thin Wire Loaded TLM Node	3463
<i>Cuggia, Renaud; Verissimo, G.; Dubard, J.-L.; Ney, M.; Pichot, C.</i>	
Broadband and High-Gain Metamaterial Microstrip Antenna Arrays	3468
<i>Li, Joshua Le-Wei; Li, Y. N.; Xiao, K.</i>	
Shape Optimization of Conformal Array Antennas	3472
<i>Jacobsson, Per; Rylander, T</i>	
Analysis of the Scattering Field of Wind Turbine Using Rigorous and Asymptotic Techniques	3477
<i>González, I; Lozano, L; Gómez, J; Tayebi, H; Etayo, I.; Catedra, M. F.</i>	
A SVD-Based Approach to Helicoidal NFFF Transformations	3481
<i>Capozzoli, Amedeo; Curcio, C; D'Elia, G; Ferrara, F; Gennarelli, C; Guerriero, R; Liseno, A</i>	
Design of H-Plane Shaped Flat Lenses Using a 2-D Approach Based on FDTD and Genetic Algorithm	3486
<i>Rolland, Anthony; Sauleau, Ronan; Drissi, M'Hamed</i>	
The European ALMA Project: Design Manufacturing and Performances	3490
<i>Marchiori, Gianpietro; Rampini, Francesco</i>	
Small Wideband Antennas Based on Photonic Crystals	3495
<i>Volakis, L.; Sertel, Kubilay; Tzanidis, Ioannis</i>	
Slowing Manhattan MIMO Channels	3499
<i>Ling, Jonathan; Chizhik, D.</i>	
Millimeter Wave Isolator Based on Thin Film Magnetized Semiconductors in Fully-Planar Waveguide	3504
<i>Alshannaq, S.; Rojas, R.</i>	

The Biggest CFRP Antenna in the World for Communication and Navigation: The Normandie Radar Project	3507
<i>De Lorenzi, Simone; Marchiori, Gianpietro; Rampini, Francesco</i>	
Characteristic Mode Analysis of Electrically Large Conformal Bifilar Helical Antenna	3511
<i>Strojny, B. T.; Rojas, R. G.</i>	
Design of a Directive Antenna with Fractal Geometry for RFID Localization Applications	3516
<i>Franciscatto, B. R.; Fontgalland, G.; Ndagijimana, F.; Vuong, T. P.</i>	
External Calibration of GPR Antennas Accommodated on a Rover	3521
<i>Benedix, W.-St.; Plettemeier, D.; Wolf, K.; Ciarletti, V.; Hamran, S.-E.; Corbel, C.</i>	
Archimedean Spiral Antenna for Underground Soil Measurements in Greenland	3525
<i>Gustafson, C; Johansson, A J</i>	
Optical Scanner Retrieval of Reciprocal AUT-Probe Positions and Its Use in NFFF Transformation Techniques	3530
<i>Amedeo, Capozzoli; Curcio, C; D'Elia, G; Lisenò, A; Rizzo, C A E; Strazzullo, G; Vinetti, P</i>	
Circular Polarized DVB-T Transmitting Antennas	3535
<i>Hahnel, R.; Plettemeier, D.; Wolf, K.; Müller, M.; Mugler, A.</i>	
Preliminary Design of Foldable Reconfigurable Reflectarray for Ku-Band Satellite Communication	3540
<i>El Ghamudi, Hamza; Vincenti Gatti, Roberto; Tomassoni, Cristiano; Sorrentino, Roberto</i>	
Reduction of Radiation from Central Exciting Region of Eleven Feed and Pattern Improvements for VLBI 2010 Applications	3545
<i>Karandikar, Yogesh; Yang, Jian; Kildal, Per-Simon</i>	
Multi-Scale Modeling of Antennas with TLM Method	3550
<i>Verissimo, G.; Cuggia, R.; Dubard, J.-L.; Ney, M.; Pichot, C.</i>	
On a Characterisation of Large-Scale Channel Parameters for Distributed (Multi-Link) MIMO – The Impact of Power Level Differences	3553
<i>Narandzic, M.; Kotterman, W.; Kaeske, M.; Schneider, C.; Sommerkorn, G.; Hong, A.; Thomae, R.</i>	
Low Profile Multiband Antenna for Mobile Communications	3558
<i>Pinho, Pedro; Calhau, Luis; Pinho, Pedro</i>	
Electrically Small Wire Monopole Antenna with Non-Foster Impedance Element	3562
<i>Song, Keum-Su; Rojas, R. G.</i>	
Channel Covariance Modeling for Multi-User MIMO Systems	3566
<i>Jensen, M. A.; Shi, Y.; Yang, Y.</i>	
Wideband Dual-Polarization Reconfigurable Elementary Cell for Electronic Steerable Reflectarray at Ku-Band	3571
