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TABLE OF CONTENTS

MO-SP.1A: LOW-COST PHASED ARRAY TECHNOLOGY

MO-SP.1A.4: MODULAR PHASED ARRAY DESIGN THROUGH A TILE-DIMENSION TAPERING 1 APPROACH

Nicola Anselmi, Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN– University of Genoa), Italy; Paolo Rocca, Andrea Massa, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy

MO-SP.1A.6: WIDEBAND PRINTED ANTENNA ARRAYS FOR 5G MOBILE APPLICATIONS 3

Wei Jian Foo, Kubilay Sertel, Ohio State University, United States

MO-SP.1A.7: EBG ANTENNA FOR AUTOMOTIVE APPLICATIONS 1955

Seungmin Woo, Byeongyong Park, Innam Cho, Yeongho Je, LG Electronics Inc., Korea (South)

MO-SP.1A.8: HIGH-EFFICIENCY LOW-PROFILE FEEDS FOR UWB ARRAYS 5

Christopher Merola, University of Massachusetts, United States; Rick Kindt, Naval Research Laboratory, United States; Marinos Vouvakis, University of Massachusetts Amherst, United States

MO-SP.1A.10: A 1-BIT RECONFIGURABLE REFLECTARRAY ELEMENT WITH INDEPENDENT 7 DUAL-BAND PHASE CONTROLLING CAPABILITY

Hongjing Xu, Shenheng Xu, Fan Yang, Maokun Li, Tsinghua University, China

MO-SP.2A: EMERGING TECHNOLOGIES FOR BIOMEDICAL APPLICATIONS

MO-SP.2A.1: SINGLE-COIL DUAL-BAND TRANSMITTING ANTENNA DESIGN FOR WIRELESS 9 CAPSULE ENDOSCOPIC COMMUNICATION

Yunxiao Peng, Kazuyuki Saito, Koichi Ito, Chiba University, Japan

MO-SP.2A.3: CHARACTERIZATION OF MICROCHAMBER ARRAYS FOR TARGETED DRUG 11 DELIVERY

Yang Hao, Ahsan Noor Khan, Henry Giddens, Gleb Sukhorukov, Queen Mary University of London, United Kingdom

MO-SP.2A.5: COMPACT DUAL-BAND PIFA BASED ON A SLOTTED RADIATOR FOR WIRELESS 13 BIOMEDICAL IMPLANTS

Nikta Pournoori, Shubin Ma, Lauri Sydänheimo, Leena Ukkonen, Tampere University, Finland; Yahya Rahmat-Samii, University of California, Los Angeles, United States; Toni Björninen, Tampere University, Finland

MO-SP.2A.7: MATCHING CONSIDERATIONS FOR WIRELESS, BATTERYLESS BRAIN IMPLANTS 15 TO HIGH IMPEDANCE ELECTRODES

Katrina Guido, Asimina Kiourti, Ohio State University, United States

MO-SP.2A.8: MAGNETIC INDUCTION-BASED HUMAN ACTIVITY RECOGNITION (MI-HAR)..... 17

Negar Golestani, Mahta Moghaddam, University of Southern California, United States

MO-SP.2A.9: DESIGN OF AN INTERSTITIAL MICROWAVE APPLICATOR FOR 3D PRINTING 19 ANTENNAS IN THE BODY

Kaitlin Hall, Cynthia Furse, University of Utah, United States

MO-SP.2A.10: CADAVER MEASUREMENT RESULTS USING ULTRA-FLEXIBLE ELECTRO-TEXTILE 21 MRI RF COIL

Daisong Zhang, Yahya Rahmat-Samii, University of California, Los Angeles, United States

MO-A5.1A: ANTENNAS FOR 5G I

MO-A5.1A.1: A WIDEBAND DUAL-POLARIZED END-FIRE ANTENNA ARRAY WITH A SINGLE-LAYER FEED METHOD 23

Ao Li, Kwai-Man Luk, City University of Hong Kong, China

MO-A5.1A.2: MILLIMETER-WAVE COMPACT AND HIGH-PERFORMANCE TWO-DIMENSIONAL GRID ARRAY FOR 5G APPLICATIONS 25

Syeda Fizzah Jilani, Queen Mary University of London, United Kingdom; Qammer H. Abbasi, University of Glasgow, United Kingdom; Akram Alomainy, Queen Mary University of London, United Kingdom

MO-A5.1A.4: DUAL-LINEAR OR DUAL-CIRCULAR POLARIZED SLOT EXCITED ME-DIPOLE ANTENNA WITH SINGLE-LAYER FEEDING 27

Nadeem Ashraf, Ahmed Kishk, Abdel Razik Sebak, Concordia University, Canada

MO-A5.1A.5: WIDE-BAND SLOT ANTENNA ON METAL BEZEL FOR COVERING 28/39GHZ IN 5G COMMUNICATION SYSTEM 29

Tai Hwan Choi, Sung Soo Kim, Young Joong Yoon, Yonsei University, Korea (South); Hyungrak Kim, Daelim University College, Korea (South)

MO-A5.1A.6: A TRIPLE-BAND MILLIMETER WAVE SIW ANTENNA WITH DUAL-SENSE CIRCULAR POLARIZATION 31

Huakang Chen, Yu Shao, Yajing Zhang, Changhong Zhang, Zhizhong Zhang, Chongqing University of Posts and Telecommunications, China

MO-A5.1A.7: INTEGRATED MULTILAYER YAGI ANTENNA FOR 5G 33

Amélia Ramos, Tiago Varum, Instituto de Telecomunicações, Portugal; João Matos, Instituto de Telecomunicações, Universidade de Aveiro, Portugal

MO-A5.1A.8: COLD PLATE DESIGN, FABRICATION, AND DEMONSTRATION FOR HIGH-POWER KA-BAND ACTIVE ELECTRONICALLY SCANNED ARRAYS 35

Boris Tomasic, Air Force Research Laboratory, United States; Derek Wisniewski, Robert Schmier, Alpha Omega Electromagnetics, LLC, United States; Thomas Steffen, Gregory Phillips, Defense Engineering Corp., United States

MO-A5.1A.10: A WIDE BAND META- SURFACE ENHANCEMENT OF MUTUAL COUPLING IN SATCOM / 5G ANTENNA APPLICATIONS 39

Ibrahim Mohamed, Mahmoud A. Abdalla, Military Technical College, Egypt; Safieddin Safavi-Naeini, University of Waterloo, Canada

MO-A1.1A: BEAM FORMING, ANGLE OF ARRIVAL AND PATTERN SYNTHESIS

MO-A1.1A.1: DIRECTIONS-OF-ARRIVAL ESTIMATION IN LINEAR SUB-ARRAYED ARRAY THROUGH COMPRESSIVE SENSING 41

Mohammad Abdul Hannan, Paolo Rocca, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy

MO-A1.1A.2: AOA ESTIMATION WITH PRACTICAL ANTENNA ARRAYS USING NEURAL NETWORKS 43

Yuanzhang Xiao, Zhengqing Yun, Magdy Iskander, University of Hawaii at Manoa, United States

MO-A1.1A.3: OPTIMAL SYNTHESIS OF WIDEBAND BEAMFORMING WEIGHTS FOR MONOPULSE TRACKING RADAR - THE LINEAR ARRAY CASE 45

Le Trong Phuoc Bui, Lorenzo Poli, Paolo Rocca, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy

MO-A1.1A.4: APPLICATION OF SPARSE REPRESENTATION TO BEAMFORMING FOR DIRECTION OF ARRIVAL ESTIMATION 47

Jacob Compaleo, Inder Gupta, Ohio State University, United States

MO-A1.1A.5: OPTIMAL THINNING TECHNIQUES OF ANTENNA PHASED ARRAYS FOR DUAL BAND OPERATION 49

Rotem Gal, Reuven Shavit, Ben Gurion University of the Negev, Israel

MO-A1.1A.6: COMPARISON BETWEEN DETERMINISTIC AND STOCHASTIC METHODS FOR THE SYNTHESIS OF APERIODIC ARRAYS	51
<i>Giulia Buttazoni, Fulvio Babich, Francesca Vatta, Massimiliano Comisso, University of Trieste, Italy</i>	
MO-A1.1A.7: A GENERALIZED TECHNIQUE TO ACCURATELY PREDICT CONFORMAL ANTENNA ARRAYS	53
<i>Hannah Johnson, George R. Branner, Gregory Nelson, Matt Chun, University of California, Davis, United States; B.P. Kumar, California State University, United States</i>	
MO-A1.1A.8: REDUCTION OF THE NUMBER OF PHASE SHIFTERS IN LINEAR PHASED ANTENNA ARRAYS BY USING EVOLUTIONARY MULTI-OBJECTIVE OPTIMIZATION	55
<i>Juan L. Valle, Carlos A. Brizuela, Marco A. Panduro, Center for Scientific Research and Higher Education of Ensenada, Mexico; Alberto Reyna, Autonomous University of Tamaulipas, Mexico</i>	
MO-A1.1A.9: PHASE-CONTROLLED BEAM-SCANNING OF ARBITRARY ANTENNA ARRAYS WITH FAR-FIELD FIXED NULLS	57
<i>Giulia Buttazoni, Fulvio Babich, Francesca Vatta, Massimiliano Comisso, University of Trieste, Italy</i>	
MO-A1.1A.10: A NOVEL BEAM-STEERING METHOD AT THE CARRIER FREQUENCY WITH TIME MODULATED ARRAY	N/A
<i>Gang Ni, Chong He, Xian-Ling Liang, Junping Geng, Weiren Zhu, Ronghong Jin, Shanghai Jiao Tong University, China</i>	
 MO-A1.2A: DIELECTRIC RESONATOR ANTENNAS	
MO-A1.2A.1: BAND-NOTCHED RECONFIGURABLE RECTANGULAR DIELECTRIC RESONATOR ANTENNA WITH PARASITIC ELEMENTS	61
<i>Beijia Liu, Jinghui Qiu, Hua Zong, Lifei Bao, Nannan Wang, Shengchang Lan, Harbin Institute of Technology, China</i>	
MO-A1.2A.2: SPLIT RING LOADED DUAL-POLARIZED DIELECTRIC RESONATOR ANTENNAS	63
<i>Yanxia Liu, Dustin Isleifson, Lotfollah Shafai, University of Manitoba, Canada</i>	
MO-A1.2A.3: DIFFERENTIALLY FED CDRA ARRAY WITH PHASE INVERTER FOR HIGH GAIN AND REDUCED CROSS POLARIZATION	65
<i>Md Nazmul Hasan, Sungkyunkwan University, Korea (South); Roy B.V.B Simorangkir, Karu Esselle, Macquarie University, Australia; Saeideh Shad, Boise State University, United States</i>	
MO-A1.2A.4: DISCUSSION ON SERIES-FED PARASITIC DRA ARRAY WITH LOW DIELECTRIC CONSTANT EXCITED BY SIW SLOTS	67
<i>Wael M. Abdel-Wahab, University of Waterloo, Canada; Ying Wang, University of Ontario Institute of Technology, Canada; Safieddin Safavi-Naeini, University of Waterloo, Canada</i>	
MO-A1.2A.5: POINT-TO-POINT DIELECTRIC-HORN INTEGRATED RESONATOR ANTENNA WITH REDUCED SIDE-LOBE LEVEL	69
<i>E. Baldazzi, Sapienza Universita di Roma, Netherlands; Ali Al-Rawi, A. Bart Smolders, Eindhoven University of Technology, Netherlands; R. Cicchetti, Sapienza Universita di Roma, Netherlands; Diego Caratelli, The Antenna Company, Netherlands</i>	
MO-A1.2A.6: HIGH GAIN RIDGE GAP DIELECTRIC RESONATOR ANTENNA USING FSS SUPERSTRATES	71
<i>Mehri Borhani Kakhki, Zahra Mousavirazi, Institut national de la recherche scientifique (INRS), Canada; Tayeb A. Denidni, National Institute of Scientific Research (INRS), Canada</i>	
MO-A1.2A.7: DESIGN AND ANALYSIS OF STACKED EQUILATERAL TRIANGULAR DRA FOR WIDE BAND APPLICATION	73
<i>Rinki Ghosal, Bhaskar Gupta, Jadavpur University, India</i>	
MO-A1.2A.8: DUAL-BAND RECTANGULAR DIELECTRIC RESONATOR ANTENNA	75
<i>Bharathi Anantha, Osmania University, India; Lakshminarayana Merugu, Bharat Institute of Engineering and Technology, India</i>	

MO-A1.2A.9: PATTERN RECONFIGURABLE DIELECTRIC RESONATOR ANTENNA ACTUATED BY SHORTED PARASITIC ELEMENTS	77
<i>Beijia Liu, Jinghui Qiu, Shengchang Lan, Hua Zong, Nannan Wang, Harbin Institute of Technology, China</i>	
 MO-A5.2A: ADDITIVELY MANUFACTURED ANTENNAS AND STRUCTURES	
MO-A5.2A.1: SLOT-EXCITED WIDEBAND HORN ANTENNA WITH MICROSTRIP LINE FEEDING FOR KA-BAND APPLICATIONS	79
<i>Nadeem Ashraf, Ahmed Kishk, Abdel Razik Sebak, Concordia University, Canada</i>	
MO-A5.2A.2: PHASED ARRAY ANTENNA ELEMENT WITH EMBEDDED CAVITY AND MMIC USING DIRECT DIGITAL MANUFACTURING	81
<i>Merve Kacar, University of South Florida, United States; Casey Perkowski, Kenneth Church, Sciperio Inc., United States; Baean Wu, Air Force Research Laboratory, United States; Jing Wang, University of South Florida, United States; Thomas Weller, Oregon State University, United States; Gokhan Mumcu, University of South Florida, United States</i>	
MO-A5.2A.3: WRIST-WORN RFID ANTENNA PRINTED ON ADDITIVE MANUFACTURED FLEXIBLE SUBSTRATE	83
<i>João M. Felício, Instituto de Telecomunicações, Portugal; Sérgio A. Matos, Instituto de Telecomunicações/ISCTE-IUL, Portugal; António M. Almeida, Instituto de Telecomunicações/Instituto Superior Técnico, Portugal; Jorge R. Costa, Instituto de Telecomunicações/ISCTE-IUL, Portugal; Carlos A. Fernandes, Instituto de Telecomunicações/Instituto Superior Técnico, Portugal</i>	
MO-A5.2A.4: ADDITIVELY-MANUFACTURED CYLINDRICAL ARRAY WITH SNAP-FIT CONNECTOR INTEGRATION	85
<i>Anna Stume, Mark Dorsey, U.S. Naval Research Laboratory, United States; Ozlem Kilic, Catholic University of America, United States; John Valenzi, U.S. Naval Research Laboratory, United States</i>	
MO-A5.2A.5: A NOVEL DIAGNOSTICS METHOD FOR DETERMINING THE UNKNOWN PERMITTIVITY PROFILE OF 3D PRINTED LENSES	87
<i>Jordan Budhu, Yahya Rahmat-Samii, University of California, Los Angeles, United States</i>	
MO-A5.2A.6: ADDITIVELY MANUFACTURED CIRCULAR-LINEAR POLARIZATION CONVERTER USING CIRCULAR WAVEGUIDE	89
<i>David Mitchell, Nicole Bohannon, Laboratory for Physical Sciences, United States</i>	
MO-A5.2A.7: INKJET PRINTED LANGE COUPLER FOR ANTENNA SYSTEMS	91
<i>Xuanke He, Manos Tentzeris, Georgia Institute of Technology, United States</i>	
MO-A5.2A.8: ELECTROLESS SILVER PLATING OF ADDITIVE MANUFACTURED TROUGH WAVEGUIDE MODE TRANSDUCER AND ANTENNA STRUCTURE	93
<i>Amrita Bal, Anoop Tiwari, Texas A&M University, United States; Gregory Huff, Pennsylvania State University, United States</i>	
MO-A5.2A.9: LIQUID WAVEGUIDE ANTENNA	95
<i>Guan-Long Huang, Jia-jun Liang, Tao Yuan, Shenzhen University, China</i>	
MO-A5.2A.10: KA-BAND LOW-COST FOCUSED LENS WITH FREQUENCY-SCANNING FEATURES	N/A
<i>Shilin Liu, Xianqi Lin, University of Electronic Science and Technology of China, China</i>	

MO-A2.1A: ELECTROMAGNETIC MEASUREMENTS AND MATERIAL CHARACTERIZATION I

MO-A2.1A.1: PERMITTIVITY CHARACTERIZATION OF AUTOMOTIVE PAINT MATERIAL AT W-BAND FREQUENCIES	99
<i>Adib Nashashibi, Kamal Sarabandi, University of Michigan, United States; Hussein Shaman, Mohammed Aseeri, King Abdulaziz City for Science and Technology, Saudi Arabia</i>	

MO-A2.1A.2: HIGHLY ACCURATE LIQUID PERMITTIVITY MEASUREMENT USING COAXIAL LINES	101
<i>Seyed Mirjahanmardi, Omar Ramahi, University of Waterloo, Canada</i>	
MO-A2.1A.3: EM MEASUREMENTS OF GLUCOSE-AQUEOUS SOLUTIONS	103
<i>Ala Eldin Omer, George Shaker, Safieddin Safavi-Naeini, Raed M. Shubair, University of Waterloo, Canada</i>	
MO-A2.1A.4: 4-40 GHZ PERMITTIVITY MEASUREMENTS OF INDOOR BUILDING MATERIALS.....	105
<i>Jonathan Abel, Jon Wallace, Lafayette College, United States</i>	
MO-A2.1A.5: MEASUREMENT OF DIELECTRIC CONSTANTS OF LIQUID CRYSTALS USING	107
DOUBLE-RIDGED WAVEGUIDE CAVITY	
<i>Chengyong Yu, En Li, University of Electronic Science and Technology of China, China</i>	
MO-A2.1A.6: PERMITTIVITY DEPTH PROFILE MEASUREMENTS OF THE ANTARCTIC FIRN LAYER	109
IN THE 0.4-2 GHZ BAND	
<i>Roberto Olmi, Saverio Priori, Consiglio Nazionale delle Ricerche, Italy; Alberto Toccafondi, Federico Puggelli, University of Siena, Italy</i>	
MO-A2.1A.7: CHARACTERIZATION OF BIOLOGICAL TISSUES USING A SUSPENDED MICROSTRIP	111
RING RESONATOR	
<i>Nivedita Parthasarathy, Ramesh Abhari, Santa Clara University, United States</i>	
MO-A2.1A.8: CHARACTERIZATION OF OILS AND OIL MIXTURES USING TERAHERTZ	113
TIME-DOMAIN SPECTROSCOPY	
<i>Khem Poudel, Seth Floyd, William Robertson, Middle Tennessee State University, United States</i>	
MO-A2.1A.9: MICROWAVE PERFORMANCE MEASUREMENT OF INP POWDER UNDER LIGHT	115
IRRADIATION	
<i>Yafeng Li, En Li, University of Electronic Science and Technology of China, China</i>	
MO-A5.3A: MILLIMETER-WAVE AND TERAHERTZ ANTENNA DESIGN AND OPTIMIZATION	
MO-A5.3A.2: ANALYSIS OF A WIDEBAND FABRY-PÉROT CAVITY ANTENNA AT 60 GHZ USING GRID	117
IMPEDANCE APPROXIMATION	
<i>Ahmad Almutawa, Hamidreza Kazemi, Filippo Capolino, University of California, Irvine, Kuwait; David Jackson, University of Houston, United States</i>	
MO-A5.3A.4: FINGER BLOCKAGE MITIGATION METHOD FOR MMWAVE BEAMFORMING MOBILE	119
DEVICES	
<i>Youngno Youn, Dongkwon Choi, Wonbin Hong, Pohang University of Science and Technology (POSTECH), Korea (South)</i>	
MO-A5.3A.5: DUAL-BAND PHASED ARRAY ANTENNA ON METAL FOR MMWAVE MOBILE	121
APPLICATION	
<i>Junggil Kim, Sung Soo Kim, Young Joong Yoon, Yonsei University, Korea (South); Hyungrak Kim, Daelim University College, Korea (South)</i>	
MO-A5.3A.7: E-SHAPED NANO-ANTENNA WITH ASYMMETRIC INTEGRATED	123
DIELECTRIC-PLASMONIC WAVEGUIDE	
<i>Zahra Manzoor, Missouri University of Science and Technology, United States; Mohammad Ali Panahi, University of California, Los Angeles, United States; Amin Pak, Semnan University, Iran</i>	
MO-A5.3A.8: ARRAY OPTIMIZATION FOR MAXIMUM REALIZED GAIN IN TERAHERTZ ANTENNA	125
WITH LENS	
<i>Galia Ghazi, Parinaz Sadri-moshkenani, Reza Safian, imec, United States</i>	
MO-A5.3A.9: MILLIMETER-WAVE ANTENNA WITH IMPROVED BANDWIDTH AND ISOLATION FOR	127
MIMO APPLICATIONS	
<i>Chunxu Mao, Pingjuan L. Werner, Douglas H. Werner, Pennsylvania State University, United States</i>	