<i>Montori, Simone; Cacciamani, Fabrizio; Vincenti Gatti, Roberto; Barba, Mariano; Carrasco, Eduardo; Encinar, Jose; Sorrentino, Roberto</i>	
Propagation Study and Performance Evaluation of a Fixed Access WiMAX System	3576
<i>Moraitis, Nektarios; Skevas, Spyros; Giouzevas, Anastasios; Constantinou, Philip</i>	
Comparisons of Different Descrambler/ Power Combining Boards Layout for Multi-Port, Decade Bandwidth Eleven Feed	3581
<i>Yogesh, Karandikar; Kildal, Per-Simon</i>	
Circularly Polarized Textile Antenna for Personal Satellite Communication	3587
<i>Kaivanto, E.; Berg, M.; Salonen, E.; Lilja, J.</i>	
Effect of Terrain Irregularities and Clutter Distribution on Wave Propagation at 3.5 GHz in Suburban Area	3591
<i>Chee, Kin Lien; Kürner, Thomas</i>	
Ultra Wideband Monopole Antenna with Split Ring Resonator for Notching Frequencies	3596
<i>Brito, D. B.; Begaud, Xavier; D'Assuncao, A. G.; Fernandes, H. C. C.</i>	
Analysis & Generation of Statistical Population of Planar UWB Antennas	3601
<i>Yousuf, Muhammad Amir; Roblin, Ch. R</i>	
A Thin Surface Wave Antenna Using a Via-Less EBG Structure for 2.45 GHz On-Body Communication Systems	3606
<i>Khouri, Rami; Ratajczak, P.; Brachat, P.; Staraj, R.</i>	
Antenna for the Application in UWB-Monopulse-Radar Technique	3610
<i>Adamiuk, Grzegorz; Heine, Christoph; Wiesbeck, Werner; Zwick, Thomas</i>	
Nanosecond Pulsed Electric Fields: Microdosimetry on Single Cells	3614
<i>Merla, C.; Paffi, A.; Liberti, M.; Apollonio, F.; Danei, F.; Leveque, P.; D'Inzeo, G.</i>	
Performance Analysis and Optimization of a MIMO Antenna System Based Upon Hybrid Diversity for Wireless HDTV Camera	3617
<i>Person, Christian; Deniel, S; Hemery, J; Coupez, J. P.</i>	
On the Optimal Synthesis of Shaped Patterns by Means of Uniformly Spaced Linear or Planar Arrays	3621
<i>Isernia, Tommaso; Laganà, Antonia Rita; Morabito, Andrea Francesco</i>	
Wave Excitation on Human Body by a Short Dipole	3626
<i>Akhoondzade-Asl, Lida; Hall, Peter; Nechayev, Yuri</i>	
ROSA: An Advanced New Technological Design for Radio Occultation Antenna	3631
<i>Catalano, Valeria; Ivagnes, M.; Valle, P.</i>	
Natural Coupling Distance for Human Exposure to Electromagnetic Fields	3636
<i>Garcia-Fernandez, M. A.; Valenzuela-Valdes, J. F.; Sanchez-Hernandez, D.</i>	
Printed Antenna for Satellite Communications	3639
<i>Garcia-Aguilar, A.; Sierra-Perez, M.; Fernandez-Gonzalez, J. M.; Inclan-Alonso, J. M.</i>	
LU-Decomposition Based Integral Equation Solver of Linear Complexity and Higher-Order Accuracy for Large-Scale Capacitance Extraction	3644
<i>Chai, W.; Jiao, D.</i>	
Clinical Diagnostics and Treatment with Electromagnetic Fields	3649
<i>Fhager, Andreas; Dobsicek Trefna, H; Zeng, X; Linner, P; Zirath, H; Stake, J; Persson, M</i>	

An Energy-Based Circuit Parameter Extraction Method for CRLH Leaky Wave Antennas	3651
<i>Otto, S.; Rennings, A.; Liebig, T.; Caloz, C.; Solbach, K.</i>	
Clear-Air Transmission Impairments at Low Path Elevation Angles	3656
<i>Rogers, David</i>	
Beam Switching Reflectarray with MEMS Controls	3661
<i>Bayraktar, Omer; Aydin Civi, Ozlem; Akin, Tayfun</i>	
Refractive Index Evaluation of Multi-Walled Carbon Nanotube Arrays	3665
<i>Katsounaros, Anestis; Rajab, K; Hou, K; Mann, M; Naftaly, M; Crossland, W. A.; Collings, N; Hao, Y</i>	
A Universal Dipole-Moment-Based Approach for Formulating MoM-Type Problems Without the Use of Green's Functions	3668
<i>Mitra, Raj; Panayappan, Kadappan; Pelletti, Chiara; Monorchio, Agostino</i>	
A Compact Antenna Based on Split Ring Resonator	3671
<i>El Mrabet, O; Aznabet, M; Falcone, F; Essaaidi, M; Sorolla, M</i>	
On Simulating Propagation for OFDM/MIMO Systems with the MR-FDPF Model	3674
<i>Gorce, Jean-Marie; Villemaud, Guillaume; Flipo, Paul</i>	
Using Game Engines for Wideband Channel Estimation Parameters in Andean Cities	3679
<i>Navarro, Andres; Guevara, D.</i>	
Mutual Coupling and Platform Effects in the Synthesis of Passive Coherent Location Radar Array	3684
<i>D'Urso, Michele; Bernardi, Gabriella; Farina, Alfonso; Felaco, Maurizio; Meliadò, Ettore Flavio</i>	
Terahertz Imaging and Spectroscopy	3686
<i>Davies, A G; Burnett, A D; Dean, P; Wood, C D; Saat, N K; Hatem, O; Cunningham, J; Linfield, E H</i>	
A Compact Ku-Band Transmit/Receive Low-Profile Antenna for Broadband Mobile Satellite Communications	3691
<i>Tiezzi, F.; Llorens, D.; Dominguez, C.; Fajardo, M.</i>	
Optimization of UWB Dipole Feeding Circuits	3695
<i>Cerny, Petr</i>	
Transmission Line Model for Meander Antennas	3699
<i>Onofrio, Losito; Michele, Gallo; Vincenzo, Dimiccoli; Barletta, Domenico; Bozzetti, Michele</i>	
Comparison of Small 3D Multi-Loop and Micro-Coplanar ZOR Antennas	3703
<i>Polivka,</i>	
Test Results for the Multiple Spot Beam Antenna Project "Medusa"	3707
<i>Schneider, Michael; Hartwanger, Christian; Sommer, Ernst; Wolf, Helmut</i>	
Analysis of Rain Attenuation from Experimental Drop Size Distributions	3711
<i>Riera, Jose M.; Garcia-Rubia, J M; Benarroch, A; Garcia, P</i>	
Aperture Array Model for Rapid Assessment of Base Station Antennas Near Field Based on Half Power Beam Width Equivalence	3716
<i>Nanos, Apostolos; Goudos, S. K.; Stakavara, K.; Samaras, T.; Sahalos, J. N.</i>	
Long-Term Measurements of Slant-Path Propagation at 20 GHz in Madrid	3721
<i>Riera, Jose M.; Garcia-Rubia, J M; Garcia, P; Benarroch, A</i>	
Complex Source Extension of UTD for Analyzing Large Reflector Antennas	3726
<i>Kim, Y; Burkholder, R. J.; Pathak, P</i>	
Hybrid SFX/MLayAIM Method for the Analysis and Optimization of Large Reflectarrays and Planar Arrays with Metallic Lenses	3730
<i>Bercigli, M.; De Vita, P.; Guidi, R.; Freni, A.; Pirinoli, P.; Matekovits, L.; Vecchi, G.; Bandinelli, M.</i>	
Wide-Band Evaluation of Antennas Using Adaptive Stoer-Bulirsch Algorithm and Vector Fitting Combined with MoM	3734
<i>Karwowski, Andrzej; Wojcik, Dariusz</i>	
A Technique for Solving Multiscale Problems in CEM Utilizing Dipole Moments and Macro Basis Functions	3738
<i>Mitra, R.; Bringuier, J. N.</i>	
A Comparison of Two Different Ray Based Methods for Analyzing Large Convex Conformal Antenna Arrays	3741
<i>Pathak, P.; Janpugdee, P.; Burkholder, R. J.</i>	
Power and Delay Domain Parameters of Channel Measurements at 2.53 GHz in an Urban Macro Cell Scenario	3746
<i>Boettcher, Annika; Schneider, Christian; Narandzic, Milan; Vary, Peter; Thomae, Reiner S.</i>	
Optimization of Wire-Medium-Based Shortened Horn Antenna	3751
<i>Hrabar, S; Muha, D; Sipus, Z</i>	
A Hybrid Multiscale FDTD Methodology for Modeling Fine Features In Body-Centric Communication Systems	3755
<i>Mitra, R.; Bringuier, J. N.</i>	
Low Profile, Directive and Very Wideband Antenna on a High Impedance Surface	3758
<i>Damaj, L.; Lepage, Ac.; Begaud, X.</i>	
Terahertz Antennas and Systems for Space Borne Platforms	3763
<i>Chattopadhyay, Goutam</i>	
Statistical Models of Wideband and UWB Omnidirectional Antennas Based on Parametric Modeling	3770
<i>Roblin, Christophe; Yousuf, Muhammad Amir</i>	
Green's Function Approach for Interfacing UTD with FEM for a Conformal Array Antenna on a Large Platform	3775