MO-A5.3A.10: MODULATING SURFACE IMPDANCES OF SURFACE PLASMON POLARITONS FOR LEAKY WAVE PLASMONIC NANOANTENNAS	129
<i>Yuan-Song Zeng, Shi-Wei Qu, University of Electronic Science and Technology of China, China</i>	
 MO-A1.3A: LEAKY-WAVE AND TRAVELLING-WAVE ANTENNAS	
MO-A1.3A.1: LEAKY-WAVE ANTENNA ON HOLEY EBG BASED GAP-WAVEGUIDE	131
<i>Maria Soto Medina, Rafael Rodríguez Solís, University of Puerto Rico at Mayaguez, United States</i>	
MO-A1.3A.2: MILLIMETER-WAVE METALLIC BULL’S-EYE ANTENNA WITH WIDEBAND BROADSIDE RADIATION CHARACTERISTICS	133
<i>Glad Dragos, Queen’s University, Canada; Brad Jackson, California State University, Northridge, United States; Carlos Saavedra, Queen’s University, Canada</i>	
MO-A1.3A.3: PERIODIC LEAKY-WAVE ANTENNA WITH MODIFIED GIELIS-SHAPED PATCH ELEMENTS	135
<i>Vignesh Shanmugam Bhaskar, Eng Leong Tan, King Ho Holden Li, Nanyang Technological University, Singapore</i>	
MO-A1.3A.4: A HYBRID UNIFORM/PERIODIC DUAL-MODE DIELECTRIC GRATING LEAKY-WAVE ANTENNA	137
<i>Libin Sun, Tsinghua University, China; Yuanxin Li, Sun Yat-sen University, China; Yue Li, Zhijun Zhang, Zhenghe Feng, Tsinghua University, China</i>	
MO-A1.3A.5: LOW CROSS POLARIZATION LEAKY-WAVE ANTENNA BASED ON SIW-CRLH TRANSMISSION LINE	N/A
<i>Yang Liu, Hongjian Wang, Lifang Zhang, National Space Science Center, Chinese Academy of Sciences, China</i>	
MO-A1.3A.7: A WIDEBAND FREQUENCY BEAM SCANNING ANTENNA BASED ON THE SPOOF SURFACE PLASMON POLARITONS	141
<i>Jun Wang, Zhang-Cheng Hao, Southeast University, China; Lei Zhao, China University of Mining and Technology, China</i>	
MO-A1.3A.8: MICROSTRIP-FED ENDFIRE ANTENNAS WITH HIGH GAIN AND STABLE RADIATION PATTERN	143
<i>Yuefeng Hou, Yue Li, Zhijun Zhang, Zhenghe Feng, Tsinghua University, China</i>	
MO-A1.3A.9: A NOVEL CONFORMAL TRAVELLING-WAVE CIRCULARLY POLARIZED MICROSTRIP ANTENNA DESIGN	145
<i>Stanislav Ogurtsov, Slawomir Koziel, Reykjavik University, Iceland</i>	
 MO-A1.4A: BROADBAND ANTENNAS FOR 5G SYSTEMS	
MO-A1.4A.1: 5G BROADBAND ANTENNA FOR SUB-6 GHZ WIRELESS APPLICATIONS	147
<i>Nada Sekeljc, Zhen Yao, Hao-Han Hsu, Intel, United States</i>	
MO-A1.4A.2: DESIGN OF A WIDEBAND VIVALDI ANTENNA FOR 5G BASE STATIONS	149
<i>Paula Fernandez-Martinez, Sergio Martin-Anton, Daniel Segovia-Vargas, Universidad Carlos III de Madrid, Spain</i>	
MO-A1.4A.3: MIMO ANTENNA FOR INDOOR LOW-BAND 5G BASE STATIONS	151
<i>Jaime Molins-Benlliure, Universitat Politècnica de València, Spain; Anibal Llanga-Vargas, Universidad Nacional de Chimborazo, Ecuador; Dong Kook Park, Korea Maritime and Ocean Univesrity, Korea (South); Miguel Ferrando-Bataller, Marta Cabedo-Fabrés, Universitat Politècnica de València, Spain</i>	
MO-A1.4A.4: ANALOG BEAMFORMING SYSTEM USING ROTMAN LENS FOR 5G APPLICATIONS AT 28 GHZ	153
<i>Essa Mujammami, Abdel Razik Sebak, Concordia University, Canada</i>	

MO-A1.4A.5: ISGW FEED SLOT-COUPLED MAGNETOELECTRIC DIPOLE ANTENNA FOR 5G APPLICATIONS N/A

Huaqiang Zhang, Dongya Shen, Hong Yuan, Yunnan University, China

MO-A4.1A: REMOTE SENSING

MO-A4.1A.1: NON-DESTRUCTIVE DIELECTRIC CONSTANT MEASUREMENT OF LOW-LOSS DIELECTRIC SLABS USING WIDEBAND AUTOCORRELATION RADIOMETRY 157

Seyedmohammad Mousavi, Roger De Roo, Kamal Sarabandi, Anthony England, University of Michigan, United States

MO-A4.1A.2: EVAPORATION DUCT REFRACTIVITY INVERSIONS FROM FIXED TRANSMITTER-FIXED RECEIVER UWB MEASUREMENTS 159

Luyao Xu, Caglar Yardim, Robert Burkholder, Ohio State University, United States; Denny P. Alappattu, Qing Wang, Naval Postgraduate School, United States

MO-A4.1A.3: MULTIPLE SCATTERING SOLUTION OF PASSIVE RADIATIVE TRANSFER EQUATIONS APPLIED TO FORESTS 161

Maryam Salim, University of Michigan, United States; Shurun Tan, Zhejiang University, China; Leung Tsang, University of Michigan, United States

MO-A4.1A.4: INTEGRATED WATER VAPOR ESTIMATION THROUGH MICROWAVE PROPAGATION MEASUREMENTS: FIRST EXPERIMENT ON A GROUND-TO-GROUND RADIO LINK 163

Alberto Toccafondi, Federico Puggelli, Matteo Albani, University of Siena, Italy; Luca Facheris, University of Florence, Italy; Fabrizio Cuccoli, CNIT - National Inter-University Consortium for Telecommunications, Italy; Giovanni Macelloni, Francesco Montomoli, National Research Council of Italy (CNR), Italy; Alessio Cucini, Francesco Mariottini, WaveComm S.r.l., Italy; Luigi Volpi, RTW Ride The Wave S.r.l., Italy; Devis Dei, Florence Engineering S.r.l., Italy; Marco Gai, Laboratori Victoria S.r.l., Italy

MO-A4.1A.5: MICRO-DOPPLER BASED DETECTION OF HOVERING UAVS 165

Linlin Wang, Yang Li, Ning Zhang, Xinyang Wang, Harbin Institute of Technology, China; Wenxing Wang, CSSC Maritime Technology Co., Ltd, China; Wenbo Ding, Harbin Institute of Technology, China

MO-A4.1A.6: MODELING AND MEASUREMENT OF DUCTED EM PROPAGATION OVER THE GULF STREAM 167

Qi Wang, Robert Burkholder, Ohio State University, United States

MO-A4.1A.7: ELECTROMAGNETIC SCATTERING FROM RANDOM ROUGH SURFACES WITH MULTIPLE ELEVATIONS FOR GNSS-R LAND APPLICATIONS 169

Jiyue Zhu, Leung Tsang, University of Michigan, United States

MO-A4.1A.8: RETRIEVAL OF SUBSURFACE PROPERTIES OF LAYERED DIELECTRIC STRUCTURES USING HYBRID GLOBAL AND LOCAL OPTIMIZATION 171

Aslan Eminan, Alireza Tabatabaenejad, Richard Chen, Mahta Moghaddam, University of Southern California, United States

MO-A3.1A: TRANSIENT SIMULATIONS

MO-A3.1A.1: TRANSIENT DIFFRACTION MECHANISM OF ELECTROMAGNETIC SCATTERING FROM CONDUCTING BODIES BASED ON THE APPROXIMATION OF PHYSICAL OPTICS 177

Hsi-Tseng Chou, Chen-Yi Chang, National Taiwan University, Taiwan

MO-A3.1A.2: A HIGHER-ORDER EXPLICIT MARCHING-ON-IN-TIME FOR ANALYSIS OF TRANSIENT ACOUSTIC SCATTERING FROM RIGID OBJECTS 179

Rui Chen, Hakan Bagci, King Abdullah University of Science and Technology (KAUST), Saudi Arabia

MO-A3.1A.3: A STABILIZED MARCHING-ON-IN-DEGREE SOLUTION OF TIME DOMAIN COMBINED FIELD INTEGRAL EQUATION 181

Ming-Da Zhu, Xidian University, China; Tapan Sarkar, Syracuse University, United States; Yu Zhang, Xidian University, China

MO-A3.1A.4: FAST MULTIPOLE TIME DOMAIN ALGORITHM FOR THE SCALAR AND VECTOR WAVE EQUATION	183
<i>Yifei Shi, Jiangsu University of Technology, China</i>	
MO-A3.1A.5: PREDICTING INSTABILITY IN TRANSIENT SIMULATIONS, USING COMPLEX NUMERICAL IMPULSE RESPONSE	185
<i>Amirreza Jalali Khalilabadi, Ata Zadehgol, University of Idaho, United States</i>	
MO-A3.1A.6: A TWO-COMPONENT COMPACT 2-D FDFD METHOD FOR WAVEGUIDE STRUCTURES WITH ARPACK	187
<i>Xiaoliang Gu, Xiaolin Jin, Jinxin Li, Bin Li, University of Electronic Science and Technology of China, China</i>	
MO-A3.1A.7: TRANSIENT ANALYSIS OF ELECTROMAGNETIC SCATTERING BY PENETRABLE OBJECTS BASED ON TIME-DOMAIN PMCHWT EQUATIONS	189
<i>Qing Xu, Xi Yuan Du, Ze Yuan Lu, Mei Song Tong, Tongji University, China</i>	
MO-A3.1A.8: A HYBRID SUB-GRIDDED FDTD FOR EFFICIENT TIME REVERSAL SIMULATION	191
<i>Bao-Jun Jiang, Xiao-Kun Wei, Fu-Long Jin, Zhipeng Wang, Wei Shao, University of Electronic Science and Technology of China, China</i>	
MO-A3.1A.9: FIELD SAMPLING STRATEGIES FOR POD MODEL ORDER REDUCTION OF PARTICLE-IN-CELL SIMULATIONS	193
<i>Julio de Lima Nicolini, Dong-Yeop Na, Fernando Lisboa Teixeira, Ohio State University, United States</i>	
 MO-A2.2A: ANALYSIS OF METAMATERIALS AND METASURFACES	
MO-A2.2A.1: RIGOROUS ANALYTICAL MODEL FOR METASURFACE MICROSCOPIC DESIGN WITH INTERLAYER COUPLING	195
<i>Shahar Levy, Yaniv Kerzhner, Ariel Epstein, Technion - Israel Institute of Technology, Israel</i>	
MO-A2.2A.2: EQUIVALENT CIRCUIT MODELS AND PRONY'S ANALYSIS OF ELECTROMAGNETIC DESIGNS USING GENETIC PROGRAMING	197
<i>Gui Chao Huang, Scott Clemens, Magdy Iskander, Zhenqing Yun, University of Hawaii, United States</i>	
MO-A2.2A.3: MODIFIED FLOQUET SCATTERING MATRIX METHOD FOR SOLVING N-PATH NETWORKS	199
<i>Cody Scarborough, Anthony Grbic, University of Michigan, United States</i>	
MO-A2.2A.4: CATEGORIZING METAMATERIALS BY USING EQUIVALENT DIELECTRIC APPROACH	201
<i>Abdelkhalek Nasri, Research Laboratory Smart Electricity & ICT, SEICT, LR18ES44, Tunisia; Raj Mittra, University of Central Florida, United States; Hatem Rmili, King Abdulaziz University, Faculty of Engineering, Saudi Arabia</i>	
MO-A2.2A.5: ANALYSIS OF PHASE DISCRETIZATION INFLUENCE ON THE MONOCHROMATIC ABERRATIONS OF FOCUSING METASURFACE BASED ON GENERALIZED RAYLEIGH-SOMMERFELD DIFFRACTION THEORY	203
<i>Hongjun Chu, Jiaran Qi, Jinghui Qiu, Harbin Institute of Technology, China</i>	
 MO-A1.5A: SPIRAL ANTENNAS	
MO-A1.5A.1: ANALYSIS OF CROSS- AND X-SHAPED SPIRAL ANTENNA ARRAYS FOR AMPLITUDE-COMPARISON OF SYSTEMS	205
<i>Eduardo Sakomura, Daniel Ferreira, Ildelfonso Bianchi, Daniel Chagas do Nascimento, Diego Moná, Technological Institute of Aeronautics, Brazil</i>	
MO-A1.5A.2: AN ULTRA-WIDEBAND EDGE-FED OCTAGONAL FOUR-ARM ARCHIMEDEAN SPIRAL ANTENNA	207
<i>Sanghoon Lee, Michael E.D. Smith, Sensen Li, Hua Wang, Georgia Institute of Technology, United States</i>	

MO-A1.5A.3: UNDERWATER DEPLOYMENT AND PERFORMANCE OF CURVED SPIRAL ANTENNAS IN MUSSEL BACKPACKS	209
<i>Ruben Llamas, Kumar Vijay Mishra, James Niemeier, Anton Kruger, University of Iowa, United States</i>	
MO-A1.5A.4: BOW-SPIRAL ANTENNA	211
<i>Thi M. D. Tran, Marc Piette, Royal Military Academy, Belgium</i>	
MO-A1.5A.5: PERFORMANCE ANALYSIS OF AZIMUTH-ONLY AMPLITUDE-COMPARISON DF SYSTEM IN OPERATIONAL SCENARIOS	213
<i>Eduardo Sakomura, Daniel Ferreira, Ildefonso Bianchi, Daniel Chagas do Nascimento, Diego Moná, Technological Institute of Aeronautics, Brazil</i>	
 MO-SP.1P: APPLICATION OF MACHINE/DEEP LEARNING AND UNCERTAINTY QUANTIFICATION TECHNIQUES IN COMPUTATIONAL ELECTROMAGNETICS	
MO-SP.1P.1: GENERALIZATION CAPABILITIES OF DEEP LEARNING SCHEMES IN SOLVING INVERSE SCATTERING PROBLEMS	215
<i>Zhun Wei, Xudong Chen, National University of Singapore, Singapore</i>	
MO-SP.1P.2: GEOMETRICALLY STOCHASTIC FINITE DIFFERENCE TIME DOMAIN METHOD	217
<i>Khadijeh Masumnia-Bisheh, Tarbiat Modares University, Iran; Cynthia Furse, University of Utah, United States</i>	
MO-SP.1P.4: DEEP CONVOLUTIONAL NEURAL NETWORK APPROACH FOR SOLVING NONLINEAR INVERSE SCATTERING PROBLEMS	219
<i>Lianlin Li, Longgang Wang, Peking University, China; Daniel Ospina Acero, Fernando Teixeira, Ohio State University, United States</i>	
MO-SP.1P.5: ERROR ESTIMATION AND UNCERTAINTY QUANTIFICATION BASED ON ADJOINT METHODS IN COMPUTATIONAL ELECTROMAGNETICS	221
<i>Branislav Notaros, Jake Harmon, Cam Key, Donald Estep, Colorado State University, United States; Troy Butler, University of Colorado Denver, United States</i>	
MO-SP.1P.6: A MULTI-LEVEL RECONSTRUCTION ALGORITHM FOR ELECTRICAL CAPACITANCE TOMOGRAPHY BASED ON MODULAR DEEP NEURAL NETWORKS	223
<i>Elizabeth Chen, Costas Sarris, University of Toronto, Canada</i>	
MO-SP.1P.8: FAST AND ACCURATE NEAR-FIELD TO FAR-FIELD TRANSFORMATION USING AN ADAPTIVE SAMPLING ALGORITHM AND MACHINE LEARNING	225
<i>Rezvan Rafiee Alavi, Rashid Mirzavand, Pedram Mousavi, University of Alberta, Canada</i>	
MO-SP.1P.9: EXPERIMENTAL MICROWAVE TARGET IDENTIFICATION USING MACHINE LEARNING	227
<i>Clayton Kettlewell, Kyle Hetjmanek, George Scott, Waleed Al-Shaikhli, Blake Willig, Ala-Addin Nabulsi, Somen Baidya, Reza Derakhshani, Ahmed M. Hassan, University of Missouri-Kansas City, United States</i>	
MO-SP.1P.10: UNCERTAINTY QUANTIFICATION OF RADIO PROPAGATION MODELS USING ARTIFICIAL NEURAL NETWORKS	229
<i>Aristeidis Seretis, Xingqi Zhang, Costas Sarris, University of Toronto, Canada</i>	
 MO-SP.2P: SPACE-TIME MODULATED METAMATERIALS	
MO-SP.2P.1: THE DAWN OF SPACETIME METAMATERIALS	231
<i>Christophe Caloz, Zoé-Lise Deck-Léger, École Polytechnique de Montréal, Canada</i>	
MO-SP.2P.3: NONRECIPROCAL TRANSMISSION THROUGH LOCALLY TIME-MODULATED BIANISOTROPIC METAFILMS	233
<i>Ana Díaz-Rubio, Viktor Asadchy, Grigorii Ptitsyn, Mohammad Mirmoosa, Sergei Tretyakov, Aalto University, Finland</i>	

MO-SP.2P.5: NONRECIPROCAL METASURFACES THROUGH BIASING WITH CIRCULARLY POLARIZED WAVES	235
<i>Dimitrios Sounas, Wayne State University, United States</i>	
MO-SP.2P.6: UWB IMPEDANCE MATCHING BY TEMPORAL SWITCHING	237
<i>Yakir Hadad, Tel Aviv University, Israel; Amir Shlivinski, Ben Gurion University of the Negev, Israel</i>	
MO-SP.2P.7: LINEAR PULSE COMPANSION BASED ON SPACE-TIME MODULATION	239
<i>Nima Chamanara, David G. Cooke, McGill University, Canada; Christophe Caloz, Polytechnique Montréal, Canada</i>	
MO-SP.2P.8: HARMONIC-MODULATED NONLINEAR METASURFACE BASED ON GENERALIZED PHASE CONJUGATION PRINCIPLE	241
<i>Xibi Chen, Fan Yang, Tsinghua University, China</i>	
MO-SP.2P.9: FULL-DUPLEX NEAR-INFRARED COMMUNICATION VIA SPATIOTEMPORALLY-MODULATED ARRAY ANTENNAS	243
<i>Mohammad Mahdi Salary, Hossein Mosallaei, Northeastern University, United States</i>	
MO-SP.2P.10: CODING PROGRAMMABLE METASURFACES BASED ON DEEP LEARNING TECHNIQUES	245
<i>Tao Shan, Maokun Li, Tsinghua University, China</i>	
 MO-A1.1P: BROADBAND ANTENNAS	
MO-A1.1P.1: ENHANCED AXIAL-RATIO BANDWIDTH SINGLE-POINT-FED CP ANTENNA USING SLOT STRUCTURE MODIFICATION	247
<i>Ubaid Ullah, Slawomir Koziel, Reykjavik University, Iceland</i>	
MO-A1.1P.2: A SEMI-CIRCULAR SLOT TEXTILE ANTENNA FOR ULTRA-WIDEBAND APPLICATIONS	249
<i>Swetha Amit, Viswanath Talasila, Ramaiah Institute of Technology, India; Prasad Shastry, Bradley University, United States</i>	
MO-A1.1P.3: L-PROBE AND U-SLOT MICROSTRIP CIRCULAR ANTENNA FOR APPLICATION IN THE DETECTION OF PARTIAL DISCHARGES IN POWER TRANSFORMERS	251
<i>George Victor Rocha Xavier, Edson Guedes da Costa, Alexandre Jean René Serres, Camila Caroline Rodrigues de Albuquerque, Federal University of Campina Grande, Brazil</i>	
MO-A1.1P.4: HIGH GAIN WIDEBAND AIR STRIP-LINE FED ANTENNA FOR HIGH POWER APPLICATIONS	253
<i>Sherif R. Zahran, Arab Academy for Science, Technology & Maritime Transport, Egypt; Ahmed Elshafey, Mahmoud A. Abdalla, Military Technical College, Egypt</i>	
MO-A1.1P.5: DESIGN OF WIDEBAND SLOT ANTENNAS BY USING COMBINED CHARACTERISTIC MODES	255
<i>Jiang-Feng Lin, Qing-Xin Chu, South China University of Technology, China</i>	
MO-A1.1P.6: FEED BASED BANDWIDTH ENHANCEMENT OF U-SLOT MICROSTRIP PATCH USING THEORY OF CHARACTERISTIC MODES	257
<i>Mahrukh Khan, University of Missouri-Kansas City, United States</i>	
MO-A1.1P.7: A NOVEL CLASS OF SUPER-ELLIPTICAL VIVALDI ANTENNAS WITH ENHANCED RADIATION PROPERTIES	259
<i>Simay Kazıcı, Abraham Loutridis, Diego Caratelli, The Antenna Company, Netherlands</i>	
MO-A1.1P.8: PERFORMANCE EVALUATION ON VARIOUS RESISTIVELY LOADED WRAPPED BOWTIE ANTENNA	N/A
<i>Doojin Lee, George Shaker, William Melek, University of Waterloo, Canada</i>	
MO-A1.1P.9: A WIDEBAND TOP-HAT LOADED MONOCONE ANTENNA USING SHORTING STRIPS	263
<i>Kyoseung Keum, Sungpeel Kim, Hanyang University, Korea (South); Youngmi Park, Agency for Defense Development, Korea (South); Jaehoon Choi, Hanyang University, Korea (South)</i>	