<i>Burkholder, Robert; Kim, Youngchel; Pathak, Prabhakar H.; Lee, Jin-Fa</i>	
Dual-Polarized Cylindrically Conformal Microstrip Patch Antennas and Arrays	3779
<i>Vallecchi, A.; Biffi Gentili, G.</i>	
Electrically Small Loop Antenna Surrounded by a "Shell" of Concentric Split Loops	3782
<i>Polivka, M.; Holub, A.</i>	

COST231-HATA and SUI Models Performance Using a LMS Tuning Algorithm on 5.8 GHZ in Amazon Region Cities	3785
<i>Souza Lyra Castro, Bruno; Ruiz Gomes, Igor; Carlos Ribeiro Jr, Francisco; Protazio Do Santos Cavalcante, Gervasio</i>	
Radar Propagation Modeling in Complex Environments for Marine Navigational Radar Using Measured Pulse Shapes	3788
<i>Rashid, L; Williams, K; Brown, A K</i>	
Auto-Calibrated MIMO-OFDM Channel Sounder for 3D Spatial Channel Characterization	3791
<i>Mora-Cuevas, J.; Cuellar, L.; De Haro-Ariet, L.</i>	
Analytical Dual-Link-MIMO Channel Model Using Correlated Correlation Matrices	3795
<i>Hult, Tommy; Tufvesson, Fredrik; Kolmonen, Veli-Matti; Poutanen, Juho; Haneda, Katsuyuki</i>	
Physical Optics Formulas for the Scattering from Metallic and Dielectric Plates with Cubic Spline Curved Boundaries	3800
<i>Vallecchi, A.</i>	
Exact Path Deformation Technique for Computing the RCS of 2D Rational Bezier Curves	3803
<i>Ferrando-Bataller, Miguel; Alfonso-Alos, Esperanza; Antonino-Daviu, Eva; Vico-Bondía, Felipe</i>	
Small Antennas Impedance and Gain Characterization Using Backscattering Measurements	3805
<i>Bories, Serge; Hachemi, M.; Haj Khelifa, K.; Delaveaud, C.</i>	
Groove Gap Waveguide: A Rectangular Waveguide Between Contactless Metal Plates Enabled by Parallel-Plate Cut-Off	3810
<i>Rajo-Iglesias, E.; Kildal, P. S.</i>	
Superb Gaussian Beam Efficiency Corrugated Horn Antennas	3814
<i>Teniente, J.; Gonzalo, R.; Del Río, C.</i>	
On the Applicability of the dRET Model to the Trunk Layer	3818
<i>Fernandes, Telmo; Leonor, Nuno; Caldeirinha, Rafael; Richter, Juergen; Al-Nuaimi, Miqdad</i>	
The Ridge Gap Waveguide as a Wideband Rectangular Hard Waveguide	3822
<i>Kildal, Per-Simon; Ng Mou Kehn, M.</i>	
Microstrip Array Analysis Using a Circuit Model Technique	3826
<i>Brown, J. E.; Lee, C. S.</i>	
Simulation of Millimetre-Wave Channels for Short-Range Body to Body Communications	3830
<i>Cotton, S. L.; Scanlon, W. G.; Madahar, B. K.</i>	
Comparison Between Known Adaptive Algorithms for Pre-FFT Beamforming in OFDMA Systems	3835
<i>Ribeiro Junior, F. C.; Gomes, I. R.; Castro, B. S. L.; Cavalcante, G. P. S.</i>	
A Novel Green Multi-antenna Topology for Concurrent 4G Cellular and RFID-enabled Wireless Sensor Data Bundling	3840
<i>Tentzeris, Manos; Traulle, Anya; Katsibas, Konstantinos; Konstas, Zissis</i>	
Dual-Band Multiple Beam Antenna System Using Hybrid-Cell Reuse Scheme for Non-Uniform Satellite Communications Traffic	3843
<i>Wang, Jim; Rao, Sudhakar</i>	
Analysis of the Effects from Lateral Variations of Irregular Terrain Based on a Three-dimensional Parabolic Equation	3847
<i>Nunes Da Silva, Marco Aurélio; Nunes Da Silva, Marco Aurélio; Costa, Emanuel; Liniger, Markus</i>	
Characteristics of Compact Balanced-fed Folded Dipole Antenna	3851
<i>Hirayama, M. H; Ito, J. I; Watanabe, S. W; Morishita, H. M</i>	
Aerotrtransported Radar Antenna for Oil Spills Monitoring Antennas and Propagation	3855
<i>Alves, A. M. P.; Duplat, D. N.; Oliveira, L. P.; Hernandez-Figueroa, H. E.</i>	
Calibration and Performance Measurements of The NASA Deep Space Network Antennas Upgrade for Ka-Band (26-GHz)	3858
<i>Rochblatt, David; Baines, G.; Vazquez, M.; Sotuela, I.; Snedeker, C.; Ridgway, T.; Schredder, M; Labelle, C</i>	
New Topologies for Miniaturized Horizontal Corrugations	3863
<i>Inclán Sánchez, Luis; Vazquez-Roy, J. L.; Quevedo-Teruel, O.; Rajo-Iglesias, E.</i>	
Novel Ingestible Capsule Antenna Designs for Medical Monitoring and Diagnostics	3866
<i>Rajagopalan, H; Rahmat-Samii, Y.</i>	
Advantages of Rapid Bipolar Planar Near-field Scanner for Millimeter-Wave Antenna Measurement	3871
<i>Brockett, T; Rahmat-Samii, Y.</i>	
Phaseless Diagnostics for Non-Rectangular Near-Field Antenna Measurement Systems	3876
<i>Razavi, S; Rahmat-Samii, Y.</i>	
Azimuth and Delay Dispersion of Mobile Radio Wave Propagation Through Vegetation	3881
<i>Ghoraishi, Mir; Takada, Jun-Ichi; Phakasoum, Chaymaly; Imai, Tetsuro; Kitao, Koshiro</i>	
Conformal RFID Antenna Design Suitable for Human Monitoring and Metallic Platforms	3885
<i>Rajagopalan, Harish; Rahmat-Samii, Y.</i>	
Near-Isotropic Negative Refraction Simulation in Metamaterials Using Geomtrical Optics and Scattering Matrix Parameters	3890
<i>Wang, X.; Zaghloul, A.</i>	
A Multiband Monopole Antenna Using a Double-Tuned Wheeler Matching Network	3895
<i>Antoniades, M. A.; Eleftheriades, G. V.</i>	
A Localization and Position Tracking Solution Utilizing Solar-Powered RFID Tags	3899
<i>Lakafosis, Vasileios; Vyas, Rushi; Tentzeris, Manos</i>	
Tailoring the Nanoantenna Geometry to Improve Efficiency and Bandwidth	3903
<i>Alu, Andrea; Engheta, N</i>	

Optical Measurement of Millimeter-Wave Antenna for Imaging Concealed Cracks on Concrete Surface	3906
<i>Togo, H.; Mochizuki, S.; Oka, S.; Toyoda, I.; Kukutsu, N.; Kado, Y.</i>	
Nanoparticle Chains Coupled with Surfaces and Twisted Chains As Optical Waveguides and Antennas	3910
<i>Van Orden, D.; Fainman, Y.; Lomakin, V.</i>	
Whole-Body Averaged SAR Measurement Based on Electric Field Distributions on External Cylindrical Boundary	3914
<i>Hikage, T.; Kawamura, Y.; Nojima, T.</i>	
A Distributed Antenna Tuning Unit Using a Frequency Reconfigurable PIXEL-Antenna	3918
<i>Grau Besoli, Alfred; Grau Besoli, A.; De Flaviis, F.</i>	
Statistical Channel Model for 60 GHz WLAN Systems in Conference Room Environment	3923
<i>Maslennikov, R.; Maltsev, A.; Sevastyanov, A.; Lomayev, A.; Khoryaev, A.</i>	
Coupling Waveguide Array for a Patch Array Calibration Scanner	3928
<i>Humpfer, H.; Wansch, R.</i>	
Millimeter-Wave Integrated Waveguide Antenna Arrays and Beamforming Networks for Low-Cost Satellite and Mobile Systems	3933
<i>Wu, K.; Cheng, Y. J.; Djeraji, T.; Chen, X. P.; Fonseca, N.; Hong, W.</i>	
Far Field Condition in Passive Interferometry for Security Screening Applications	3938
<i>Torres, F.; Abril, J.; Nova, E.; Broquetas, A.; Jofre, L.</i>	
Compact and Flexible Surfaces Using EBG	3942
<i>Vardaxoglou, Yiannis; Chauraya, A.; Bashir, S.; Edwards, R. M.</i>	
Frequency Scaling of Attenuation Between 12 and 100 GHz	3946
<i>Riera, Jose M.; Lucas, M J.</i>	
RCS Simulations on Deformed Corner Reflectors Applying SBR Code SIGRAY	3951
<i>Kemptner, Erich</i>	
Evaluating the Singular Integrals Arising in MPIE Formulations with a Double-Exponential Algorithm	3953
<i>Polimeridis, Athanasios G.; Mosig, Juan R.</i>	
Bi-Dimensional Characterization of a WIMAX Radio Channel at 3.5GHz	3958
<i>Pinho, Pedro; Roldão, João; Pinho, Pedro</i>	
Advanced Antenna Diagnostics Based on Equivalent Currents	3963
<i>Foged, L. J.; Mioc, F.; Sabbadini, M.; Araque Quijano, J. L.; Vecchi, G.</i>	
Comparative Investigation of SGH Performance Prediction Formulas, Measurements and Numerical Modelling	3967