MO-A1.1P.10: A SLOTTED CIRCULAR PATCH ANTENNA WITH WIDEBAND FILTERING CHARACTERISTICS	265
<i>Manisha Kahar, Mrinal Kanti Mandal, Indian Institute of Technology, Kharagpur, India</i>	
 MO-A5.1P: ANTENNAS FOR 5G II	
MO-A5.1P.1: WIDEBAND PRINTED RIDGE GAP WAVEGUIDE DIFFERENTIAL FEEDING APERTURE ANTENNA FOR MILLIMETER WAVE APPLICATIONS	267
<i>Islam Afffi, Magid Alzidani, Abdel Razik Sebak, Concordia University, Canada</i>	
MO-A5.1P.2: MMWAVE DOUBLE CAVITY-BACKED SLOT ANTENNA FEATURING ELECTRICALLY SMALL AND LOW-PROFILE	269
<i>Jaehyun Choi, Junho Park, Woonbong Hwang, Wonbin Hong, Pohang University of Science and Technology (POSTECH), Korea (South)</i>	
MO-A5.1P.3: CONFORMAL ANTIPODAL VIVALDI ANTENNA WITH PARASITIC ELEMENTS FOR 5G MILLIMETER WAVE APPLICATIONS	271
<i>Yuxiao He, John Papapolymerou, Michigan State University, United States</i>	
MO-A5.1P.4: A NOVEL WIDEBAND MILLIMETER WAVE INTEGRATED SUBSTRATE GAP WAVEGUIDE PATCH ANTENNA	N/A
<i>Bingshuai Huangfu, Dongya Shen, Yunnan University, China; Xiupu Zhang, Concordia University, Canada</i>	
MO-A5.1P.5: SILVER NANOWIRE BASED FLEXIBLE, TRANSPARENT, WIDEBAND ANTENNA FOR 5G BAND APPLICATION	275
<i>Weiwei Li, Azat Meredov, Atif Shamim, King Abdullah University of Science and Technology (KAUST), Saudi Arabia</i>	
MO-A5.1P.6: AN APERTURE-COUPLED DUAL-POLARIZED STACKED PATCH ANTENNA FOR MULTI-LAYER ORGANIC PACKAGE INTEGRATION	277
<i>Duixian Liu, Xiaoxiong Gu, Christian Baks, Alberto Valdes-Garcia, IBM T. J. Watson Research Center, United States</i>	
MO-A5.1P.7: SERIES CHAINED PATCH PHASED ARRAY ANTENNA FOR MMWAVE 5G MOBILE IN METAL BEZEL DESIGN	279
<i>Sung Soo Kim, Samsung Electronics, Korea (South); Sung Hoe Kim, Bae Jang Hwan, Young Joong Yoon, Yonsei University, Korea (South)</i>	
MO-A5.1P.8: DESIGN OF A PLANAR WIDEBAND YAGI-UDA ANTENNA FOR MILLIMETER WAVE SAR IMAGING APPLICATION	281
<i>Yuan Gao, Mohammad Ghasr, Reza Zoughi, Missouri University of Science and Technology, United States</i>	
MO-A5.1P.9: MILLIMETER-WAVE TRIPLE-RESONANCE SUBSTRATE INTEGRATED WAVEGUIDE CAVITY-BACKED SLOT ANTENNA WITH CAVITY RESONATOR	283
<i>Jang Hwan Bae, Jun Gi Jeong, Young Joong Yoon, Yonsei University, Korea (South); Hyungrak Kim, Daelim University College, Korea (South)</i>	
 MO-A1.2P: REFLECTARRAY DESIGN AND APPLICATIONS	
MO-A1.2P.2: PHOENIX CELLS REDUCED DATABASE CONSTRUCTION FOR EFFICIENT REFLECTARRAY SYNTHESIS	285
<i>Andrea Guarriello, Heriot-Watt University, United Kingdom; Renaud Loison, Institut d'Électronique et de Télécommunications de Rennes, France; George Goussetis, Heriot-Watt University, United Kingdom; Daniele Bresciani, Herve Legay, Thales Alenia Space, France</i>	
MO-A1.2P.3: FRONTIERS IN REFLECTARRAY DESIGN	287
<i>Giacomo Oliveri, Marco Salucci, Angelo Gelmini, Andrea Massa, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy</i>	

MO-A1.2P.4: DESIGN METHODOLOGY OF A PASSIVE REFLECTARRAY FOR MAIN BEAM COLLIMATION	289
<i>Jiawei Han, M. A. Constant Niamien, Zouheir Riah, Normandie University, UNIROUEN, ESIGELEC, IRSEEM, France</i>	
MO-A1.2P.5: A FEASIBILITY STUDY OF SPARSE REFLECTARRAY ANTENNAS	N/A
<i>Jianhua Yang, Feng Yang, Rui Wang, Zhiyu Xing, Xiao Ma, University of Electronic Science and Technology of China, China</i>	
MO-A1.2P.6: DESIGN OF HIGH GAIN SINGLE LAYER REFLECTARRAY ANTENNA USING RING AND DOUBLE SQUARE ELEMENTS	293
<i>Shafaq Kausar, Saeideh Shad, Ahmed Kausar, Hani Mehrpouyan, Boise State University, United States</i>	
MO-A1.2P.7: 3D-PRINTABLE PERFORATED DIELECTRIC REFLECTARRAY IN KA-BAND	295
<i>Andrea Massaccesi, Michele Beccaria, Paola Pirinoli, Politecnico di Torino, Italy</i>	
MO-A1.2P.8: EFFECTS OF LARGE ANGLE OF INCIDENCE IN OFFSET-FED REFLECTARRAY ANTENNAS	297
<i>Yu-Cheng Lin, Chun-Tzu Lin, Yuan-Chun Lin, National Chung Cheng University, Taiwan; Shih-Cheng Lin, National Chiayi University, Taiwan; Wei-Yang Chen, Sheng-Fuh Chang, National Chung Cheng University, Taiwan</i>	
MO-A1.2P.9: CIRCULAR POLARIZATION CONVERSION REFLECTARRAY SUPPRESSING BEAM SHIFT	299
<i>Hiroki Yamada, Kotaro Sakagawa, Hiroyuki Deguchi, Mikio Tsuji, Doshisha University, Japan</i>	
MO-A1.2P.10: COMPACT FOLDED TRANSMITARRAY ANTENNA WITH A PLANAR FEEDER	301
<i>Yuehe Ge, Chengxiu Lin, Yufang Wang, Guowei Li, Huaqiao University, China</i>	
 MO-A1.3P: NOVEL RECONFIGURABLE ANTENNAS AND ARRAYS	
MO-A1.3P.2: ELECTRONICALLY RECONFIGURABLE DIPOLE ANTENNA USING INTEGRATED PASSIVE NON-VOLATILE SOLID-STATE METAL-INSULATOR-METAL SWITCHES	303
<i>Jayakrishnan Methapettyparambu Purushothama, Etienne Perret, Universite Grenoble Alpes, France; Arnaud Vena, Brice Sorli, Université de Montpellier 2, France</i>	
MO-A1.3P.3: ON CHANGING THE IMPEDANCE OF A REACTIVE SURFACE USING MAGNETO-STATIC RESPONSIVE PARTICLES	305
<i>Jerika Cleveland, Dipankar Mitra, Jaco Lewis, Benjamin D. Braaten, North Dakota State University, United States; Jeffery Allen, Monica Allen, Air Force Research Laboratory, United States</i>	
MO-A1.3P.4: CENTER-FED CIRCULARLY POLARIZED OMNIDIRECTIONAL OPEN-HELICAL ELEMENT OPTIMIZATION	307
<i>Henadz Krukovich, Benjamin Bladow, Jeffrey Varness, Steven Schennum, Gonzaga University, United States</i>	
MO-A1.3P.5: DESIGN OF A TERAHERTZ RECONFIGURABLE REFLECTARRAY WITH INDIVIDUALLY CONTROLLED 1-BIT PHASING ELEMENTS	309
<i>Hongjing Xu, Shenheng Xu, Fan Yang, Tsinghua University, China; Shaobo Dun, Shixiong Liang, HeBei Semiconductor Research Institute, China</i>	
MO-A1.3P.6: NOVEL RECONFIGURABLE CIRCULARLY POLARIZED SQUARE SLOT ANTENNA FOR UNDERGROUND MINE	311
<i>Mohamed Lamine Seddiki, Mourad Nedil, Iyadh Gammoudi, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada</i>	
MO-A1.3P.7: STUDY OF INTERCONNECTING SWITCH CURRENTS IN RECONFIGURABLE PARASITIC LAYER ANTENNAS	313
<i>Germán Augusto Ramírez Arroyave, Javier Leonardo Araque Quijano, Universidad Nacional de Colombia, Colombia; Christian Ballesteros, Sebastián Blanch Boris, Jordi Romeu, Universitat Politecnica de Catalunya (UPC), Spain; Bedri Cetiner, Utah State University, United States; Luis Jofre Roca, Universitat Politecnica de Catalunya (UPC), Spain</i>	
MO-A1.3P.9: DESIGN OF HIGH GAIN LOW COST BEAM-STEERING REFLECTARRAY ANTENNA	315
<i>Shafaq Kausar, Saeideh Shad, Ahmed Kausar, Hani Mehrpouyan, Boise State University, United States</i>	

MO-A1.3P.10: A MIMO COMMUNICATION SYSTEM WITH FIXED AND RECONFIGURABLE BAND N/A
NOTCH ANTENNAS

Rashid Saleem, Asim Quddus, University of Engineering and Technology (UET), Taxila, Pakistan; Farhan Shafique, COMSATS Institute of Information Technology (CIIT), Pakistan; Tayyab Shabbir, University of Engineering and Technology (UET), Taxila, Pakistan

MO-A1.4P: SLOT ANTENNAS

MO-A1.4P.1: MM-WAVE BEAM-STEERING SLOT ANTENNA USING GRADIENT 319
RELATIVE-PERMITTIVITY FSS SUPERSTRATE

Zahra Mousavirazi, Mehri Borhani Kakhki, National Institute of Scientific Research (INRS), Canada; Vahid Rafii, Aydin University, Turkey; Tayeb A. Denidni, National Institute of Scientific Research (INRS), Canada

MO-A1.4P.2: A MULTILAYER DIELECTRIC FILLED RADIAL SUBSTRATE INTEGRATED 321
WAVEGUIDE SLOT ANTENNA

Dhruva Kumar Chandrappa, Shraman Gupta, Abdel Razik Sebak, Concordia University, Canada

MO-A1.4P.3: EIGENMODE ANALYSIS OF PRINTED-RIDGE-GAP-WAVEGUIDE CAVITY AND ITS 323
APPLICATION TO ANTENNA DESIGN

Zhenjiang Zhao, Huan Li, Mohamad Mantash, Tayeb A. Denidni, National Institute of Scientific Research (INRS), Canada

MO-A1.4P.4: DUAL POLARIZED OMNI CELL ANTENNA WITH CYLINDRICAL LOOP SLOT 325

Bakar Rohani, Hiroyuki Arai, Yokohama National University, Japan

MO-A1.4P.5: DUAL-BAND ANTI-INTERFERENCE SLOT ANTENNA USING METAMATERIAL 327
STRUCTURE

Zhi Zheng, Wei Wang, Hong-Tao Zhang, Yu-Yang Zheng, East China Research Institute of Electronic Engineering, China; Xian-Ling Liang, Shanghai Jiao Tong University, China

MO-A1.4P.6: VHF NOTCH ANTENNA INTEGRATED IN AN AIRCRAFT WINGLET 329

Marta Martínez-Vázquez, Jordi Balcells-Ventura, IMST GmbH, Germany; Zdeněk Řezníček, Evektoř, Czech Republic; Kai Gonet, Stefan Steeger, Invent GmbH, Germany; Petr Vrchota, VZLU – Czech Aerospace Research Centre, Czech Republic

MO-A1.4P.7: DUAL-BAND DUAL-POLARIZED SIW FILTERING ANTENNA 331

Manisha Kahar, Mrinal Kanti Mandal, Indian Institute of Technology, Kharagpur, India

MO-A1.4P.8: INTEGRATED SUBSTRATE GAP WAVEGUIDE CIRCULARLY POLARIZED SLOT N/A
ANTENNA

DanDan You, Dongya Shen, Yunnan University, China; Xiupu Zhang, Concordia University, Canada

MO-A1.4P.9: W BAND SUBSTRATE-INTEGRATED SLOT ANTENNA-IN-PACKAGE USING HIGHER 335
ORDER MODE

En Zhang, Liang Zhou, Shanghai Jiao Tong University, China; Wen-Yan Yin, Zhejiang University, China

MO-A1.4P.10: GROUNDED $\pm 45^\circ$ DUAL SLANT POLARIZED OMNIDIRECTIONAL ANTENNA N/A

Muhammad Shahzad Sadiq, Cunjun Ruan, Beihang University, China

MO-A2.1P: ELECTROMAGNETIC MEASUREMENTS AND MATERIAL CHARACTERIZATION
II

MO-A2.1P.1: Q-BAND FREE-SPACE SETUP FOR MEASURING DIELECTRIC PROPERTIES N/A

Mohamed Hassan, Cairo University, Egypt; Riddhi Goswami, Ahmed Kishk, Vincent Mooney-Chopin, Concordia University, Canada

MO-A2.1P.2: AN APPLICATION OF THE VIRTUAL TRANSMISSION LINE MODEL OF AN 341
OPEN-ENDED COAXIAL PROBE FOR DIELECTRIC PROPERTIES CHARACTERIZATION OF
BIOLOGICAL TISSUES

Nunzia Fontana, Eliana Canicattì, Agostino Monorchio, University of Pisa, Italy

MO-A2.1P.3: HIGHLY SENSITIVE PLANAR MICROWAVES SENSOR	2205
<i>Ali Albishi, King Saud University, Saudi Arabia; Omar Ramahi, University of Waterloo, Canada</i>	
MO-A2.1P.5: A MODIFIED TEST FIXTURE USING PARALLEL STRIPS FOR MEASURING ATTENUATION OF THE DIELECTRIC ROD	343
<i>Chong Gao, En Li, Chengyong Yu, Yafeng Li, University of Electronic Science and Technology of China, China</i>	
MO-A2.1P.6: ANALYSIS OF MULTIPLE OBJECTIVE COST FUNCTIONS FOR FREE SPACE MATERIAL CHARACTERIZATION WITH GENETIC ALGORITHMS	345
<i>Raenita Fenner, Loyola University, United States; Ryan Banks, Virginia Polytechnic Institute and State University, United States; Mark Dorsey, Naval Research Laboratory, United States</i>	
MO-A2.1P.7: A METHOD FOR THE MEASUREMENT OF RF ABSORBER USING SPECTRAL DOMAIN TRANSFORMATIONS	347
<i>Vince Rodriguez, Brett T. Walkenhorst, NSI-MI Technologies, United States; Jorgen Bruun, PPG Aerospace, United States</i>	
MO-A2.1P.8: A NOVEL TECHNIQUE TO REDUCE TRUNCATION ERROR IN NEAR-FIELD MEASUREMENTS	349
<i>Marco Salucci, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy; Marco Donald Migliore, ELEDIA Research Center (ELEDIA@UniCAS - University of Cassino and Southern Lazio), Cassino, Italy, Italy</i>	
MO-A2.1P.9: ACCURACY INVESTIGATION OF SINGLE-CUT NEAR-FIELD FAR-FIELD TRANSFORMATION TECHNIQUE BASED ON 2D PLANE-WAVE EXPANSION	351
<i>Shuntaro Omi, Toru Uno, Takuji Arima, Tokyo University of Agriculture and Technology, Japan</i>	
 MO-A5.3P: BIOMEDICAL APPLICATIONS OF ELECTROMAGNETICS I	
MO-A5.3P.1: THEORY OF ELECTROMAGNETIC-BASED COMMUNICATION WITHIN BACTERIAL COMMUNITIES	353
<i>Navid Barani, Kamal Sarabandi, University of Michigan, United States</i>	
MO-A5.3P.2: EXPERIMENTAL VALIDATION OF A MICROWAVE BRAIN SCANNER FOR CEREBROVASCULAR DISEASES MONITORING	355
<i>Jorge A. Tobon Vasquez, Politecnico di Torino, Italy; Rosa Scapatucci, Institute for Electromagnetic Sensing of the Environment, National Research Council of Italy, Italy; Giovanna Turvani, Politecnico di Torino, Italy; Gennaro Bellizzi, University of Naples Federico II, Italy; Nadine Joachimowicz, Université Paris-Diderot, France; Bernard Duchêne, CNRS, France; Mario R. Casu, Politecnico di Torino, Italy; Lorenzo Crocco, Institute for Electromagnetic Sensing of the Environment, National Research Council of Italy, Italy; Francesca Vipiana, Politecnico di Torino, Italy</i>	
MO-A5.3P.5: A FAST AND ACCURATE TRANSFER FUNCTION VALIDATION STRATEGY USING ROTATIONAL INVARIANT LEAD TRAJECTORIES	357
<i>Yu Wang, Jianfeng Zheng, Qingyan Wang, Ji Chen, University of Houston, United States</i>	
MO-A5.3P.7: ELECTROMAGNETIC COMPONENTS REALIZED ON CONDUCTIVE WIRES: A COPPER VS. E-THREAD COMPARISON	359
<i>Vigyanshu Mishra, Asimina Kiourti, Ohio State University, United States</i>	
MO-A5.3P.10: A NEAR-FIELD MICROWAVE BIOSENSOR FOR GLUCOSE CONCENTRATION LEVEL DETECTION	N/A
<i>Abdulrahman Alghamdi, Saeed Mohammadi, Purdue University, United States; Rehab Alghamdi, Indiana State University, United States</i>	
 MO-A4.1P: SCATTERING, DIFFRACTION AND RCS	
MO-A4.1P.1: FULL WAVE SOLUTIONS OF MULTIPLE SCATTERING USING 3D VECTOR CYLINDRICAL WAVE EXPANSIONS IN FOLDY-LAX EQUATIONS	363
<i>Huanting Huang, Leung Tsang, University of Michigan, United States; Kung-Hau Ding, Air Force Research Laboratory, United States</i>	

MO-A4.1P.3: MULTIPLE WEDGES DIFFRACTION IN PROPAGATION PROBLEMS USING THE GENERALIZED WIENER-HOPF TECHNIQUE	365
<i>Vito Daniele, Guido Lombardi, Rodolfo S. Zich, Politecnico di Torino-ISMB, Italy</i>	
MO-A4.1P.4: SCATTERING AT INTERLUMINAL INTERFACE	367
<i>Zoé-Lise Deck-Léger, École Polytechnique de Montréal, Canada; Christophe Caloz, Polytechnique Montréal, Canada</i>	
MO-A4.1P.5: A NON-ITERATIVE TIME-DOMAIN SIDELobe SUPPRESSION IN DOPPLER SHIFTED LFM WAVEFORMS	369
<i>Ehtesham Shareef, Muhammad Dawood, New Mexico State University, United States</i>	
MO-A4.1P.6: A MACHINE LEARNING BASED 77 GHZ RADAR TARGET CLASSIFICATION FOR AUTONOMOUS VEHICLES	371
<i>Xiuzhang Cai, Kamal Sarabandi, University of Michigan, United States</i>	
MO-A4.1P.7: IMPROVING TWO ENDS PRECISION OF RCS MEASUREMENT BASED ON SPECTRAL EXTRAPOLATION TECHNIQUE	N/A
<i>Chufeng Hu, Nanjing Li, Weijun Chen, Shuxia Guo, Northwestern Polytechnical University, China</i>	
MO-A4.1P.8: ON SCATTERING OF A VECTOR CYLINDRICAL WAVE BY AN AXISYMMETRIC SEMITRANSSPARENT REFLECTOR	375
<i>Kirill Klionovski, Atif Shamim, King Abdullah University of Science and Technology (KAUST), Saudi Arabia</i>	
MO-A4.1P.9: DIFFUSE SCATTERING CHARACTERISTICS OF ROUGH MATERIALS AT MM-WAVE FREQUENCIES	377
<i>Haikuo Tian, Xi Liao, Chongqing University of Posts and Telecommunications, China; Rui Zhang, China Research Institute of Radiowave Propagation, China; Yu Shao, Yang Wang, Chongqing University of Posts and Telecommunications, China</i>	
MO-A4.1P.10: MANEUVERING TARGET DETECTION METHOD BASED ON RD SPECTRUM OF SKYWAVE OTHR	N/A
<i>Hui Zheng, Yang Li, Ning Zhang, Longshan Wu, Xinyang Wang, Wenbo Ding, Harbin Institute of Technology, China</i>	
 MO-A5.2P: TERAHERTZ SENSING APPLICATIONS	
MO-A5.2P.1: MONITORING HEALTH STATUS AND QUALITY ASSESSMENT OF LEAVES USING TERAHERTZ FREQUENCY	379
<i>Adnan Zahid, University of Glasgow, United Kingdom; Hasan Tahir Abbas, Texas A&M University at Qatar, Qatar; Fawad Sheikh, Thomas Kaiser, Universitat Duisburg-Essen, Germany; Ahmed Zoha, Muhammad Ali Imran, Qammer Hussain Abbasi, University of Glasgow, United Kingdom</i>	
MO-A5.2P.2: MONITORING QUALITY CONTROL OF FRUITS USING TERAHERTZ SENSING	381
<i>Aifeng Ren, Xidian University, China; Adnan Zahid, Muhammad Ali Imran, Qammer H. Abbasi, University of Glasgow, United Kingdom; Akram Alomainy, Queen Mary University of London, United Kingdom</i>	
 TU-SP.1A: MEMORIAL SESSION FOR DR. R. C. HANSEN	
TU-SP.1A.2: ROBERT C. HANSEN - MANAGING ANTENNA EXPECTATIONS	383
<i>Dean Paschen, FIRST RF Corporation, United States</i>	
TU-SP.1A.6: ARRAY SYNTHESIS IN THE AUTOCORRELATION DOMAIN - PROOF AND RESEARCH TRACKS	385
<i>Mohammad Abdul Hannan, Lorenzo Poli, Giacomo Oliveri, Andrea Massa, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy</i>	
TU-SP.1A.8: PHASED ARRAY BANDWIDTH DEFINED BY BEAM SQUINT AND PULSE DISPERSION	387
<i>Randy Haupt, Colorado School of Mines, United States</i>	