<i>Foged, Lars Jacob; Giacomini, Andrea; Scialacqua, Lucia; Isman, Noah; Morbidini, Roberto</i>	
Impact of the Ground Plane Topology on the Performances of a Multiband Quadri-Element Antenna	3971
<i>Palacin, Baptiste; Fonseca, Nelson J. G.; Hebib, Sami; Aubert, Hervé</i>	
Challenges and Solutions for the Modeling of Linear and Nonlinear Dispersion Effects with FDTD	3976
<i>Schild, Stefan; Chavannes, N; Kuster, N</i>	
A Modified Wheeler Cap Method for Radiation Efficiency Measurement of Balanced Electrically Small Antennas	3978
<i>Zhang, J.; Pivnenko, S.; Breinbjerg, O.</i>	
P-Band Feed Design and Optimisation for Compact Antenna Test Range	3983
<i>Foged, Lars Jacob; Duchesne, Luc; Rosa, Alessandro; Lopez, Jean-Marc; Belot, Daniel</i>	
Fast Antenna Testing Using Advanced Probe Array Technology	3987
<i>Durand, L.; Duchesne, L.; Foged, L. J.</i>	
Recent Advances in Astigmatic Beam Tracing	3991
<i>Foged, L. J.; Bencivenga, B.; Sabbadini, M.; Filipone, S.; Di Giampaolo, E.</i>	
Modeling and Manufacturing of a Series of Identical Antennas for a P-Band Ice Sounder	3995
<i>Lopez-Pena, S.; Zurcher, J. F.; Torres, R.; Polimeridis, A. G.; Mosig, J. R.</i>	
Time Domain Simulation of Carbon Nanotube Dipoles at Low-Terahertz Band	4000
<i>Pantoja, M. F.; Bretones, A. R.; Garcia, S. G.; Martin, R. G.; Werner, D. H.; Werner, P. L.</i>	
On the Double Potential Integrals Arising in the Method of Moments and Their Analytic-Numeric Hybrid Treatment	4004
<i>Lopez-Pena, S.; Polimeridis, A. G.; Mosig, J. R.</i>	
Millimeter-Wave Imaging Systems with Aperture Synthesis Techniques	4008
<i>Krozer, V.; Löffler, T.; Zhurbenko, V.; Kusk, A.; Dall, J.; Jensen, T.</i>	
Determination of Phase Centers of Ultra-Wideband Antennas	4010
<i>Schwarz, Ulrich; Zhukov, V.; Stephan, R.; Hein, M. A.</i>	
Test Campaign of the IOV (In Orbit Validation) Galileo System Navigation Antenna for Global Positioning	4014
<i>Monjas, Fernando; Montesano, Antonio; Montesano, Carlos; Llorente, Juan José; Cuesta, Luis E.; Naranjo, Margarita; Arenas, Silvia; Madrazo, Israel; Martínez, Leticia</i>	
Design of Low Scattering Struts for Center-Fed Reflector Antennas	4019
<i>Riel, M.; Brand, Y.; Cassivi, Y.; Demers, Y.; De Maagt, P.</i>	
Study of Mutual Coupling on Mobile Phone PCB with Shielding Using FDTD	4024
<i>Li, C.-H.; Futter, P.; Tudosie, G.; Chavannes, N.; Kuster, N.</i>	
High Stability Large Reflectors for Ka Band	4026
<i>Yarza, Amaia; Castro, Otilia; Santiago, Julian; Limiñana, Cristina</i>	
Orthogonal Basis Functions for the Discretization of the Magnetic-field Integral Equation in the Low Frequency Regime	4031
<i>Ubeda, Eduard; Tamayo, Jose M; Rius, Juan M</i>	
Reflector Vibroacoustic Response to Launch Acoustic Excitation	4035
<i>Yarza, Amaia; Castro, Otilia; Santiago, Julian; Pardo, Jose Luis</i>	
Spiral Resonator MU-Near-Zero Substrates for Grounded Slot	4039
<i>Ferrer, Pere J.; Gonzalez-Arbesu, Jose M.; Romeu, Jordi</i>	

Multipath and Interference Modelling in Complex GNSS Scenarios	4042
<i>Italiano, A.; Principe, F.; Cioni, R.; Perago, R.</i>	
Small UAV Radiocommunication Channel Characterization	4047
<i>Romeu, J.; Aguias, A.; Alonso, J.; Blanch, S.; Martins, R.</i>	
Impact Analysis of Wind Turbines Blockage on Doppler Weather Radar	4052
<i>Belmonte, Aniceto; Fabregas, Xavier</i>	
Architecture of GAIA Satellite Phased Array Antenna	4056
<i>Alonso, Eduardo; Bazan, Antonio; Garcia, Quiterio</i>	
Dielectric Loaded Ultra Wideband Monopole Antenna Integrated in a Universal Serial Bus Device	4060