TU-SP.1A.10: TIGHT BOUNDS ON THE BANDWIDTH OF SMALL MULTIRESONANT ELECTRIC DIPOLE ANTENNAS	389
<i>Howard Stuart, LGS Innovations, United States</i>	
TU-SP.2A: INTERNATIONAL COLLABORATIONS ON NEXT-GENERATION RADIO ASTRONOMICAL INSTRUMENTS	
TU-SP.2A.1: THE SQUARE KILOMETRE ARRAY OBSERVATORY	391
<i>Maria Grazia Labate, Mark Waterson, Gerhard Swart, Mark Bowen, Peter Dewdney, Square Kilometre Array (SKA) Organisation, United Kingdom</i>	
TU-SP.2A.2: PRIMARY BEAMS OF THE MEERKAT RADIO TELESCOPE: MEASUREMENTS AND SIMULATIONS	393
<i>Dirk De Villiers, Stellenbosch University, South Africa; Khan Asad, South African Radio Astronomy Observatory, South Africa; Oleg Smirnov, Rhodes University, South Africa; Robert Lehmensiek, EMSS Antennas (Pty) Ltd, South Africa; Matthieu De Villiers, Justin Jonas, South African Radio Astronomy Observatory, South Africa</i>	
TU-SP.2A.3: THE SKA APERTURE ARRAY VERIFICATION SYSTEM: MEASURED DIGITALLY-BEAM-FORMED RADIATION PATTERNS	395
<i>Giuseppe Virone, Fabio Paonessa, Stefania Matteoli, Lorenzo Ciorba, Giuseppe Addamo, Oscar Antonio Peverini, CNR-IEIIT, Italy; Eloy de Lera Acedo, Edgar Colín-Beltrán, Nima Razavi Ghods, University of Cambridge, United Kingdom; Pietro Bolli, INAF-OAA, Italy; Giuseppe Pupillo, INAF-IRA, Italy; Andrea Maria Lingua, Marco Piras, Irene Aicardi, Politecnico di Torino, Italy; Kris Zarb Adami, Alessio Magro, University of Malta, Malta</i>	
TU-SP.2A.4: SPARSE-REGULAR ARRAY DESIGN FOR SKA MID FREQUENCY APERTURE ARRAY	397
<i>Brandt Klopper, Dirk De Villiers, Stellenbosch University, South Africa; Jan Geralt bij de Vaate, ASTRON and Stellenbosch University, Netherlands; David Davidson, ICRAR-Curtin and Stellenbosch University, Australia</i>	
TU-SP.2A.5: GEOMETRY OPTIMIZATION OF A PHASED ARRAY FEED ON THE ARECIBO TELESCOPE FOR MAXIMUM SURVEY EFFICIENCY	399
<i>Karl Warnick, Jakob Kunzler, Brigham Young University, United States; German Cortes-Medellin, Cornell University, United States</i>	
TU-SP.2A.6: RADIATION EFFICIENCY CALCULATION OF THE MURCHISON WIDEFIELD ARRAY USING A POWER WAVE BASED FRAMEWORK	401
<i>Daniel Ung, Adrian Sutinjo, David Davidson, Melanie Johnston-Hollitt, Steven Tingay, Curtin University, Australia</i>	
TU-SP.2A.7: NEW RECEIVER TECHNOLOGY FOR RADIO ASTRONOMY: A TECHNOLOGY UPDATE FROM CSIRO AND FAST	403
<i>Alex Dunning, Mia Baquiran, Ron Beresford, Michael Bourne, Mark Bowen, Michael Brothers, John Bunton, Nick Carter, Santiago Castillo, Yuqing Chen, Wan Cheng, Yoon Chung, Paul Doherty, Daniel George, Grant Hampson, Douglas Hayman, Kanapathippillai Jeganathan, Henry Kanoniuk, Simon Mackay, Les Reilly, Paul Roberts, Peter Roush, Sean Severs, Robert Shaw, Ken Smart, Stephanie Smith, John Tuthill, Tasso Tzioumis, Veronica-Claire Venables, CSIRO, Australia; Rendong Nan, Chengjin Jin, Yan Zhu, Yang Cao, Xiangwei Shi, Jinyou Song, Jinglong Yu, Jin Fan, Youling Yue, Lei Qian, Dong Bin, Chinese Academy of Sciences, China</i>	
TU-SP.2A.8: ANTENNA PHASE CENTER ANALYSIS FOR THE LOFAR RADIO TELESCOPE	405
<i>Paola Di Ninni, Pietro Bolli, Renzo Nesti, Giuseppe Pupillo, INAF, Italy; Giuseppe Virone, National Research Council of Italy (CNR), Italy; Stefan Wijnholds, ASTRON, Netherlands</i>	
TU-SP.2A.9: DESIGN OF AN ULTRA LOW FREQUENCY CUBESAT ANTENNA PAYLOAD FOR RADIO ASTRONOMY IN SPACE: STATE OF THE ART	407
<i>Cornelis Vertegaal, Mark Bentum, Eindhoven University of Technology, Netherlands</i>	

TU-A5.1A: 5G MIMO ANTENNA TECHNOLOGY

TU-A5.1A.1: A BROADSIDE THREE-PORT ANTENNA FOR 5G MASSIVE MIMO ANTENNA SYSTEMS..... 409
Li Ying Nie, Xian Qi Lin, University of Electronic Science and Technology of China, China; Buon Kiong Lau, Lund University, Sweden

TU-A5.1A.2: A CAPACITY RECONFIGURABLE MULTIMODE ORIGAMI MIMO ANTENNA.....411
Nicholas Russo, Constantinos L. Zekios, Stavros V. Georgakopoulos, Florida International University, United States

TU-A5.1A.3: A LTE BAND INTEGRATED 5G ANTENNA DESIGN USING CHARACTERISTIC MODE ANALYSIS 413
Javid Ganie, Chitra Singh, Kumud Jha, Shri Mata Vaishno Devi University, India; Satish Sharma, San Diego State University, United States

TU-A5.1A.4: EFFECT OF ANTENNA ARRAY ELEMENT SEPARATION ON CAPACITY OF MIMO SYSTEMS INCLUDING MUTUAL COUPLING 415
Tomislav Marinovic, Katholieke Universiteit Leuven, Belgium; Amirashkan Farsaei, TU Eindhoven, Netherlands; Rob Maaskant, Chalmers University of Technology, Sweden; Adrian Lahuerta Lavieja, Katholieke Universiteit Leuven, Sweden; Martin Johansson, Ulf Gustavsson, Ericsson, Sweden; Guy A. E. Vandenbosch, Katholieke Universiteit Leuven, Belgium

TU-A5.1A.5: EFFECT OF ANTENNA COUPLING ON THE SNR IMPROVEMENT OF MM-WAVE MASSIVE MIMO FOR 5G 417
Vahid Ezzati, Mohammad Fakharzadeh, Forouhar Farzaneh, Sharif University of Technology, Iran; Mohammadreza Ranjbar Naeini, University of Wisconsin-Madison, United States

TU-A5.1A.6: 4X4 MIMO ANTENNA ELEMENTS FED BY MICROSTRIP RIDGE GAP WAVEGUIDE..... 419
Abdelmoniem Hassan, Ahmed Kishk, Concordia University, Canada

TU-A5.1A.7: DESIGN OF AN ANTIPODAL BOWTIE ARRAY MIMO ANTENNA FOR 5G MOBILE APPLICATIONS 421
Debarati Ganguly, Yahia Antar, Royal Military College of Canada, Canada; Anil Somagani, Chinmoy Saha, Indian Institute of Space Science and Technology, India

TU-A5.1A.8: A DUAL-BAND AND DUAL-POLARIZED APERTURE ANTENNA FOR 5G MILLIMETER-WAVE APPLICATIONS 423
He-Sheng Lin, Yi-Cheng Lin, National Taiwan University, Taiwan

TU-A5.1A.9: PATH LOSS COMPENSATED PATTERN DIVERSITY ANTENNAS FOR MMWAVE 5G INDOOR BASE STATIONS 425
Karthikeya GS, Mahesh P. Abegaonkar, Shibani K. Koul, Indian Institute of Technology, Delhi, India

TU-A5.1A.10: 5G MIMO ANTENNA SYSTEM FOR MOBILE TERMINALS 427
Anping Zhao, Zhouyou Ren, Shenzhen Sunway Communication Co., Ltd, China

TU-A2.1A: METASURFACES FOR BEAM SHAPING

TU-A2.1A.1: BROADBAND WAIM METASURFACE STRUCTURE FOR ELECTRONICALLY BEAM SCANNING HOLOGRAPHIC ANTENNA FOR KU-BAND SATELLITE COMMUNICATIONS 429
Aidin Mehdipour, Mohsen Sazegar, Ryan Stevenson, Kymeta Corporation, United States

TU-A2.1A.2: ALL-DIELECTRIC COMPOUND METAOPTICS 431
Brian Raeker, Anthony Grbic, University of Michigan, United States; You Zhou, Jason Valentine, Vanderbilt University, United States

TU-A2.1A.3: REFLECTION-CANCELLING DIELECTRIC HUYGENS' METASURFACE PAIR FOR WIDEBAND MILLIMETER-WAVE BEAM-FORMING 433
Mohamed K. Emara, Carleton University, Canada; Takashi Tomura, Jiro Hirokawa, Tokyo Institute of Technology, Japan; Shulabh Gupta, Carleton University, Canada

TU-A2.1A.4: IMPEDANCE-MATCHED CIRCULAR POLARIZATION SELECTIVE SURFACES WITH SPIN-SELECTIVE PHASE MODULATION	435
<i>Minseok Kim, George V. Eleftheriades, University of Toronto, Canada</i>	
TU-A2.1A.5: GENERATION OF TILTED HIGH-ORDER BESSEL BEAM IN MILLIMETER RANGE USING METASURFACE	437
<i>Dajun Zhang, Xiong Wang, ShanghaiTech University, China</i>	
TU-A2.1A.6: AN ULTRATHIN FLEXIBLE METASURFACE FOR HALF MIRROR AND QWP OPERATION	439
<i>Fahad Ahmed, Afzal Ahmed, Farooq Ahmad Tahir, Research Institute for Microwave & Millimeter-wave Studies (RIMMS) National University of Sciences and Technology (NUST), Islamabad, Pakistan; Hassan Tariq Chattha, Islamic University of Madinah, Saudi Arabia</i>	
TU-A2.1A.7: DESIGN OF 2-BIT PROGRAMMABLE REFLECTIVE METASURFACE IN K-BAND	441
<i>Yasir Saifullah, Fuheng Zhang, Guo-Min Yang, Feng Xu, Fudan University, China</i>	
TU-A2.1A.8: THE HUYGENS' BOX ANTENNA: METASURFACE-BASED DIRECTIVE ANTENNA BEAM-STEERING WITH DRAMATICALLY REDUCED ELEMENTS	443
<i>Kayode A. Oyesina, Alex M. H. Wong, City University of Hong Kong, China</i>	
TU-A2.1A.9: FOCUSING METASURFACE WITH ARBITRARY FOCAL POINT BASED ON PANCHARATNAM-BERRY PHASE PRINCIPLE	445
<i>Meijun Qu, Shufang Li, Li Deng, Beijing University of Posts and Telecommunications, China; Xin Ma, China Academy of Information and Communications Technology (CAICT), China</i>	
TU-A2.1A.10: A SWITCHABLE REFLECTION-TYPE LINEAR/CIRCULAR POLARIZERS BASED ON ACTIVE METASURFACE	447
<i>You Li, You Li, You Li, Qunsheng Cao, Qunsheng Cao, Qunsheng Cao, Yi Wang, Yi Wang, Yi Wang, Nanjing University of Aeronautics and Astronautics, China</i>	
 TU-A1.1A: MATERIAL AND STRUCTURAL ANTENNA RECONFIGURABILITY	
TU-A1.1A.1: RECONFIGURABLE ANTENNA BASED ON LIQUID CRYSTALS FOR CONTINUOUS BEAM SCANNING WITH A SINGLE CONTROL	449
<i>Enrica Martini, Santi Concetto Pavone, Matteo Albani, Stefano Maci, University of Siena, Italy; Valerio Martorelli, Ingegneria dei Sistemi, Italy; Giorgio Giodanengo, Istituto Superiore Mario Boella, Italy; Antonio Ferraro, Romeo Beccherelli, National Research Council of Italy (CNR), Italy; Giovanni Toso, ESA-ESTEC, Netherlands; Giuseppe Vecchi, Politecnico di Torino, Italy</i>	
TU-A1.1A.2: MODULAR, RECONFIGURABLE BLOCK CELL ANTENNA CONCEPT FOR MILLIMETER-WAVE 5G	451
<i>Moogoong Choo, Junho Park, Wonbin Hong, Pohang University of Science and Technology (POSTECH), Korea (South)</i>	
TU-A1.1A.3: A DEPLOYABLE AND RECONFIGURABLE ORIGAMI ANTENNA FOR EXTENDED MOBILE RANGE	453
<i>Gian Carrara, Nicholas Russo, Constantinos L. Zekios, Stavros V. Georgakopoulos, Florida International University, United States</i>	
TU-A1.1A.4: FREQUENCY-RECONFIGURABLE MMWAVE ANTENNA LOADED WITH CAPACITIVE STRUCTURE INTEGRATED WITHIN A MICROSTRIP LINE	455
<i>Jaehyun Choi, Junho Park, Youngno Youn, Woonbong Hwang, Wonbin Hong, Pohang University of Science and Technology (POSTECH), Korea (South)</i>	
TU-A1.1A.5: RECONFIGURABLE RHCP-TO-LP HELICAL ANTENNA MADE OF PURE WATER	457
<i>Zhen Ren, Shishan Qi, Wen Wu, The Ministerial Key Laboratory of JGMT, China; Zhongxiang Shen, Nanyang Technological University, China</i>	
TU-A1.1A.6: EFFECT OF ELECTROLYTE ON A 2D SURFACE-BASED RECONFIGURABLE LIQUID METAL ANTENNA	459
<i>Feng Xie, Mei Song Tong, Tongji University, China; Jacob Adams, North Carolina State University, United States</i>	

TU-A1.1A.7: OPTIMIZATION OF AN ADAPTIVE ANTENNA ARRAY EXCITATIONS EMPLOYING GENETIC ALGORITHM	461
<i>Abubakar Hamza, Hussein Attia, Sharif Sheikh, King Fahd University of Petroleum and Minerals (KFUPM), Saudi Arabia; Muhammad Iqbal, FAST, Pakistan; Essam Hassan, Formerly with KFUPM, Saudi Arabia</i>	
TU-A1.1A.8: UWB MODIFIED ELLIPTICAL ANTIPODAL VIVALDI ANTENNA ARRAY FED WITH FOUR STAGE WILKINSON POWER DIVIDER	463
<i>Hany Hammad, German University in Cairo, Egypt</i>	
TU-A1.1A.9: EXPERIMENTAL INVESTIGATION OF ACTIVE ANTENNA	N/A
<i>Igor Shirokov, Elena Shirokova, Sevastopol State University, Russia</i>	
TU-A1.2A: REFLECTOR DESIGNS AND APPLICATIONS	
TU-A1.2A.3: DESIGN OF POLARIZING CELLS FOR BROADBAND REFLECTORS	467
<i>Samara Gharbieh, Institute of Electronic and Telecommunication in Rennes, IETR, INSA Rennes, France and CRSI, Lebanese University, Faculty of Engineering, EDST, Tripoli, Lebanon; Maria Garcia-Vigueras, Renaud Loison, Institute of Electronic and Telecommunication in Rennes, IETR, INSA Rennes, France; Ali Harmouch, CRSI, Lebanese University, Faculty of Engineering, EDST, France; Akil Jrad, LEPA, Lebanese University, Faculty of Sciences, EDST, Tripoli, Lebanon</i>	
TU-A1.2A.4: GAIN-MAXIMIZATION OF FPA-FED REFLECTORS BY MEANS OF LINEAR REGRESSION	469
<i>S. Narayanan, National and Kapodistrian University of Athens, Greece; Ali Al-Rawi, A. Dubok, B.P. de Hon, A. Bart Smolders, Eindhoven University of Technology, Netherlands</i>	
TU-A1.2A.5: DESIGN AND ANALYSIS OF FENGYUN3 MICROWAVE HUMIDITY SOUNDER(FY3MHS) ANTENNA	471
<i>Hongjian Wang, NMRS, China</i>	
TU-A1.2A.6: ELECTROMAGNETIC GAP LEAKAGE ANALYSIS FOR THE SKA MID-FREQUENCY DISH	473
<i>Mariet Venter, South African Radio Astronomy Observatory, South Africa; Pietro Bolli, Italy National Institute of Astrophysics, Italy</i>	
TU-A1.2A.7: THE BIFOCAL MICROWAVE MICROSCOPE	475
<i>Carey Rappaport, Ann Morgenthaler, Northeastern University, United States</i>	
TU-A1.2A.8: INFLUENCE OF ROUGH SURFACE ON THE ELECTRICAL PERFORMANCE OF REFLECTOR ANTENNA BASED ON FRACTAL FUNCTION	N/A
<i>Shuo Zhang, Wei Wang, Hong Bao, Congsi Wang, Xidian University, China</i>	
TU-A1.2A.9: A K-BAND SIW HIGH GAIN PLANAR ANTENNA WITH PARABOLIC METALIZED VIA-HOLES REFLECTOR	479
<i>Wei Li, Ying Suo, Bowen Cai, Harbin Institute of Technology, China</i>	
TU-A1.2A.10: A MACHINE LEARNING BASED FIRST-ORDER SEA CLUTTER REGION EXTRACTION METHOD FOR HFSWR	173
<i>Yang Li, Xinyang Wang, Ning Zhang, Harbin Institute of Technology, China; Wenxing Wang, Qiming Zhang, CSSC Marine Technology cO., Ltd, China; Wenbo Ding, Longshan Wu, Harbin Institute of Technology, China</i>	
TU-A2.2A: THEORETICAL ELECTROMAGNETICS I	
TU-A2.2A.1: TIME-DOMAIN FORCE AND HIDDEN MOMENTUM FOR A PERFECTLY CONDUCTING SPHERE	481
<i>Arthur Yaghjian, Electromagnetics Research, United States</i>	
TU-A2.2A.2: DIFFRACTION BY A TRUNCATED SLAB FILLED BY DIELECTRIC MATERIAL	483
<i>Vito Daniele, Guido Lombardi, Rodolfo S. Zich, Politecnico di Torino-ISMB, Italy</i>	

TU-A2.2A.3: ZERO-FORWARD SCATTERING FOR OMNIDIRECTIONAL INCIDENCE USING NON-HERMITIAN PARTICLES	485
<i>Yun Jing Zhang, Mei Song Tong, Tongji University, China; Andrea Alù, University of Texas at Austin, United States</i>	
TU-A2.2A.4: GAUGE TRANSFORMATIONS FOR RECASTING POTENTIAL REPRESENTATIONS	487
<i>Ramakrishna Janaswamy, University of Massachusetts, United States</i>	
TU-A2.2A.5: DEMONSTRATION OF GROUP DELAY MODULATION BASED ON EIT USING LC CIRCUITS	N/A
<i>Zhe Chen, Xianqi Lin, University of Electronic Science and Technology of China, China</i>	
TU-A2.2A.6: ANALYSIS OF A CHIRAL HELIX METAMATERIAL USING EIGENMODE EXPANSION METHOD AND CHARACTERISTIC MODE THEORY	491
<i>Nadia Kari, ESYCOM Lab, Univ. Paris-Est, France; Ozuem Chukwuka, Divitha Seetharamdoo, IFSTAR, COSYS, LEOST, France; Jean Marc Laheurte, Francois Sarrazin, ESYCOM Lab, Univ. Paris-Est, France</i>	
TU-A2.2A.7: RELATION BETWEEN COMPLEX PROPAGATION CONSTANT AND COMPLEX EIGENMODES IN LOSSY TRAVELING-WAVE STRUCTURES	493
<i>Daniel King, Shulabh Gupta, Carleton University, Canada</i>	
TU-A2.2A.8: MATHEMATICAL MODELING OF A SMART ANTENNA BASED ON HYBRID BEAM-FORMING TECHNIQUE	495
<i>Ahmed Kausar, Shafaq Kausar, Hani Mehrpouyan, Boise State University, United States</i>	
TU-A2.2A.9: HIGH FREQUENCY DIFFRACTION BY THICK LOADED CONDUCTING SLITS –H POLARIZATION CASE–	497
<i>Khanh Nam Nguyen, Hiroshi Shirai, Chuo University, Japan</i>	
TU-A2.2A.10: MEASUREMENT OF DISPERSION CHARACTERISTIC OF SLOW-WAVE SYSTEM BY MICROWAVE NETWORK CASCADE METHOD	499
<i>Yong Gao, En Li, Gaofeng Guo, University of Electronic Science and Technology of China, China</i>	
 TU-A5.2A: TERAHERTZ ANTENNAS	
TU-A5.2A.1: TWO-PORT, COMMON APERTURE, HIGH-ISOLATION, DUAL-POLARIZED SUB-MILLIMETERWAVE ANTENNA SYSTEM BASED ON SPATIAL POWER DIVIDER	501
<i>Tanner Douglas, Kamal Sarabandi, University of Michigan, United States</i>	
TU-A5.2A.2: HIGH BANDWIDTH PEROVSKITE BASED ANTENNA FOR HIGH- RESOLUTION BIOMEDICAL IMAGING AT TERAHERTZ	503
<i>Abdoalbasat Abohmra, Glasgow University, United Kingdom; Syeda Fizzah Jilani, Hasan Abbas, Akram Alomainy, Queen Mary University of London, United Kingdom; Muhammad Ali Imran, Qammer H. Abbasi, University of Glasgow, United Kingdom</i>	
TU-A5.2A.5: A WIDEBAND HIGH-GAIN HORN ANTENNA FOR 140GHZ SHORT-RANGE WIRELESS COMMUNICATION	505
<i>Chaojun Ma, Hao Yu, Southern University of Science and Technology of China, China</i>	
TU-A5.2A.6: HIGH GAIN CONSTRAINED LENS ANTENNA ON BCB SUBSTRATE FOR 300-GHZ APPLICATIONS	507
<i>Adham Mahmoud, David Gonzalez-Ovejero, Mauro Ettore, Ronan Sauleau, Institut d'Électronique et de Télécommunications de Rennes, France; Frédéric Aniel, Nicolas Zerounian, Anne-Sophie Grimault-Jacquin, Université Paris Sud, France</i>	
TU-A5.2A.7: A HIGH PERFORMANCE TERAHERTZ METALENS	509
<i>Hang Li, Sensong An, Bowen Zheng, Hong Tang, Clayton Fowler, Wei Guo, University of Massachusetts Lowell, United States; Rensheng Xie, Jun Ding, East China Normal University, China; Hualiang Zhang, University of Massachusetts Lowell, United States</i>	

TU-A5.2A.8: TOWARD LARGE-SCALE DYNAMICALLY RECONFIGURABLE APERTURES USING GRAPHENE	511
<i>Panagiotis Theofanopoulos, Georgios Trichopoulos, Arizona State University, United States</i>	
TU-A5.2A.9: EQUIVALENT CIRCUIT MODEL FOR RECONFIGURABLE FAR-INFRARED FILTER EMPLOYING VANADIUM DIOXIDE	513
<i>Lucas Newton, Niru K. Nahar, Ohio State University, United States</i>	
TU-A5.2A.10: FULL D-BAND COPLANAR TO RECTANGULAR WAVEGUIDE TRANSITION FOR UTC-PD APPLICATION	515
<i>Caixia Wang, Yuan Yao, Junsheng Yu, Beijing University of Posts and Telecommunications, China; Xiaodong Chen, Queen Mary, University of London, United Kingdom</i>	
TU-UB.2A: ANTENNA ARRAY II	
TU-UB.2A.7: AN INNOVATIVE UWB CONNECTED ARRAY FOR MULTIFUNCTIONAL APPLICATIONS	517
<i>Christian Canestri, Domenico Gaetano, Pietro Bia, Antonio Manna, Cosmo Mitrano, Elettronica S.p.A., Italy</i>	
TU-A5.3A: BIOMEDICAL APPLICATIONS OF ELECTROMAGNETICS II	
TU-A5.3A.1: WEARABLE ELECTROMAGNETIC HEAD IMAGING USING MAGNETIC-BASED ANTENNA ARRAYS	519
<i>Abdulrahman Alqadami, Anthony E. Stancombe, Nghia Nguyen-Trong, Konstanty Bialkowski, Amin Abbosh, University of Queensland, Australia</i>	
TU-A5.3A.2: RECORDING CRITICAL EPILEPSY INDICATORS USING A FULLY-PASSIVE WIRELESS SYSTEM	521
<i>Carolina Moncion, Satheesh Bojja Venkatakrishnan, Jorge Riera Diaz, John L. Volakis, Florida International University, United States</i>	
TU-A5.3A.3: DETERMINING THE MAXIMUM LOCAL SPECIFIC ABSORPTION RATE OF A MULTIPLE-ANTENNA TRANSMITTER USING K-ORDER ELECTRIC FIELD MODELS	523
<i>Dinh Thanh Le, Kun Li, Soichi Watanabe, National Institute of Information and Communications Technology (NICT), Japan; Teruo Onishi, NTT DOCOMO, Inc., Japan</i>	
TU-A5.3A.4: CANCER CLASSIFICATION OF FRESHLY EXCISED MURINE TUMORS WITH ORDERED ORTHOGONAL PROJECTION	525
<i>Tanny Chavez, Tyler Bowman, Jingxian Wu, Magda El-Shenawee, University of Arkansas, United States; Keith Bailey, Oklahoma State University, United States</i>	
TU-A5.3A.5: FAST PREDICTION OF MRI RF-INDUCED HEATING FOR A GENERIC STENT WITH ARBITRARY ORIENTATION USING ANN	527
<i>Xiaohe Ji, Jianfeng Zheng, Ji Chen, University of Houston, United States</i>	
TU-A5.3A.6: IMPACTS OF MRI FREQUENCY ON RF-INDUCED HEATING FOR EXTERNAL FIXATION WITH INSULATING MATERIAL	529
<i>Rui Yang, Jianfeng Zheng, Yu Wang, Ran Guo, Ji Chen, University of Houston, United States</i>	
TU-A5.3A.7: EXTRACTION OF LUNG WATER CONTENT FROM COMPUTERIZED TOMOGRAPHY SCANS	531
<i>Zhengqing Yun, Magdy Iskander, University of Hawaii, United States</i>	
TU-A5.3A.8: EVALUATION OF AN INVERSION ALGORITHM FOR NONINVASIVE SPECIFIC ABSORPTION RATE APPLICATIONS	533
<i>Mario Phaneuf, Puyan Mojabi, University of Manitoba, Canada</i>	

TU-A5.3A.9: INFLUENCE OF 3T MRI COIL MODELING ON EM EXPOSURE ESTIMATION USING A HUMAN MODEL	535
<i>Mikhail Kozlov, Nikolaus Weiskopf, Harald Möller, Max Planck Institute for Human Cognitive and Brain Sciences, Germany</i>	
TU-A5.3A.10: OPTIMIZATION OF MICROWAVE HYPERTHERMIA ARRAY APPLICATORS USING FIELD INTERPOLATION	537
<i>Massimiliano Zanolì, Hana Dobsicek Trefna, Chalmers University of Technology, Sweden</i>	
TU-A3.1A: HYBRID METHODS I	
TU-A3.1A.1: HYBRID SOLVER VIA EQUIVALENCE PRINCIPLE ALGORITHM	539
<i>Joseph Rutherford, Riverside Research, United States; Weng Cho Chew, Purdue University, United States</i>	
TU-A3.1A.2: A NOVEL NUMERICAL TECHNIQUE FOR ANALYZING METASURFACES	541
<i>Ozlem Ozgun, Hacettepe University, Turkey; Raj Mittra, University of Central Florida, United States; Mustafa Kuzuoglu, Middle East Technical University, Turkey</i>	
TU-A3.1A.3: APPROXIMATION OF REFLECTARRAY CROSS-POLARIZATION RESPONSE USING A HYBRID FEM-PO METHOD	543
<i>Joshua Roper, Viasat Inc., United States; Andrew Peterson, Georgia Institute of Technology, United States</i>	
TU-A3.1A.4: HYBRID METHOD OF FDTD/PO FOR EM SCATTERING SIMULATION OF ELECTRICALLY LARGE TARGETS	545
<i>Shuo Liu, Bin Zou, Lamei Zhang, Harbin Institute of Technology, China</i>	
TU-A3.1A.5: AGGRESSIVE SPACE MAPPING TECHNIQUE FOR RECONFIGURABLE HEXAGONAL PATCH ANTENNA DESIGN	547
<i>Akinwale Fadamiro, Oluwole Famoriji, Rabiu Zakariyya, Fujiang Lin, University of Science and Technology of China, China; Fan Jiang, Qingsha Cheng, Southern University of Science and Technology of China, China; Oluwasegun Somefun, Erastus Ogunti, Federal University of Technology Akure, Nigeria</i>	
TU-A3.2A: COMPUTATIONAL METHODS FOR COUPLING AND SCATTERING	
TU-A3.2A.2: ADMM BASED CONSENSUS AND SECTIONING NORM-1 REGULARIZED ALGORITHM FOR IMAGING WITH A CRA	549
<i>Juan Heredia-Juesas, Luis Tirado, Ali Molaei, Jose Angel Martinez-Lorenzo, Northeastern University, United States</i>	
TU-A3.2A.3: ELECTROMAGNETIC COUPLING ANALYSIS OF PRINTED CIRCUIT BOARD TRACES USING CHARACTERISTIC MODE ANALYSIS	551
<i>Kalyan Durbhakula, John Lancaster, Ahmed M. Hassan, Deb Chatterjee, Anthony Caruso, University of Missouri-Kansas City, United States; James Hunter, Yuanzhuo Liu, Daryl Beetner, Victor Khilkevich, Missouri University of Science and Technology, United States</i>	
TU-A3.2A.4: ELECTROMAGNETIC INTERFERENCE OF UNMANNED AERIAL VEHICLES: A CHARACTERISTIC MODE ANALYSIS APPROACH	553
<i>Mohamed Hamdalla, Ahmed M. Hassan, Anthony Caruso, University of Missouri-Kansas City, United States; James Hunter, Yuanzhuo Liu, Victor Khilkevich, Daryl Beetner, Missouri University of Science and Technology, United States</i>	
TU-A3.2A.5: IDENTIFICATION OF SUSPICIOUS MASS IN BIOLOGICAL TISSUES USING RESONANCE PARAMETERS EXTRACTED FROM LATE TIME RESPONSE	555
<i>Marwa Bannis, Egyptian Russian University, Egypt; Fatma El Hefnawi, National Authority for Remote Sensing, Electronic Research Institute, Egypt; Atef Elsherbini, Colorado School of Mines, United States</i>	
TU-A3.2A.6: RCS OF COMPLEX TARGETS VIA COMPRESSIVE SENSING	557
<i>Xiang Li, Mustapha Yagoub, University of Ottawa, Canada</i>	
TU-A3.2A.8: RCS ENHANCEMENT USING TOPOLOGY OPTIMIZATION	559
<i>Aseim Elfrgani, C J Reddy, Altair Engineering Inc., United States</i>	

TU-A3.2A.9: AN ENTIRE-DOMAIN ANALYSIS OF VERY LARGE 2-D SCATTERERS IN TM MODE USING GEGENBAUER POLYNOMIALS	561
<i>Jovana Perović, Dragan Olćan, University of Belgrade, Serbia</i>	
TU-A3.2A.10: EXPLICIT UNCONDITIONALLY STABLE SYMMETRIC POSITIVE SEMI-DEFINITE FDTD SUBGRIDDING ALGORITHM WITH ANALYTICAL REMOVAL OF UNSTABLE MODES	1663
<i>Kaiyuan Zeng, Dan Jiao, Purdue University, United States</i>	
TU-A2.3A: THZ AND OPTICAL METAMATERIALS	
TU-A2.3A.1: THREE-DIMENSIONAL NANOANTENNA INVERSE-DESIGN	563
<i>Sawyer D. Campbell, Pennsylvania State University, United States; Danny Z. Zhu, United States Military Academy at West Point, United States; Eric B. Whiting, Pingjuan L. Werner, Douglas H. Werner, Pennsylvania State University, United States</i>	
TU-A2.3A.2: TUNABLE HYBRID TERAHERTZ METAMATERIALS BASED ON VO₂ PHASE TRANSITION	565
<i>Lei Kang, Pennsylvania State University, United States; Shengxiang Wang, Wuhan Textile University, China; Sawyer D. Campbell, Douglas H. Werner, Pennsylvania State University, United States</i>	
TU-A2.3A.3: POLARIZATION-INDEPENDENT AND BROADBAND THZ COHERENT PERFECT ABSORBER BASED ON BLACK PHOSPHORUS BIFACIAL METASURFACES	567
<i>Tianjing Guo, Christos Argyropoulos, University of Nebraska-Lincoln, United States</i>	
TU-A2.3A.4: METASURFACE BASED FAR INFRARED SOLAR ABSORBER	569
<i>Charmy Jani, Marwadi University, India; Shobhitkumar Patel, Marwadi Education Foundation, India</i>	
TU-A4.1A: IMAGING AND SCATTERER CHARACTERIZATION	
TU-A4.1A.1: IMAGE RECONSTRUCTION OF FRESHLY EXCISED HUMAN BREAST TUMORS USING TERAHERTZ ELECTRICAL PROPERTIES	571
<i>Nagma Vohra, Tyler Bowman, Magda El-Shenawee, University of Arkansas, United States; Keith Bailey, Oklahoma State University, United States</i>	
TU-A4.1A.2: EXPERIMENTAL DEMONSTRATION OF THE SHADOW PROJECTION ALGORITHM FOR NEAR-FIELD MICROWAVE IMAGING OF BURIED OBJECTS IN LAYERED MEDIA	573
<i>Kai Ren, University of Wisconsin-Madison, United States; Robert Burkholder, Ohio State University, United States</i>	
TU-A4.1A.3: AUTOMATIC PERMITTIVITY CHARACTERIZATION OF A WEAK DIELECTRIC ATTACHED TO HUMAN BODY USING WIDEBAND RADAR IMAGE PROCESSING	575
<i>Mahshid Asri, Carey Rappaport, Northeastern University, United States</i>	
TU-A4.1A.4: FOCUSED CW MM-WAVE CHARACTERIZATION OF LOSSY PENETRABLE DIELECTRIC SLAB AFFIXED TO HUMAN BODY	577
<i>Mohammad Tajdini, Carey Rappaport, Northeastern University, United States</i>	
TU-A4.1A.5: ELECTROMAGNETIC DEEP LEARNING TECHNOLOGY FOR RADAR TARGET IDENTIFICATION	579
<i>Abdelelah M. Alzahed, Royal Military College of Canada, Canada; Said M. Mikki, University of New Haven, United States; Yahia Antar, Royal Military College of Canada, Canada</i>	
TU-A4.1A.6: LOCATING SCATTERING CENTERS USING COMPRESSIVE PSD ESTIMATION	581
<i>Ismail Jouny, Lafayette College, United States</i>	
TU-A4.1A.7: A MICROWAVE TOMOGRAPHY SYSTEM USING TIME-REVERSAL IMAGING	583
<i>John Doroshewitz, Jason Merlo, Christopher Oakley, Lalita Udpa, Jeffrey Nanzer, David MacFarlane, Emily Huff, Michigan State University, United States; Saptarshi Mukherjee, Lawrence Livermore National Laboratory, United States</i>	

TU-A4.1A.8: DETECTION OF SCATTERERS INSIDE METAL CONTAINERS VIA VLF SIGNALS OF OPPORTUNITY	585
<i>Nathan Opalinski, Edward Slevin, Roderick Gray, Morris Cohen, Georgia Institute of Technology, United States; Vijay Harid, Mark Golkowski, University of Colorado Denver, United States; Sarah Patch, University of Wisconsin-Milwaukee, United States</i>	
TU-A4.1A.9: OPPORTUNISTIC EQUIVALENT SOURCES FOR FIELD SYNTHESIS - POTENTIALITIES AND FUTURE TRENDS	587
<i>Marco Salucci, Andrea Massa, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy</i>	
TU-A4.1A.10: PRIMITIVE SCATTERER RECONSTRUCTION FOR TARGET SCATTERING IN SAR IMAGES	N/A
<i>Yongchen Li, Zichang Liang, Science and Technology on Electromagnetic Scattering Laboratory, China</i>	
 TU-A5.4A: ADDITIVELY MANUFACTURED ANTENNAS	
TU-A5.4A.1: A NOVEL 3D AND INKJET PRINTED PRESSURE-SENSING BUTTON-SHAPED RESONATOR	591
<i>Yepu Cui, Wenjing Su, Manos Tentzeris, Georgia Institute of Technology, United States</i>	
TU-A5.4A.2: ON THE SURFACE ROUGHNESS AND SMOOTHING IN THE 3D PRINTED THZ REFLECTORS	593
<i>Sinan Adibelli, Prateek Juyal, Alenka Zajić, Georgia Institute of Technology, United States</i>	
TU-A5.4A.3: COMPACT AND HIGH GAIN HALF-SPHERE DIELECTRIC ANTENNA USING 3D PRINTING TECHNOLOGY	595
<i>Enass Usama, Poznań University of Technology, Poland; Mohamed Basha, University of Waterloo, Canada; Rafal Krenz, Poznań University of Technology, Poland; Safieddin Safavi-Naeini, University of Waterloo, Canada</i>	
TU-A5.4A.4: A 3D PRINTED UHF PASSIVE RFID TAG FOR PLASTIC COMPONENTS	597
<i>Saranraj Karuppuswami, Mohd Ifwat Mohd Ghazali, Saikat Mondal, Deepak Kumar, Amanpreet Kaur, Premjeet Chahal, Michigan State University, United States</i>	
TU-A5.4A.5: 3D PRINTED INVERTED-F ANTENNA AND TEMPERATURE SENSOR USING MICROFLUIDICS TECHNOLOGIES	599
<i>Shi Cong Wang, Mei Song Tong, Tongji University, China; Yang Yang Guan, Manos Tentzeris, Georgia Institute of Technology, United States</i>	
 TU-SP.1P: CYBERSECURITY AND ELECTROMAGNETIC SYSTEMS: FROM DC TO DAYLIGHT AND FROM WIRELESS TO WIRED	
TU-SP.1P.2: SOLVING CYBERSECURITY PROBLEM BY SYMMETRIC DUAL-SPACE FORMULATION—PHYSICAL AND CYBERNETIC	601
<i>Johnson Wang, Wang Electro-Opto Corporation, United States</i>	
TU-SP.1P.3: ANTENNA-ON-DISPLAY (AOD) FOR MILLIMETER-WAVE 5G MOBILE DEVICES	603
<i>Junho Park, Wonbin Hong, Pohang University of Science and Technology (POSTECH), Korea (South)</i>	
TU-SP.1P.4: DESIGN OF ULTRA-WIDEBAND CIRCULARLY POLARIZED CPW-FED ANTENNA WITH A METASURFACE SUBSTRATE	605
<i>Ashwani Kumar, Prashant Chaudhary, Delhi University, India; Raj Mitra, University of Central Florida, United States</i>	
TU-SP.1P.5: A NOVEL DUAL-BAND 28/38 GHZ SLOTTED MICROSTIP MIMO ANTENNA FOR 5G MOBILE APPLICATIONS	607
<i>Mohamed I. Ahmed, Electronics Research Institute, Egypt; H. M. Marzouk, A. A. Shaalan, Zagazig University, Egypt</i>	