<i>Pires, Nuno; Letizia, M.; Maisenbacher, A.; Moreira, A.</i>	
Antenna in the Terahertz Band for Radioastronomy Applications	4065
<i>Andrés García, B.; García Muñoz, L. E.; Camara Mayorga, I.; Segovia Vargas, D.; Güsten, R</i>	
Remote Sensing Structures Based on Surface Plasmon Resonances and Carbon Nanotubes	4069
<i>Thai, Trang; Haque, Amil; Ratner, Justin; Dejean, Gerald; Tentzeris, Manos</i>	
Beam Expansion in Multi-reflector Quasi-Optical Systems	4073
<i>Casaletti, M.; Skokic, S.; Maci, S.; Sørensen, S.</i>	
Prediction of the In-flight Radiation Patterns of the Planck Telescope	4077
<i>Martin Polegre, A.; Nielsen, P. H.; Tauber, J.; Doyle, D.; Dubruel, D.; Martin, P.; Daddato, R.; Cozzani, A.; Kirschner, V.; Crone, G.; Peacocke, T.; Norgaard-Nielsen, H. U.; Maffei, B.; Murphy, A.; Sandri, M.; Villa, F.; Crone, G.</i>	
Parametric Study of Ground Reflections and Diversity Techniques Effect on Body-Worn VHF/UHF Antenna Performance	4082
<i>Alomaimy, Akram; Sani, A.; Hao, Y.; Pettitt, G; Cushnaghan, P</i>	
The Planck Mission	4086
<i>Martin Polegre, A.; Tauber, J.; Crone, G.; Paßvogel, T.</i>	
Solving Multi-Scale Low Frequency Electromagnetic Problems	4091
<i>Qian, Z. G.; Li, M. K.; Ma, Z.-H.; Jiang, L.-J.; Chew, W. C.</i>	
Thales Alenia Space France Antennas: Recent Achievements for Telecommunications	4096
<i>Lepeltier, Philippe; Maurel, J; Navarre, G</i>	
Recent Developments in Ka-Band Satellite Antennas for Broadband Communications	4101
<i>Amyotte, E; Demers, Y; Hildebrand, L; Forest, M; Riendeau, S; Sierra-Garcia, S; Uher, J</i>	
Ongoing Research and Development on Antennas in Brazil	4106
<i>Assis, M. S.; Dias, M H C; Santos, J C A</i>	
Sub-nanosecond Electrical Pulses for Medical Therapies and Imaging	4111
<i>Kolb, Juergen F.; Xiao, Shu; Camp, J. Thomas; Migliaccio, Mark; Bajracharya, Chandra; Schoenbach, Karl H.</i>	
Broadband Antenna FDTD Modeling for EMC Tests	4116
<i>Jauregui, R; Heras, M.; Silva, F.</i>	
MEMS Integrated Reconfigurable Antenna for Cognitive Public Safety Radios	4121
<i>Khoshnati, A.; Mopidevi, H.; Dangaci, Y.; Rodrigo, D.; Jofre, L.; Cetiner, B. A.</i>	
A Customized Measurement System for the Assessment of Electromagnetic Interference Caused by Plasma Plumes	4124
<i>Sarri, Antonio; Cioni, Riccardo; Fittipaldi, Domenico A.; Marliani, Filippo</i>	
EDX- Companion Tools and Other 2nd Year Developments	4129
<i>Sabbadini, Marco; Frandsen, P. E.; Ghilardi, M.; Vandenbosch, G. A. E</i>	
New Results from the SoftLAB Benchmark of Antenna Software	4134
<i>Rolland, Anthony; Gillard, Raphaël; Sauleau, Ronan; Eberhard, Jens; Rius, Juan M.; Cappellin, Cecilia; Vandenbosch, Guy</i>	
Textile Antenna Bending and Crumpling	4138
<i>Bai, Qiang; Langley, Richard</i>	
A New Technique for Modeling In-body and On-body Antennas	4142
<i>Bringuier, J. N.; Mittra, R.</i>	
Preferentially Loaded Patch Antennas for Body-borne Applications	4145
<i>Hall, M. E.; Totten, E. J.; Atkins, D. P.</i>	
A Review of the Practical Limitations of Designing Antennas for Portable Applications	4148
<i>Atkins, David</i>	
Open Boundary Quadridge Horn Antenna for the 80 MHz to 1 GHz Range: A Dual Polarized Solution for Testing Antennas in the VHF and UHF Ranges	4150
<i>Rodriguez, Vince</i>	
Design of Active Antennas for Airborne Radar Applications	4154
<i>Renard, Christian; Barbier, T.; Hérault, J.; Martinaud, J. P.</i>	
Boosting Antenna Research at Brno University of Technology	4156