TU-SP.1P.6: ANTENNA PATTERN EVALUATION OF 28GHZ BAND MASSIVE MIMO ANTENNA RF FRONTEND MODULE FOR 5G	609
<i>Tasuku Kuriyama, Satoshi Yamaguchi, Hikaru Watanabe, Hideki Morishige, Hideyuki Nakamizo, Koji Tsutsumi, Manabu Sakai, Akihiro Okazaki, Toru Fukasawa, Naofumi Yoneda, Mitsubishi Electric Corporation, Japan</i>	
TU-SP.1P.7: ANALYSIS AND DESIGN OF MM-WAVE PHASED ARRAY ANTENNAS FOR 5G ACCESS	611
<i>Risto Valkonen, Efstratios Doumanis, Nokia Bell Labs, Finland</i>	
TU-SP.1P.8: A COMPACT PROBE FOR EM SIDE-CHANNEL ATTACKS ON CRYPTOGRAPHIC SYSTEMS	613
<i>Frank Werner, Georgia Institute of Technology, United States; Antonije Djordjevic, University of Belgrade, Serbia; Alenka Zajić, Georgia Institute of Technology, United States</i>	
TU-SP.1P.9: SCAN PROPERTIES OF SLOT-FED DIELECTRIC RESONATOR ANTENNA ARRAYS FOR 5G WIRELESS COMMUNICATIONS	615
<i>Ali Al-Rawi, A. Bart Smolders, Eindhoven University of Technology, Netherlands; Diego Caratelli, The Antenna Company, Netherlands</i>	
TU-SP.1P.10: SPREAD SPECTRUM TECHNIQUES FOR INTERFERENCE MITIGATION IN LARGE BANDWIDTH	617
<i>Md Rakibur Rahman, Satheesh Bojja Venkatakrishnan, Elias A. Alwan, John L. Volakis, Florida International University, United States</i>	
 TU-SP.2P: METASURFACES IN ANTENNA APPLICATIONS	
TU-SP.2P.2: A WIDEBAND HIGH-GAIN CONICAL SHORT HORN BASED ON A METASURFACE-CORRECTED LENS	619
<i>Kaiting Liu, Yuehe Ge, Huaqiao University, China</i>	
TU-SP.2P.3: BISTATIC RCS OF A ONE-DIMENSIONAL METASURFACE LEAKY-WAVE ANTENNA	621
<i>Subramanian Ramalingam, Constantine Balanis, Craig Birtcher, Sivaseetharaman Pandi, Arizona State University, United States; Hussein Shaman, King Abdulaziz City for Science and Technology, Saudi Arabia</i>	
TU-SP.2P.4: RADIATION OF FORWARD AND BACKWARD LEAKY WAVES IN SINUSOIDALLY-MODULATED METASURFACES	623
<i>Subramanian Ramalingam, Constantine Balanis, Craig Birtcher, Arizona State University, United States; Hussein Shaman, King Abdulaziz City for Science and Technology, Saudi Arabia</i>	
TU-SP.2P.5: A NOVEL DEPLOYABLE COMPACT LENS ANTENNA BASED ON GRADIENT-INDEX METAMATERIALS	625
<i>Anastasios Papathanasopoulos, Yahya Rahmat-Samii, University of California, Los Angeles, United States</i>	
TU-SP.2P.6: ROBUST METHOD FOR SYNTHESIZING LOW-RCS HIGH-GAIN ANTENNAS USING METASURFACES	627
<i>Anuj Modi, Constantine Balanis, Craig Birtcher, Arizona State University, United States; Hussein Shaman, King Abdulaziz City for Science and Technology, Saudi Arabia</i>	
TU-SP.2P.8: BANDWIDTH ENHANCEMENT OF SQUARE-RING ANTENNA USING SURFACE WAVES ON METASURFACE	629
<i>Mohammed Alharbi, Constantine Balanis, Craig Birtcher, Arizona State University, United States; Hussein Shaman, King Abdulaziz City for Science and Technology, Saudi Arabia; Saud Saeed, Prince Sattam bin Abdulaziz University, Saudi Arabia</i>	
TU-SP.2P.9: DIRECTIVITY ENHANCEMENT OF ANTIPODAL VIVALDI ANTENNA USING BROADBAND METASURFACE LENS	631
<i>Omer Yesilyurt, Gonul Turhan Sayan, Middle East Technical University, Turkey</i>	
TU-SP.2P.10: A META-SURFACE ANTENNA ARRAY DECOUPLING (MAAD) METHOD FOR TWO LINEAR POLARIZED COMPACT ANTENNA ELEMENTS AT 3.5GHZ	633
<i>Jiayin Guo, Feng Liu, Luyu Zhao, Xidian University, China</i>	

TU-A5.1P: RFID SYSTEMS AND APPLICATIONS

TU-A5.1P.1: A PSK MODULATION SCHEME FOR SENSOR INTEGRATED RFIDS..... 635
Saikat Mondal, Deepak Kumar, Saranraj Karuppuswami, Mohd Ifwat Mohd Ghazali, Amanpreet Kaur, Premjeet Chahal, Michigan State University, United States

TU-A5.1P.2: GESTURE RECOGNITION USING A PORTABLE AND FLEXIBLE META-ATOM PANEL 637 AND MACHINE LEARNING
Mehdi Hajizadegan, Pai-Yen Chen, University of Illinois at Chicago, United States

TU-A5.1P.3: CHARACTERIZATION OF CHIPLESS RFID TAG IN A 3-DIMENSIONAL READING ZONE..... 639
Raphael Tavares de Alencar, Nicolas Barbot, Marco Garbati, Etienne Perret, Univ. Grenoble Alpes, Grenoble INP, LCIS, France

TU-A5.1P.4: UHF RECTENNA FOR IMPLANTED AND FREE SPACE COMMUNICATIONS 641
Adamantia Chletsou, Ibrahim Kagan Aksoyak, John Papapolymerou, Ahmet Cagri Ulusoy, Michigan State University, United States

TU-A5.1P.5: MACHINE EMBROIDERED WEARABLE E-TEXTILE WIDEBAND UHF RFID TAG 643 ANTENNA
Yutong Jiang, Ting Leng, Yixian Fang, Zhirun Hu, Lulu Xu, University of Manchester, United Kingdom

TU-A5.1P.6: SPATIAL CHARACTERIZATION OF THE AMBIENT BACKSCATTER COMMUNICATION 645 PERFORMANCE IN LINE-OF-SIGHT
Kammel Rachedi, Institut Langevin, France; Dinh Thuy Phan Huy, Orange Gardens, France; Abdelwaheb Ourir, Julien de Rosny, Institut Langevin, France

TU-A5.1P.7: THE FUTURE OF BACKSCATTER IN PRECISION AGRICULTURE..... 647
Spyridon Daskalakis, Heriot-Watt University, United Kingdom; Stylianos Assimonis, Queen's University Belfast, United Kingdom; George Goussetis, Heriot-Watt University, United Kingdom; Manos Tentzeris, Georgia Institute of Technology, United States; Apostolos Georgiadis, Heriot-Watt University, United Kingdom

TU-A5.1P.8: BROADBAND MST SENSOR PROBES BASED ON A SP3T MEMS SWITCH..... 649
Massimo Donelli, Mohammedhusen Manekiya, University of Trento, Italy; Jacopo Iannacci, Fondazione Bruno Kessler (FBK), Italy

TU-A5.1P.9: ORIENTATION INSENSITIVE UHF RFID TAG ANTENNA WITH POLARIZATION 651 DIVERSITY USING CHARACTERISTIC MODE ANALYSIS
Abubakar Sharif, Jun Ouyang, University of Electronic Science and Technology of China, China; Muhammad Ali Imran, Qammer Hussain Abbasi, University of Glasgow, United Kingdom

TU-A5.2P: MILLIMETER-WAVE ANTENNAS

TU-A5.2P.1: WIDEBAND MILLIMETER-WAVE DIELECTRIC RESONATOR ANTENNA..... 653
Yazan Al-Alem, Ahmed Kishk, Concordia University, Canada

TU-A5.2P.2: HIGH GAIN MILLIMETER-WAVE SLOT ANTENNA WITH SYMMETRIC RADIATION 655 CHARACTERISTICS
Yazan Al-Alem, Ahmed Kishk, Concordia University, Canada

TU-A5.2P.3: A SERIES-FED CAVITY-BACK PATCH ARRAY ANTENNA FOR A MINIATURIZED 77GHZ 657 RADAR MODULE
Chen-Pang Chao, Shang-Hung Yang, Chiu-Ming Tung, Chang-Fa Yang, National Taiwan University of Science and Technology (Taiwan Tech), Taiwan; Wen-Hsiung Lin, Jorjin Technologies Inc., Taiwan; Chun-Yi Chai, XMMSE Co., Ltd, Taiwan; Ike Lin, WaveFidelity Inc., Taiwan

TU-A5.2P.4: WIDEBAND, WIDE ANGLE RADOME DESIGN FOR MM-WAVE AUTOMOTIVE RADAR 659 SYSTEMS
Maruf Md Sajjad Hossain, Syed An Nazmus Saqueeb, Ohio State University, United States; Alebel H. Arage, John Cabigao, Carlos Velasquez, Alps Electric NA, Inc., United States; Kubilay Sertel, Niru K. Nahar, Ohio State University, United States

TU-A5.2P.5: LOW-COST AND HIGH-GAIN W-BAND CIRCULARLY POLARIZED SIW SLOT ANTENNA..... 661
Hao Liu, University of Electronic Science and Technology of China, China; Anyong Qing, Southwest Jiaotong University, China; Ziqiang Xu, Zhao Yang, University of Electronic Science and Technology of China, China

TU-A5.2P.6: K/KA DUAL-BAND DUAL-POLARIZED GAP WAVEGUIDE ARRAY ANTENNA..... 663
Miguel Ferrando-Rocher, Alejandro Valero-Nogueira, Jose Ignacio Herranz-Heruzo, Universitat Politècnica de València, Spain

TU-A5.2P.7: MODELING THE EFFECTS OF GASEOUS ABSORPTION AND ATTENUATION DUE TO 665
CLOUDS FOR A 72 GHZ TERRESTRIAL LINK
Ralph Lyndon Gesner, Christos Christodoulou, University of New Mexico, United States; Steven Lane, David Murrell, Air Force Research Laboratory, United States; Eugene Hong, Applied Technology Associates, United States; Nicholas Tarasenko, Air Force Research Laboratory, United States

TU-A5.2P.8: RIDGE GAP ARRAY ANTENNA WITH INTER-ELEMENT SPACING OF A WAVELENGTH..... 667
Mohammadmahdi Farahani, Institut national de la recherche scientifique (INRS), Canada; Tayeb A. Denidni, National Institute of Scientific Research (INRS), Canada; Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada

TU-A5.2P.9: ARRAY OF STACKED LEAKY WAVE ANTENNAS BASED ON GAP WAVEGUIDE 669
TECHNOLOGY
Nafsika Memeletoglou, Eva Rajo-Iglesias, Universidad Carlos III de Madrid, Spain

TU-A5.2P.10: A STEPPED-RING FABRY PEROT CAVITY ANTENNA FOR MILLIMETER WAVE 671
APPLICATIONS
Qing-Yi Guo, Hang Wong, City University of Hong Kong, China

TU-UB.1P: WIRELESS COMMUNICATIONS

TU-UB.1P.7: BANDWIDTH EXTENSION OF PLANAR MICROSTRIP-TO-WAVEGUIDE TRANSITION 673
BY VIA-HOLE LOCATIONS AT BOTH SIDES OF MICROSTRIP LINE
Nguyen Thanh Tuan, Kunio Sakakibara, Nobuyoshi Kikuma, Nagoya Institute of Technology, Japan

TU-UB.1P.10: 4×4 BROADBAND BUTLER MATRIX AND ITS APPLICATION IN ANTENNA ARRAYS..... 675
Kai-Ran Xiang, Fu-Chang Chen, South China University of Technology, China

TU-A1.1P: PATTERN RECONFIGURABLE ANTENNAS

TU-A1.1P.1: NEW PATTERN RECONFIGURABLE ANTENNA WITH 4 U-SLOTS FOR MIMO 677
APPLICATIONS
Saeed Haydhah, Rifaqat Hussein, Mohammad Sharawi, King Fahd University of Petroleum and Minerals (KFUPM), Saudi Arabia

TU-A1.1P.2: A YAGI-UDA PATTERN RECONFIGURABLE ANTENNA FOR WIMAX APPLICATION 679
Sagiru Gaya, Hussein Attia, King Fahd University of Petroleum and Minerals (KFUPM), Saudi Arabia; Abdelhady Mahmoud, Benha University, Egypt; Mohammad Sharawi, Polytechnique Montréal, Canada; Sharif Sheikh, King Fahd University of Petroleum and Minerals (KFUPM), Saudi Arabia

TU-A1.1P.3: 2-D PATTERN RECONFIGURABLE ARRAY ANTENNA WITH EXCITATION PHASE 681
DIFFERENCE CIRCUIT
Hikaru Watanabe, Takashi Maruyama, Narihiro Nakamoto, Toru Fukasawa, Naofumi Yoneda, Mitsubishi Electric Corporation, Japan

TU-A1.1P.4: IMPLEMENTATION OF A PATTERN-RECONFIGURABLE ANTENNA FOR MODERN 683
WIRELESS SENSOR NETWORK APPLICATIONS
Muamba Mukendi Leingthone, Hakem Nadir, Université de Québec en Abitibi-Témiscamingue, Canada

TU-A1.1P.5: A DUAL-BAND BEAM-SWITCHING ANTENNA USING SQUARE ACTIVE FREQUENCY 685
SELECTIVE SURFACES
Hifa Houssein, Ghada Elzwawi, INRS, Canada; Tayeb A. Denidni, National Institute of Scientific Research (INRS), Canada

TU-A1.1P.6: PCB BOWING EFFECTS ON 60 GHZ SWITCHED-BEAM ANTENNA MODULES	687
<i>Prabhat Baniya, Kathleen Melde, University of Arizona, United States</i>	
TU-A1.1P.7: RADIATION PATTERN RECONFIGURABLE HORN ANTENNA	689
<i>Mehmet Tanagardi, Utah State University, United States; Md Asaduzzaman Towfiq, i5 Technologies Inc., United States; Bedri Cetiner, Utah State University, United States</i>	
TU-A1.1P.8: A PASSIVE BEAM RECONFIGURABLE ANTENNA SYSTEM FOR MILLIMETER-WAVE APPLICATIONS	691
<i>Affan Aziz Baba, Raheel Hashmi, Karu Esselle, Macquarie University, Australia; Manik Attaygalle, Defence Science and Technology Group, Australia</i>	
TU-A1.1P.9: A NOVEL BIO-INSPIRED QUASI-YAGI HELICAL ANTENNA WITH BEAM DIRECTION AND BEAMWIDTH SWITCHING CAPABILITY USING ORIGAMI DNA	693
<i>Syed Imran Hussain Shah, Sungjoon Lim, Chung Ang University, Korea (South)</i>	
TU-A1.1P.10: FLUIDICALLY BEAM-STEERING METASURFACED ANTENNA	695
<i>Aqeel Naqvi, Sungjoon Lim, Chung-Ang University, Korea (South)</i>	
 TU-A5.3P: RECENT ADVANCES IN 4G AND 5G ANTENNAS FOR MOBILE DEVICES	
TU-A5.3P.1: A COMPACT WIDEBAND DUAL-POLARIZED MILLIMETER WAVE ANTENNA FOR 5G SMARTPHONES	697
<i>Menglou Rao, Kamal Sarabandi, University of Michigan, United States</i>	
TU-A5.3P.2: A FUNDAMENTAL STUDY OF FOLDED MONOPOLE ANTENNA WITH ROBUSTNESS TO METAL	699
<i>Yuta Nakagawa, Naobumi Michishita, Hisashi Morishita, National Defense Academy, Japan</i>	
TU-A5.3P.3: CO-DESIGN OF CONFORMAL 4G LTE AND MMWAVE 5G ANTENNAS FOR SMARTPHONES	701
<i>Idrees Magrey, Karthikeya GS, Shibani K. Koul, Indian Institute of Technology, Delhi, India</i>	
TU-A5.3P.4: A 5G ANTENNA ARRAY PLACED CLOSE TO A 4G ANTENNA	703
<i>Takashi Yamagajo, Manabu Kai, Fujitsu Laboratories Limited, Japan</i>	
TU-A5.3P.5: EIGHT-ELEMENT MIMO ANTENNA WITH TIGHTLY-ARRANGED PAIRS FOR 5G MOBILE TERMINAL	705
<i>Changjiang Deng, Xin Lv, Beijing Institute of Technology, China</i>	
TU-A5.3P.6: ON THE INTEGRATION OF ANTENNAS WITH TOUCH SENSOR PANELS	707
<i>Sameer Sharma, Andrea Lutten, Costas Sarris, University of Toronto, Canada</i>	
TU-A5.3P.7: DUAL FUNCTIONAL MIMO ANTENNA SYSTEM FOR MM-WAVE 5G AND 2 GHZ 4G COMMUNICATIONS	709
<i>Emad Al Abbas, Muhammad Ikram, Amin Abbosh, University of Queensland, Australia</i>	
TU-A5.3P.8: AN OCTA-BAND ANTENNA FOR LTE MOBILE HANDSETS WITHOUT GROUND CLEARANCE	711
<i>Daiwei Huang, Zhengwei Du, Tsinghua University, China</i>	
TU-A5.3P.9: A SIDE-EDGE FRAME PRINTED EIGHT-ELEMENT ANTENNA ARRAY FOR QUAD-BAND MIMO OPERATIONS IN THE 5G SMARTPHONE	713
<i>Hongwei Wang, Yiming He, Guangli Yang, Shanghai University, China</i>	
TU-A5.3P.10: MICROSTRIP-FED SCANNING DIPOLE ANTENNA ARRAY FOR 5G APPLICATIONS	37
<i>Donia Oueslati, Université Catholique de Louvain, ICTEAM Institute, Belgium; Asim Ghalib, Ravi Kumar Arya, University of Central Florida, United States; Hatem Rmili, King Abdulaziz University, Faculty of Engineering, Saudi Arabia; Raj Mittra, University of Central Florida, United States</i>	

TU-A2.1P: FREQUENCY SELECTIVE SURFACES: APPLICATIONS

TU-A2.1P.1: DEVELOPMENT OF HIGH APERTURE EFFICIENCY FABRY-PEROT CAVITY ANTENNA SYSTEM 715

Aditya Dave, Rhonda Franklin, University of Minnesota, Twin Cities, United States

TU-A2.1P.2: DEVELOPMENT OF HIGH GAIN VIRTUAL-ELEMENT ARRAYS WITH FABRY-PEROT CAVITY ANTENNA SYSTEMS 717

Aditya Dave, Rhonda Franklin, University of Minnesota, Twin Cities, United States

TU-A2.1P.3: IMPROVEMENT IN FSS-BASED SENSOR SENSITIVITY BY MINIATURIZATION TECHNIQUE 719

Mahboobeh Mahmoodi, Kristen M. Donnell, Missouri university of Science and Technology, United States

TU-A2.1P.4: A LOW-COST LIGHT-WEIGHT 3D-PRINTED CHOKE RING FOR MULTIPATH MITIGATION FOR GNSS ANTENNAS 721

Mohamed K. Emara, Khaled Madhoun, Rawan Madhoun, Shulabh Gupta, Carleton University, Canada

TU-A2.1P.5: A COMPACT METASURFACE BASED CROSS POLARIZATION CONVERTER FOR X BAND APPLICATIONS 723

Umer Farooq, Adnan Iftikhar, Muhammad Junaid Mughal, Muhammad Farhan Shafique, Muhammad Saeed Khan, Comsats University, Pakistan; Raed M. Shubair, Massachusetts Insitute of Technology, United States

TU-A2.1P.6: FSS AND META-MATERIAL BASED LOW MUTUAL COUPLING MIMO ANTENNA ARRAY 725

Shengyuan Luo, Yingsong Li, Tao Jiang, Beiming Li, Harbin Engineering University, China

TU-A2.1P.7: C-BAND MULTI-BEAM PLANAR LENS ANTENNA BASED ON FREQUENCY SELECTIVE SURFACE 727

Ying Suo, Hongyong Wang, Wei Li, Harbin Institute of Technology, China

TU-A1.2P: ANTENNA FEEDS AND MATCHING CIRCUITS I

TU-A1.2P.1: AN IMPROVED MODEL FOR STATIC FIELD MICRO-PARTICLE COMPONENTS ON A PRINTED TRANSMISSION LINE 729

Nasim Soufizadeh-Balaneji, David Rogers, Benjamin D. Braaten, North Dakota State University, United States

TU-A1.2P.2: ON MODAL EXCITATION USING CAPACITIVE COUPLING ELEMENTS AND MATCHING NETWORK 731

Hanieh Aliakbari, Buon Kiong Lau, Lund University, Sweden

TU-A1.2P.3: DESIGN AND CHARACTERIZATION OF A DUAL-BAND IMPEDANCE TRANSFORMER BASED ON AN EMBEDDED MTM-EBG 733

Jacob Brown, Ashwin K. Iyer, University of Alberta, Canada

TU-A1.2P.4: ULTRA-WIDEBAND PLANAR MARCHAND BALUN DESIGN FOR THE PYRAMIDAL SINUOUS ANTENNA 735

Carlo Van Niekerk, Stellenbosch University, South Africa

TU-A1.2P.5: A 1X4 POWER DIVIDER CAPABLE OF IMPLEMENTING ANY PHASE DIFFERENCE OUTPUT BASED ON A SLOW-WAVE SUBSTRATE INTEGRATED WAVEGUIDE 737

Chenchen Wang, Jinling Zhang, Beijing University of Posts and Telecommunications, China; Zhanqi Zheng, Institute of Microelectronics, Chinese Academy of Sciences, China; Xiongzhi Zhu, Beijing University of Posts and Telecommunications, China

TU-A1.2P.6: COAXIAL MARCHAND BALUN - DESIGN AND FABRICATION 739

Michael Johnston, Carlo Van Niekerk, Dirk De Villiers, Stellenbosch University, South Africa

TU-A1.2P.7: COMPACT COMPARATOR FOR DUAL-POLARIZED MONOPULSE ARRAY BASED ON NOVEL EIGHT-PORT COUPLER	741
<i>Kejia Ding, Ahmed Kishk, Concordia University, Canada</i>	
TU-A1.2P.8: A NOVEL HYBRID COUPLER DESIGN BASED ON THE CONCEPT OF BALANCED LOADED TRANSMISSION LINES	743
<i>Stefano Maddio, Giuseppe Pelosi, Monica Righini, Stefano Selleri, University of Florence, Italy</i>	
TU-A1.2P.9: DUAL-POLARIZED ANTENNA WITH HIGH ISOLATION USING HYBRID BALUN CIRCUIT	745
<i>Zhongqian Niu, University of Electronic Science and Technology of China, China; Daotong Li, Chongqing University, China; Yaohui Zhang, Yonghong Zhang, Bo Zhang, Yong Fan, University of Electronic Science and Technology of China, China</i>	
TU-A1.2P.10: NEW DUAL-POLARIZED SLOT-COUPLED ANTENNA FOR WIRELESS APPLICATIONS	N/A
<i>Farid Shokouhi, Zaker Hossein Firouzeh, Reza Safian, Isfahan University of Technology, Iran</i>	
 TU-UB.2P: ANTENNA ARRAY III	
TU-UB.2P.8: OPTIMAL SYNTHESIS OF MAXIMALLY ROBUST ANTENNA ARRAYS BY MEANS OF CIRCULAR INTERVAL ARITHMETICS	749
<i>Nicola Anselmi, Mohammad Abdul Hannan, Paolo Rocca, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy</i>	
 TU-A5.4P: BIOMEDICAL APPLICATIONS OF ELECTROMAGNETICS III	
TU-A5.4P.1: MAPPING LUNG WATER SIGNAL DISTRIBUTION ON HUMAN CHEST AND PREDICTION OF LUNG WATER CONTENT	751
<i>Zhengqing Yun, Scott Clemens, Yuanzhang Xiao, Ruthsenne Perron, Magdy Iskander, University of Hawaii, United States</i>	
TU-A5.4P.2: STUDY OF BENDING EFFECTS ON A DUAL-BAND IMPLANTABLE ANTENNA	753
<i>Mohammad Haerinia, University of North Dakota, United States; Sima Noghianian, PADT Inc., United States</i>	
TU-A5.4P.3: FOLDING-DEPENDENT VS. FOLDING-INDEPENDENT FLEXIBLE ANTENNAS ON E-TEXTILES	755
<i>Saad Alharbi, Asimina Kiourti, Ohio State University, United States</i>	
TU-A5.4P.4: AN EXPERIMENTAL PROCEDURE AND INITIAL RESULTS OF RF PROPAGATION IN HUMAN SUBJECTS	757
<i>Sajid M. Asif, University of Sheffield, United Kingdom; Adnan Iftikhar, Umer Farooq, Comsats University, Pakistan; Jared Hansen, Ryan Striker, Benjamin D. Braaten, D. L. Ewert, North Dakota State University, United States; Keith Maile, Boston Scientific, United States</i>	
TU-A5.4P.5: ON THE DECOUPLING ROBUSTNESS OF DISTRIBUTED MAGNETIC TRAPS IN BIOLOGICAL LOADED DUAL TUNED MR COILS	759
<i>Nunzia Fontana, Danilo Brizi, Filippo Costa, University of Pisa, Italy; Gianluigi Tiberi, London South Bank University, United Kingdom; Agostino Monorchio, University of Pisa, Italy</i>	
TU-A5.4P.6: CLASSIFICATION OF ANOMALIES WITH OPEN-ENDED COAXIAL PROBES	N/A
<i>Tuba Yilmaz, Istanbul Technical University, Turkey; Erdem Topsakal, VCU, Turkey; Ibrahim Akduman, Istanbul Technical University, Turkey</i>	
TU-A5.4P.7: LIQUID METAL BROADBAND MONOPOLE FOR STRETCHABLE ELECTRONICS	763
<i>Nathan Seongheon Jeong, Amanda Koh, University of Alabama, United States</i>	
TU-A5.4P.8: EFFECT OF TEMPERATURE SENSOR LOCATION AND MEASUREMENT TIME ON EVALUATION OF THE CALIBRATION FACTOR OF THE LEAD ELECTROMAGNETIC MODEL	765
<i>Mikhail Kozlov, Max Planck Institute for Human Cognitive and Brain Sciences, Germany; Wolfgang Kainz, Food and Drug Administration, United States</i>	

TU-A5.4P.9: IMPROVED RECONSTRUCTION METHOD BASED ON K-MEANS BY FINDING PEAK DENSITY AUTOMATICALLY IN MICROWAVE INDUCED THERMOACOUSTIC TOMOGRAPHY	767
<i>Shuangli Liu, Zhiqin Zhao, University of Electronic Science and Technology of China, China; Xiong Wang, Dajun Zhang, ShanghaiTech University, China</i>	
TU-A5.4P.10: RESEARCH ON ELECTROMAGNETIC POSITIONING CALIBRATION TECHNOLOGY BASED ON KRIGING INTERPOLATION	769
<i>Hongjie Wang, Tao Jiang, Yingsong Li, Yibing Li, Fang Ye, Harbin Engineering University, China; Bin Cao, Marine Design & Research Institute of China, China</i>	
TU-A3.1P: FINITE ELEMENT METHODS	
TU-A3.1P.1: THE DUAL WEIGHTED RESIDUAL AND ERROR ESTIMATION IN DOUBLE HIGHER-ORDER FEM	771
<i>Jake Harmon, Branislav Notaros, Colorado State University, United States</i>	
TU-A3.1P.2: TRUNCATING MATRIX-FREE TIME-DOMAIN METHOD WITH PML FOR SOLVING 3-D OPEN REGION PROBLEMS	773
<i>Zhangchao Wei, Dan Jiao, Purdue University, United States</i>	
TU-A3.1P.3: DISTRIBUTED NUMA IMPLEMENTATION OF A DIRECT SOLVER FOR DDM PRECONDITIONING	775
<i>Dimitrios Makris, Marinos Vouvakis, University of Massachusetts Amherst, United States</i>	
TU-A3.1P.4: PARALLEL DIRECT DOMAIN DECOMPOSITION METHODS (D3M) FOR FINITE ELEMENTS	777
<i>Javad Moshfegh, Dimitrios Makris, Marinos Vouvakis, University of Massachusetts Amherst, United States</i>	
TU-A3.1P.5: LINEAR-COMPLEXITY H2-BASED DIRECT SPARSE SOLVER FOR ELECTROMAGNETIC AND MULTIPHYSICS ANALYSIS	779
<i>Miaomiao Ma, Dan Jiao, Purdue University, United States</i>	
TU-A3.3P: COMPUTATIONAL ELECTROMAGNETICS I	
TU-A3.3P.1: 2D PHYSICAL OPTICS ANALYSIS OF THE FOCAL REGION OF PARALLEL-PLATE WAVEGUIDE LENSES	781
<i>Thomas Ströber, Mauro Ettore, Centre National de la Recherche Scientifique (CNRS), France</i>	
TU-A3.3P.2: MULTIPHYSICS MODELING OF CROSSTALK EFFECT IN GRAPHENE-ENCAPSULATED CU NANO-INTERCONNECTS	783
<i>Shuzhan Sun, Dan Jiao, Purdue University, United States</i>	
TU-A3.3P.3: THE USE OF SINGULAR BASIS FUNCTIONS FOR PRECISE EM ANALYSIS OF AXIALLY SYMMETRIC METALLIC ANTENNAS	785
<i>Aleksandra Krneta, Branko Kolundzija, University of Belgrade, Serbia</i>	
TU-A3.3P.4: ERROR PREDICTION IN ELECTROMAGNETIC SIMULATIONS USING MACHINE LEARNING	787
<i>Bariscan Karaosmanoglu, Ozgur Ergul, Middle East Technical University, Turkey</i>	
TU-A3.3P.5: IMPLICATIONS OF RECOMPRESSION FOR GRID-BASED LOW-RANK APPROXIMATION TECHNIQUES	789
<i>Jonathan Kelley, Tian Yao, University of Texas at Austin, United States; Yaniv Brick, Ben Gurion University of the Negev, Israel; Ali E. Yilmaz, University of Texas at Austin, United States</i>	
TU-A3.3P.6: ALL-FREQUENCY STABLE POTENTIAL-BASED FORMULATION FOR ELECTROMAGNETIC MODELING AND SIMULATION	791
<i>Su Yan, Howard University, United States</i>	

TU-A3.3P.7: ACCURATE SOLUTION OF ELECTROMAGNETIC SCATTERING BY PENETRABLE OBJECTS WITH CHANGEABLE SHAPES	793
<i>Li Zhang, Yin Xuan Zhu, Han Yu Shi, Mei Song Tong, Tongji University, China</i>	
TU-A3.3P.8: APPROXIMATE INVERSE OF THE RAO-WILTON-GLISSON BASIS FUNCTIONS GRAM MATRIX VIA MONOPOLAR REPRESENTATION	795
<i>Jonas Kornprobst, Josef Knapp, Thomas F. Eibert, Technical University of Munich, Germany</i>	
TU-A3.3P.9: CORROSION-RELATED MAGNETOSTATIC FIELD ANALYSIS	797
<i>John Young, Robert Pfeiffer, Robert Adams, University of Kentucky, United States; Stephen Gedney, University of Colorado Denver, United States</i>	
TU-A3.3P.10: EFFICIENT FULL-WAVE METHOD FOR ANALYSING TRANSMIT-ARRAYS THROUGH AN EQUIVALENT DIELECTRIC DESCRIPTION	N/A
<i>Sergio Matos, Instituto de Telecomunicacoes, Instituto Universitario de Lisboa (ISCTE-IUL) Lisbon, Portugal; Jorge Costa, Instituto de Telecomunicacoes, Instituto Universitario de Lisboa, Portugal; Parinaz Nazeri, University of Toronto, Canada; Eduardo Lima, Carlos A. Fernandes, Instituto de Telecomunicações, Portugal; Nelson Fonseca, ESA Antenna and Sub-Millimeter Wave Section, Netherlands</i>	
 TU-A5.5P: EDUCATIONAL ADVANCES	
TU-A5.5P.1: MODERN APPROACHES AND SELF-EVALUATION TOOLS FOR TEACHING ELECTROMAGNETICS	801
<i>Alessandro Polo, Marco Salucci, Giacomo Oliveri, Paolo Rocca, Andrea Massa, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy</i>	
TU-A5.5P.2: THE FLIPPED CLASSROOM APPROACH TO ENGINEERING ELECTROMAGNETICS: A CASE STUDY	803
<i>Morris Cohen, Alenka Zajić, Georgia Institute of Technology, United States</i>	
TU-A5.5P.3: ANTEN'IT: A HARDWARE FOR ANTENNA DESIGN AND EDUCATION	805
<i>Umut Bulus, Antenom Antenna Technologies Inc., Turkey</i>	
TU-A5.5P.4: A WIFI BASED ELECTROMAGNETIC VISUAL AID	807
<i>Malcolm Simpson, Kiersten Kerby-Patel, University of Massachusetts Boston, United States</i>	
TU-A5.5P.5: SPINNING MAGNETS IN ELECTROMAGNETIC EDUCATION	809
<i>Marcus Walden, Plextek, United Kingdom</i>	
 TU-A4.1P: IMAGING METHODS AND SYSTEMS	
TU-A4.1P.1: DUAL FREQUENCY PROCESSING OF SUBSAMPLED MEASUREMENTS IN W-BAND	811
<i>Yasmine Hesham Mohamed Ibrahim, Claire Migliaccio, Jérôme Lanteri, Jean-Yves Dauvignac, Laurent Brochier, Université Côte d'Azur, CNRS UMR 7248, LEAT, France</i>	
TU-A4.1P.2: TRANSMIT PATTERN ANALYSIS FOR ACTIVE INCOHERENT MICROWAVE IMAGING	813
<i>Stavros Vakalis, Jeffrey Nanzer, Michigan State University, United States</i>	
TU-A4.1P.3: A METHOD FOR DETECTION OF WALLS AND LARGE FLAT SURFACES IN THROUGH-THE-WALL SAR IMAGING	815
<i>Behzad Yektakhah, Kamal Sarabandi, University of Michigan, United States</i>	
TU-A4.1P.4: MICROWAVE IMAGING TECHNOLOGY FOR IN-LINE FOOD CONTAMINATION MONITORING	817
<i>Laura Farina, National University of Ireland Galway, Ireland; Rosa Scapatucci, Institute for Electromagnetic Sensing of the Environment, National Research Council of Italy, Italy; Jorge A. Tobon Vasquez, Javier Rivero, Politecnico di Torino, Italy; Amelie Litman, Institut Fresnel, France; Lorenzo Crocco, Institute for Electromagnetic Sensing of the Environment, National Research Council of Italy, Italy; Francesca Vipiana, Politecnico di Torino, Italy</i>	

TU-A4.1P.5: A PHYSICAL OPTICS SIMULATOR FOR DIELECTRIC BODIES CHARACTERIZATION USING A MULTISTATIC RADAR	819
<i>Marcos Arias, Lorena Perez-Eijo, Yolanda Rodriguez-Vaqueiro, Borja Gonzalez-Valdes, José Vázquez-Cabo, Oscar Rubiños-Lopez, Antonio Pino, Universidade de Vigo, Spain; Yuri Álvarez, Universidad de Oviedo, Spain</i>	
TU-A4.1P.6: ARRAY OF ANTENNAS FOR A GPR SYSTEM ON BOARD A UAV	821
<i>Yolanda Rodriguez-Vaqueiro, José Vázquez-Cabo, Borja Gonzalez-Valdes, Antonio Pino, Universidade de Vigo, Spain; Yuri Álvarez, Maria Garcia-Fernandez, Universidad de Oviedo, Spain; Fernando Las-Heras, University of Oviedo, Spain; Ana Arboleya, Universidad Rey Juan Carlos, Spain</i>	
TU-A4.1P.7: GLOBAL MAXWELL TOMOGRAPHY USING AN 8-CHANNEL RADIOFREQUENCY COIL: SIMULATION RESULTS FOR A TISSUE-MIMICKING PHANTOM AT 7T	823
<i>Ilias Giannakopoulos, Skolkovo Institute of Science and Technology, Russia; José Serrallés, Massachusetts Institute of Technology, United States; Bei Zhang, New York University, United States; Luca Daniel, Jacob White, Massachusetts Institute of Technology, United States; Riccardo Lattanzi, New York University, United States</i>	
TU-A4.1P.8: HIGH RESOLUTION SUBSURFACE 3D SAR IMAGING USING ROBOTIC BI-STATIC TRANSCEIVERS	825
<i>Behzad Yektakhah, Kamal Sarabandi, University of Michigan, United States; Hussein Nasser Shaman, King Abdulaziz City for Science and Technology, Saudi Arabia</i>	
TU-A4.1P.9: ELEVATION IMAGING BASED ON VORTEX ELECTROMAGNETIC WAVE	827
<i>Ruiming Li, Haoquan Hu, Shiwen Lei, Zhipeng Lin, Bo Chen, University of Electronic Science and Technology of China, China</i>	
 TU-A3.2P: HIGH FREQUENCY AND ASYMPTOTIC TECHNIQUES	
TU-A3.2P.1: ANISOTROPIC SLAB SCATTERING: A HIGH FREQUENCY SOLUTION	829
<i>Manushanker Balasubramanian, Douglas H. Werner, Pennsylvania State University, United States</i>	
TU-A3.2P.2: RADIATION FROM A NON-CONFORMAL ANTENNA ARRAY ON AN ELECTRICALLY LARGE CONDUCTING CONVEX SURFACE	831
<i>Babajide Salau, Manthan Shah, Cagatay Tokgoz, Lamar University, United States</i>	
TU-A3.2P.3: ON THE LOCATION OF TRANSVERSE ELECTRIC SURFACE WAVE POLES FOR ELECTRICALLY THICK SUBSTRATES	833
<i>Kalyan Durbhakula, Deb Chatterjee, Ahmed M. Hassan, University of Missouri-Kansas City, United States</i>	
TU-A3.2P.4: SPECIAL FUNCTIONS FOR RADIATION FROM SOURCES CLOSE TO AN ELECTRICALLY LARGE CONDUCTING CONVEX SURFACE	835
<i>Babajide Salau, Manthan Shah, Cagatay Tokgoz, Lamar University, United States</i>	
TU-A3.2P.5: ANALYSIS OF ROTATED CORRUGATED PARALLEL PLATE WAVEGUIDE USING ASYMPTOTIC CORRUGATION BOUNDARY CONDITIONS	837
<i>Wei-Yu Lai, Malcolm Ng Mou Kehn, National Chiao Tung University, Taiwan</i>	
 WE-SP.1A: OPTICALLY TRANSPARENT ANTENNAS	
WE-SP.1A.1: CHARACTERIZATION OF OPTICALLY TRANSPARENT COPPER MICRO-WIRE TRANSMISSION LINES	839
<i>Christopher Liston, Carolyn Ellinger, Kevin O'Connor, Eastman Kodak Company, United States</i>	
WE-SP.1A.2: DUAL-BAND WIFI APPLIQUE ANTENNA	841
<i>Hyok J. Song, James H. Schaffner, HRL Laboratories, LLC, United States; Timothy Talty, Duane S. Carper, Eray Yasan, General Motors, LLC, United States</i>	
WE-SP.1A.3: 2.5 GHZ MESHED INSET-FED PATCH ANTENNA	843
<i>Zachary Silva, Georgia Institute of Technology, United States; Charles Hunter, Christopher Valenta, Georgia Tech Research Institute, United States; Gregory Durgin, Georgia Institute of Technology, United States</i>	

WE-SP.1A.4: TRANSPARENT MICROSTRIP ANTENNAS FOR CUBESATS..... 845
Xinyu Liu, David Jackson, Eric Ingram, Ji Chen, University of Houston, United States; Murilo Seko, University of Sao Paulo, Brazil

WE-SP.1A.5: FIELD PERFORMANCE OF A NOVEL WIDEBAND OPTICALLY TRANSPARENT GNSS ANTENNA 847
Eray Yasan, Independent Researcher, United States; Hyok J. Song, HRL Laboratories, LLC, United States; Timothy Talty, General Motors, LLC, United States; James H. Schaffner, HRL Laboratories, LLC, United States; Duane S. Carper, General Motors, LLC, United States; Arthur Bekaryan, HRL Laboratories, LLC, United States

WE-A1.1A: BROADBAND/ULTRA WIDEBAND ANTENNAS AND SYSTEMS I

WE-A1.1A.1: PREDICTION OF IMPULSE RESPONSE OF A FLEXIBLE WIDE-BAND ANTENNA FOR WBAN APPLICATIONS 849
Sherif R. Zahran, Arab Academy for Science, Technology & Maritime Transport, Egypt; Mahmoud A. Abdalla, Military Technical College, Egypt; Luigi Boccia, University of Calabria, Italy

WE-A1.1A.4: ON THE BANDWIDTH OF LOOP ANTENNAS USING CHARACTERISTIC MODE ANALYSIS 851
Daniel Antonio Santillán-Haro, Universitat Politècnica de València, Spain; Ferdaous Abderrazak, University of Tunis El Manar (UTM), Tunisia; Eva Antonino-Daviu, Miguel Ferrando-Bataller, Universitat Politècnica de València, Spain

WE-A1.1A.5: EXTREMELY WIDEBAND IMAGING ANTENNA WITH UNIFORM RADIATION PATTERNS 853
Umair Naeem, Vincent Fusco, Queen's University Belfast, United Kingdom; Michael Keaveney, Mike O'Shea, James Breslin, Analog Devices Inc., Ireland

WE-A1.1A.6: DESIGN CONSIDERATIONS IN A GRADED INDEX FLAT DIELECTRIC LENS FOR AN IMPULSE RADIATING ANTENNA 855
Fernando Albarracin-Vargas, Félix Vega-Stavro, National University of Colombia, Colombia; Christoph Baer, Kerstin Orend, Thomas Musch, Ruhr-University of Bochum, Germany

WE-A1.1A.7: A BROADBAND MUTIMODE ANTENNA BASED ON THE THEORY OF CHARACTERISTIC MODE 857
Wei Su, Shaker Alkaraki, Queen Mary University of London, United Kingdom; Qianyun Zhang, Beihang University, China; Yue Gao, Queen Mary University of London, United Kingdom

WE-A1.1A.8: GPR BOWTIE ANTENNAS WITH REDUCED INDUCTION FOOTPRINTS FOR DUAL-MODALITY DETECTORS 859
Wouter van Verre, Xianyang Gao, Frank Podd, David Daniels, Anthony Peyton, University of Manchester, United Kingdom

WE-A1.1A.9: A MODIFIED MAGNETOELECTRIC DIPOLE ANTENNA 861
Lijia Chen, Shengmin Jiang, Dajing Wang, Shufeng Zhang, Shengchang Lan, Harbin Institute of Technology, China

WE-A1.2A: IOT, 5G AND MM-WAVE ANTENNAS AND COMPONENTS

WE-A1.2A.1: ULTRA-WIDEBAND, GLASS PACKAGE-INTEGRATED POWER DIVIDERS FOR 5G AND MM-WAVE APPLICATIONS 863
Muhammad Ali, Atom Watanabe, Tong-Hong Lin, Manos Tentzeris, Rao Tummala, Georgia Institute of Technology, United States; Pulugurtha Markondeya Raj, Florida International University, United States

WE-A1.2A.2: ANALYSIS OF LOSSY SIW PATCH ANTENNA FOR NEAR-FIELD COMMUNICATIONS 865
Muhammad Khan, David Jackson, University of Houston, United States; Chatwin Lansdowne, NASA Johnson Space Center, United States

WE-A1.2A.3: 77 GHZ SCREEN PRINTED, FLEXIBLE, BEAM-SWITCHING ANTENNA ARRAY FOR WEARABLE RADAR APPLICATIONS 867
Azat Meredov, Kirill Klionovski, Atif Shamim, King Abdullah University of Science and Technology (KAUST), Saudi Arabia

**WE-A1.2A.4: HIGH-ISOLATION, LOW CROSS-POLARIZATION, DIFFERENTIAL-FEED, N/A
DUAL-POLARIZED PATCH ANTENNA ARRAY FOR A 2.45 GHZ RETRODIRECTIVE SYSTEM
APPLICATION**