<i>Ráida, Z.; Pokorný, M.; Kovacs, P.; Jilková, J.; Stumpf, M.; Lacík, J.; Lukes, Z.; Vagner, P.; Drinovsky, J.; Koudelka, V.; Kadlec, P.; Sedenka, V.; Cigánek, J.</i>	
OTA Throughput Measurements by Using Spatial Fading Emulation Technique	4161
<i>Scannavini, A.; Foged, L. J.; Abou El Anouar, M.; Gross, N.; Estrada, J.</i>	
On Small Antenna Measurements in a Realistic MIMO Scenario	4166
<i>Yanakiyev, B.; Pedersen, G. F.; Nielsen, J</i>	
Antennas, Transmission Lines and Resonators at Optical Frequencies	4171
<i>Hecht, Bert; Johannes, Kern; Feichtner, Thorsten; Geisler, Peter; Grossmann, Swen; Biagioni, Paolo; Huang, Jer Shing</i>	
Near-field Mapping of Infrared Nanoantennas	4174
<i>Schnell, M.; Garcia-Etxarri, A.; Huber, A. J.; Crozier, K. B.; Aizpurua, J.; Hillenbrand, R.</i>	

Near-field Antenna as a Scanning Microwave Probe for Characterization of Materials and Devices	4178
<i>Imtiaz, A.; Wallis, T. M.; Lim, S. H.; Chisum, J.; Popovic, Z.; Kabos, P.</i>	
Near-field Electrical Detection of Optical Surface Plasmons and Single Plasmon Sources	4181
<i>Koppens, Frank; Falk, Abram L.; Yu, Chun L.; Kang, Kibum; De Leon Snapp, Nathalie; Akimov, Alexey V.; Jo, Moon-Ho; Lukin, Mikhail D.; Park, Hongkun</i>	
Link Characteristics Between Wearable Antenna and Receivers Equipped on External Objects at MHz Band	4186
<i>Ito, K.; Suga, R.; Haga, N.; Takahashi, M.; Saito, K.</i>	
Planck-HFI Optical Design and Pre-flight Performances	4190
<i>Maffei, B.; Noviello, F.; Savini, G.; Murphy, J. A.; Lamarre, J-M.; Ade, P. A. R.; Bouchet, F. R.; Brossard, J.; Catalano, A.; Colgan, R.; Gispert, R.; Gleeson, E.; Haynes, C. V.; Jones, W. C.; Lange, A. E.; Longval, Y.; McAuley, I.; Nørgaard-Nielsen, H. U.; Pajot, F.; Peacocke, T.; Pisano, G.; Puget, J-L.; Ristorcelli, I.; Sudiwala, R.; Tauber, J.; Wylde, R. J.; Yurchenko, V.</i>	
Promotional and Prospective Plans for Engineering Careers. ICT Focus	4195
<i>JoFRE, Lluís; Cordoba, Joanfra; Robert, Laura</i>	
Mitigation Techniques for Multi-beam Broadcast Satellite Services	4199
<i>Paraboni, A.; Capsoni, C.; Gabellini, P</i>	
Design and Fabrication of Millimeter Wave Slotted Waveguide Arrays	4204
<i>Ando, Makato; Zhang, Miao; Lee, Jaeho; Hirokawa, Jiro</i>	
MIMO-UWB Propagation Channels	4210
<i>Molisch, Andreas</i>	
Antenna Modeling and Performance on Complex Structures and Airframes (EuCAP 2010)	4216
<i>Balanis, Constantine A.</i>	
Challenges in Propagation and Channels in the Networks of the Future	4221
<i>Correia, Lluís M.</i>	
The Transmission-Line Paradigm for Metamaterials: Fundamentals & Applications	4224
<i>Eleftheriades, George V.; Islam, Rubaiyat; Zedler, Michael</i>	
Propagation Models for Nanocommunication Networks	4229
<i>Akyildiz, Ian F.; Jornet, Josep Miquel; Massimiliano, Pierobon</i>	
Recent Advances in Reflectarray Antennas	4234
<i>Encinar, Jose A.</i>	
Scattering By Load-Modulated Small Antennas: Background and Sensing Applications	4240
<i>Bolomey, Jean-Charles</i>	
Antenna Measurement Range Characterization and Compensation	4243
<i>Joy, Edward B.</i>	
A New CEM Algorithm for Solving Real-world Antenna and Scattering problems	4248
<i>Mitra, Raj</i>	
Channel Modeling for Land Mobile Satellite Services	4251
<i>Pérez Fontán, Fernando</i>	
Advances in Antennas and Propagation for Body Centric Wireless Communications	4256
<i>Hall, P. S.; Hao, Y.; Cotton, S. L.</i>	
Review on Terrestrial Propagation Channel Modelling	4263
<i>Pontes, M. S.; Silva Mello, L. A. R.</i>	
Computational Electromagnetics, Wave Physics, and Quantum Mechanics	4268
<i>Chew, Weng Cho</i>	
Author Index	