Jiangjie Zeng, Xianqi Lin, Yongmu Yang, University of Electronic Science and Technology of China, China

WE-A1.2A.5: LOW-COST AND HIGHLY FLEXIBLE ANTENNA FOR 2.4 GHZ IOT APPLICATIONS 871

Denis Le Goff, Yuchan Song, Louis Barbier, Tan-Huat Chio, Koenraad Mouthaan, National University of Singapore, Singapore

**WE-A1.2A.6: EFFECTS OF MWT RADIATION ON SIDELobe LEVELS IN MM-WAVE MICROSTRIP 873
ARRAY ANTENNA**

Eonsu Noh, Kangwook Kim, Gwangju Institute of Science and Technology, Korea (South)

WE-A1.2A.7: TRIANGULAR AND RECTANGULAR SIW MICROSTRIP ANTENNAS 875

Eduardo dos Santos Silveira, Daniel Chagas do Nascimento, Technological Institute of Aeronautics, Brazil

**WE-A1.2A.8: 28 GHZ SIDE-EDGE LOOP ANTENNA WITH END-FIRE RADIATION POLARIZED 877
VERTICALLY TO SUBSTRATE**

Masayuki Nakajima, Masazumi Ishikawa, Gentei Sato, Antenna Giken Co., Ltd., Japan

**WE-A1.2A.9: ROTMAN LENS-BASED FABRY-PEROT RESONATOR ANTENNAS FOR CONVERGED N/A
MULTI-MODE OAM BEAMS**

Xudong Bai, Fanwei Kong, Yunzhuo Song, Shengyang Xu, Weizhong Yan, Shanghai Scientific Instrument Factory, China; Anjie Cao, Shanghai Institute of Satellite Engineering, China; Chong He, Weiren Zhu, Xian-Ling Liang, Ronghong Jin, Shanghai Jiao Tong University, China

WE-A1.3A: MULTI-BAND ANTENNAS I

**WE-A1.3A.1: TUNING RANGE ENHANCEMENT OF A FREQUENCY-AGILE TRI-BAND SLOT 881
ANTENNA**

Sajid M. Asif, Mohammad Anbiyaei, Adham Naji, Kenneth Ford, Timothy O'Farrell, Richard Langley, University of Sheffield, United Kingdom

WE-A1.3A.2: COMPACT, MULTI-BAND, SLOT ANTENNA..... 883

Abdullah Haskou, Anthony Pesin, Jean-Yves Le Naour, Ali Louzir, Technicolor Research and Innovation, France

**WE-A1.3A.3: A DUAL-BAND STRAIN SENSOR BASED ON POP-UP HALF WAVELENGTH DIPOLE 885
ANTENNA**

Shaghayegh Soltani, Paul S. Taylor, John C. Batchelor, University of Kent, United Kingdom

WE-A1.3A.4: A LOW-PROFILE BULL'S-EYE ANTENNAS FOR DUAL-BAND APPLICATIONS..... 887

Mohammad Mahdi Honari, University of Alberta, Canada; Kamal Sarabandi, University of Michigan, United States; Pedram Mousavi, University of Alberta, Canada

**WE-A1.3A.5: DESIGN OF MODIFIED SIERPINSKI GASKET FRACTAL ANTENNA FOR TRI-BAND 889
APPLICATIONS**

Youcef Braham Chaouche, Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada; Boualem Hammache, ET Laboratory, University of Mentouri Brothers Constantine 1, Algeria; Massinissa Belazzoug, ETA Laboratory, University of Bordj Bou Arreridj, Algeria

WE-A1.3A.6: A K/KA SHARED-APERTURE DRA ARRAY WITH HIGH ISOLATION 891

Heba I. El-Sawaf, Wael M. Abdel-Wahab, Safieddin Safavi-Naeini, University of Waterloo, Canada

**WE-A1.3A.7: A DUAL BAND CIRCULAR POLARIZED ANTENNA ARRAY BASED ON THE SEQUENTIAL 893
ARRANGEMENT OF NON-IDENTICAL DISC PATCHES**

Stefano Maddio, Giuseppe Pelosi, Monica Righini, Stefano Selleri, University of Florence, Italy

WE-A1.3A.8: A DUAL-BAND DUAL-CIRCULARLY POLARIZED PYRAMIDAL HORN ANTENNA.....	895
<i>Firas Ayoub, University of New Mexico, United States; Emil Ardelean, Air Force Research Laboratory, United States; Christos Christodoulou, University of New Mexico, United States; David Murrell, Steven Lane, Air Force Research Laboratory, United States</i>	
WE-A1.3A.9: COPPER RING AS SUPERSTRATE LAYER TO GENERATE DUAL BAND CIRCULARLY POLARIZED MICROSTRIP PATCH ANTENNA FOR X-BAND APPLICATIONS	N/A
<i>Halappa Gajera, University of Mysore, India</i>	
WE-A1.3A.10: LOW-PROFILE DIFFERENTIALLY-FED MULTI-BAND DUAL-POLARIZED ANTENNAS	899
<i>Xuanbo Wang, Yuehui Cui, RongLin Li, South China University of Technology, China</i>	
WE-A1.4A: FREQUENCY RECONFIGURABLE AND TUNABLE ANTENNAS	
WE-A1.4A.1: ORIGAMI-ENABLED FREQUENCY RECONFIGURABLE DIPOLE ANTENNA.....	901
<i>Md Rayhan Khan, Constantinos L. Zekios, Shubhendu Bhardwaj, Stavros V. Georgakopoulos, Florida International University, United States</i>	
WE-A1.4A.2: 3D PRINTED MODULAR ORIGAMI INSPIRED DIELECTRICS FOR FREQUENCY TUNABLE ANTENNAS	903
<i>Yingwei Wu, Andrea Vallecchi, Yunfang Yang, Zhong You, Christopher Stevens, Ekaterina Shamonina, Patrick Grant, University of Oxford, United Kingdom</i>	
WE-A1.4A.3: A FREQUENCY-TUNABLE DUAL-BAND SINGLE-LAYER SHORTED MULTI-RING MICROSTRIP ANTENNA FED BY AN L-PROBE WITH VARACTOR DIODES	905
<i>Toru Ikeda, Sakuyoshi Saito, Yuichi Kimura, Saitama University, Japan</i>	
WE-A1.4A.4: SLOT BASED FREQUENCY RECONFIGURABLE AND UWB SENSING MIMO ANTENNAS FOR CR APPLICATIONS	907
<i>Rifaqat Hussain, King Fahd University of Petroleum and Minerals (KFUPM), Pakistan; Muhammad Umar, Amna Kamran, National University of Sciences and Technology (NUST), Pakistan; Mohammad Sharawi, Polytechnique Montréal, Canada</i>	
WE-A1.4A.5: PLANAR FREQUENCY-TUNABLE QUAD-BAND ANTENNA WITH INDEPENDENTLY CONTROLLABLE BANDS	909
<i>Sajid M. Asif, Adham Naji, Mohammad Anbiyaei, Kenneth Ford, Timothy O'Farrell, Richard Langley, University of Sheffield, United Kingdom</i>	
WE-A1.4A.6: PATCH ANTENNA ARRAY WITH CONTINUOUS FREQUENCY AND POLARIZATION TUNING FOR 5G MID-BAND COMMUNICATIONS	911
<i>Muhammad Ikram, Nghia Nguyen-Trong, Amin Abbosh, University of Queensland, Australia</i>	
WE-A1.4A.7: DESIGN GUIDELINES FOR A NOVEL TUNABLE APERTURE- COUPLED MICROSTRIP PATCH ANTENNA	913
<i>Prasad Shastry, Bradley University, United States; Krishna Katragadda, Google, United States</i>	
WE-A1.4A.8: FLEXIBLE RECONFIGURABLE ANTENNA ROBUST TO FOLDING IN WEARABLE APPLICATIONS	915
<i>Luca Santamaria, Khai Nguyen, Fabien Ferrero, Robert Staraj, Leonardo Lizzi, Université Côte d'Azur, CNRS, LEAT, France</i>	
WE-A1.4A.9: A BANDWIDTH RECONFIGURABLE MULTIBAND FRACTAL ANTENNA FOR WIRELESS APPLICATIONS	917
<i>Youcef Braham Chaouche, Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada; Idris Messaoudene, Higher school for computer science, Algeria</i>	
WE-A1.4A.10: A FREQUENCY-RECONFIGURABLE MAGNETIC MONOPOLE ANTENNA BASED ON QUARTER-MODE SUBSTRATE INTEGRATED WAVEGUIDE	919
<i>Huan Qian Xiong, Si Ce Wang, Yi Min Fan, Mei Song Tong, Tongji University, China</i>	

WE-A5.1A: VEHICULAR ANTENNAS AND ELECTROMAGNETICS

- WE-A5.1A.1: A GLASS-INTEGRATED FERRITE FM ANTENNA FOR VEHICLE TELEMATICS** 921
Md Fahim Chowdhury, Yang-Ki Hong, Hoyun Won, Woncheol Lee, Minyeong Choi, University of Alabama, United States
- WE-A5.1A.2: DEVELOPMENT OF A REAR GLASS ANTENNA SYSTEM FOR A HATCHBACK VEHICLE** 923
Sang Heun Lee, Hyundai Motor Company, Korea (South); Frank Mierke, Continental Automotive, Germany
- WE-A5.1A.3: LOW-PROFILE, VEHICLE ROOF-TOP MOUNTED BROADBAND ANTENNA FOR V2X** 925
Martin (Wooseop) Lee, Nathan Seongheon Jeong, University of Alabama, United States
- WE-A5.1A.4: VIRTUAL DRIVE TESTING BASED ON AUTOMOTIVE ANTENNA MEASUREMENTS FOR 927
EVALUATION OF VEHICLE-TO-X COMMUNICATION PERFORMANCES**
Francesco Saccardi, Alessandro Scannavini, Lucia Scialacqua, Lars Jacob Foged, Microwave Vision Italy SRL, Italy; Nicolas Gross, Arnaud Gandois, Stephane Dooghe, Per Olav Iversen, Microwave Vision Group Industries, France
- WE-A5.1A.5: A V2X COMMUNICATION SYSTEM TEST ON SEA**..... 929
Shravan Kumar Kalyankar, Hieu Nguyen Thanh, Yee Hui Lee, Yong Liang Guan, Nanyang Technological University, Singapore
- WE-A5.1A.6: COVARIANCE MATRIX EVALUATION OF A DIVERSITY SLOT ANTENNA FOR 931
VEHICULAR COMMUNICATIONS**
Abed Pour Sohrab, Petros Karadimas, Yingke Huang, University of Glasgow, United Kingdom
- WE-A5.1A.7: POLARIZATION-DIVERSITY CONFORMAL VHF ANTENNA WITH NEAR-PERFECT 933
RADIATION EFFICIENCY FOR SMALL UAVS**
Tayfun Ozdemir, Chris Davis, Virtual EM Inc., United States
- WE-A5.1A.8: A COMPACT PLATFORM-BASED ANTENNA FOR AN UNMANNED GROUND VEHICLE** 935
Mohammad Ranjbar Nikkhal, Nader Behdad, University of Wisconsin-Madison, United States; Fikadu T. Dagefu, Army Research Laboratory, United States
- WE-A5.1A.9: AUTOMOTIVE RADAR FRONT-END WITH ADDED TARGET ESTIMATION IN 937
ELEVATION PLANE**
Umair Naeem, Dmitry Zelenchuk, Vincent Fusco, Queen's University Belfast, United Kingdom; Michael Keaveney, Mike O'Shea, James Breslin, Analog Devices Inc., Ireland
- WE-A5.1A.10: ANTENNA MODELING ON COMPLEX PLATFORMS VIA SPARSE CONSTRAINED 939
EQUIVALENT DISTRIBUTIONS**
Leo Tchorowski, Inder Gupta, Ohio State University, United States
- WE-A2.1A: WIDE- AND DUAL-BAND FREQUENCY SELECTIVE SURFACES**
- WE-A2.1A.1: PARAMETRIC ANALYSIS OF A DUAL BAND POLARIZED FREQUENCY SELECTIVE 941
SURFACE**
Andrei – Marius Silaghi, Aldo De Sabata, University Politehnica Timisoara, Romania; Ladislau Matekovits, Politecnico di Torino, Italy
- WE-A2.1A.2: DESIGN OF DUAL-POLARIZED DUAL-BAND UNIT-CELL FOR WIDEBAND FSS IN KU 943
BAND**
Lamine N.A Bamogho, Jean-Jacques Laurin, École Polytechnique de Montréal, Canada
- WE-A2.1A.3: DESIGN OF FREQUENCY SELECTIVE SURFACES FOR WIDE FREQUENCY AND 945
ANGULAR RESPONSES**
Nathawut Homsup, Raj Mittra, University of Central Florida, United States
- WE-A2.1A.4: CROSS DIPOLE FSS BANDWIDTH ENHANCEMENT** 947
Yassine Zouaoui, Larbi Talbi, Khelifa Hettak, Université du Québec en Outaouais, Canada

WE-A2.1A.5: A HIGH-PERFORMANCE DOUBLE-LAYER FREQUENCY SELECTIVE SURFACE WITH MINIATURIZED UNIT CELLS	N/A
<i>Zhiyu Xing, Feng Yang, Rui Wang, Jianhua Yang, Xiao Ma, University of Electronic Science and Technology of China, China</i>	
WE-A2.1A.6: A DUAL-POLARIZED FSS ON A SINGLE SUBSTRATE USING HIGHLY-COUPLED INTERLAYER INDUCTANCE	951
<i>Youngno Youn, Wonbin Hong, Pohang University of Science and Technology (POSTECH), Korea (South)</i>	
WE-A2.1A.7: WIDEBAND MULTILAYER 45-DEGREE POLARIZER (2 - 6GHZ)	953
<i>Wafa Abdouni-Abdallah, Muhammad Saeed Khan, Athanasios Konstantinidis, Emirates Technology and Innovation Center (ETIC), Khalifa University (KU), United Arab Emirates</i>	
WE-A2.1A.8: DESIGN OF A DUAL-BAND BAND-STOP FREQUENCY SELECTIVE SURFACE	955
<i>Wei Li, Ying Suo, Hongfei Ye, Harbin Institute of Technology, China</i>	
WE-A2.1A.9: AN ULTRA-THIN WIDEBAND 3-D FREQUENCY SELECTIVE RASORBER BASED ON FERRITE ABSORBER AND SLOW WAVE STRUCTURE	957
<i>Yihao Wang, Shishan Qi, Wen Wu, The Ministerial Key Laboratory of JGMT, China; Zhongxiang Shen, Nanjing University of Science and Technology, China</i>	
WE-A2.1A.10: FREQUENCY-SELECTIVE RASORBER WITH TRI-RESONANT ABSORPTION BAND	959
<i>Zhefei Wang, Jiahui Fu, Harbin Institute of Technology, China; Qingsheng Zeng, Nanjing University of Aeronautics and Astronautics, China; Huan Li, Université du Quebec, Canada; Tayeb A. Denidni, National Institute of Scientific Research (INRS), Canada</i>	
 WE-A1.5A: ANTENNA FEEDS AND MATCHING CIRCUITS II	
WE-A1.5A.1: SIW-TO-MINI-COAXIAL VERTICAL TRANSITION FOR LOW PROFILE MM-WAVE PCB-TO-PCB ASSEMBLY	961
<i>Wael M. Abdel-Wahab, University of Waterloo, Canada; Hussam Al-Saedi, University of Technology, Iraq; Ardeshir Palizban, Ahmad Ehsandar, Safieddin Safavi-Naeini, University of Waterloo, Canada</i>	
WE-A1.5A.2: H-PLANE METALLIC RWG-TO-SIW TRANSITION USING APERTURE COUPLING	963
<i>Wael M. Abdel-Wahab, Safieddin Safavi-Naeini, University of Waterloo, Canada</i>	
WE-A1.5A.3: A COMPACT BROADBAND PHASE-INVERTER-BASED TWO-SECTION FORWARD COUPLER FOR SUB-6-GHZ BAND	965
<i>Robin Jeanty, Shih-Yuan Chen, National Taiwan University, Taiwan</i>	
WE-A1.5A.4: UWB MILLIMETER-WAVE 180 DEGREE HYBID COUPLERS	967
<i>Carl Pfeiffer, Thomas Steffen, Defense Engineering Corp., United States; Boris Tomasic, Air Force Research Laboratory, United States</i>	
WE-A1.5A.6: 3:1 BANDWIDTH DUAL POLARIZED FEEDS FOR COMPACT RANGE AND NEAR-FIELD PROBES	969
<i>German Cortes-Medellin, Brett T. Walkenhorst, NSI-MI Technologies, United States</i>	
WE-A1.5A.7: FINITE METAL WALL EFFECTS OF W-BAND CIRCULAR POLARIZED HORN ANTENNA WITH INBUILT POLARIZER	971
<i>Ghanshyam Mishra, San diego state university, United States; Satish K Sharma, San Diego State University, United States; Jia-Chi Chieh, SPAWAR, United States</i>	
WE-A1.5A.8: SEARCH-BASED DESIGN OF DIGITAL NON-FOSTER ANTENNA MATCH FOR HIGH-SPEED LOW-IMPEDANCE CONVERTERS	973
<i>Vinit Katariya, Thomas Weldon, University of North Carolina at Charlotte, United States</i>	
WE-A1.5A.9: X-BAND WAVEGUIDE COUPLER WITH LOW RIPPLE AND LOSSES	975
<i>Alireza Pilevar, Shahid Beheshti University, Iran; Omid Manoochehri, University of Illinois at Chicago, United States; Mahdi Khorsandi, Tarbiat Modares University, Iran; Danilo Erricolo, University of Illinois at Chicago, United States</i>	

WE-A1.6A: ARRAY SYSTEM TECHNOLOGIES

WE-A1.6A.1: BI-STATIC SIMULTANEOUS TRANSMIT AND RECEIVE (STAR) ANTENNA ARRAY 977 SYSTEM

Prathap Valale Prasannakumar, Aman Samaiyar, Mohamed Elmansouri, Ljubodrag Boskovic, Dejan Filipovic, University of Colorado at Boulder, United States; Sudhakar Rao, Northrop Grumman Aerospace Systems, United States

WE-A1.6A.2: WIDEBAND OPTICALLY-STEERED PHASED ARRAY ANTENNA USING A N/A DUAL-ELECTRODE MACH-ZEHNDER MODULATOR

Daniel Nuño, Maria Concepcion Santos, Jordi Romeu, Josep Prat, Luis Jofre Roca, Universitat Politecnica de Catalunya (UPC), Spain

WE-A1.6A.3: NEAR-FIELD MEASUREMENT STUDY FOR OVER-THE-HORIZON RADAR TRANSMIT 981 BEAMFORMERS

Simon Henault, Defence Research and Development Canada, Canada

WE-A1.6A.4: USING MIMO TO EXTEND THE OPERATING BAND OF OVER-THE-HORIZON RADAR 983 TRANSMIT BEAMFORMERS TO LOWER FREQUENCIES

Simon Henault, Defence Research and Development Canada, Canada

WE-A1.6A.5: AN UNIFIED EQUATION FOR ACTIVE REFLECTION COEFFICIENT IN 4D ANTENNA 985 ARRAYS INCLUDING MUTUAL COUPLING EFFECT

Feng Yang, Shiwen Yang, Kejin Chen, Fang Wang, Yikai Chen, University of Electronic Science and Technology of China (UESTC), China

WE-A1.6A.6: BROADBAND ARRAY ANTENNAS FOR CURVED GEOMETRIES 987

Sharmistha Modak, Hung Tran, George R. Branner, University of California, Davis, United States; Preetham Kumar, California State University, Sacramento, United States

WE-A1.6A.7: REDUCING THE NUMBER OF PHASE SHIFTERS IN CIRCULAR ARRAYS OF 989 CIRCULAR SUBARRAYS FOR A WIDE-SCANNING PATTERN

Elizvan Juarez, CICESE Research Center, Mexico; Marco A. Panduro, Center for Scientific Research and Higher Education of Ensenada, Mexico; Alberto Reyna, Universidad Autonoma de Tamaulipas, Mexico; David Covarrubias, Roberto Conte, CICESE Research Center, Mexico; Eduardo Murillo, Universidad Nacional Autónoma de México, Mexico

WE-A1.6A.8: WIDEBAND TWO-BEAM ANTENNA ARRAY FED BY MODIFIED BUTLER MATRIX..... 991

Ji-Peng Chen, Fu-Chang Chen, South China University of Technology, China

WE-A1.6A.9: GENERATION OF DUAL-BEAM ORBITAL ANGULAR MOMENTUM VORTEX BEAM 993 USING TRANSMIT ARRAYS

Rui Xi, Xidian University, China; S. Ang, Kaoru Porter, University of Arkansas, United States; Long Li, Xidian University, China

WE-A1.6A.10: TWO-WAY PHASE SHIFTER WITH EQUAL PHASE SHIFT 995

Zahra Rahimian Omam, Suren Gigoyan, University of Waterloo, Canada; Ali Pourziad, Saeid Nikmehr, University of Tabriz, Iran; Safieddin Safavi-Naeini, University of Waterloo, Canada

WE-A5.2A: BIOMEDICAL APPLICATIONS OF ANTENNAS

WE-A5.2A.1: INVESTIGATION ON RESOLUTION OF THERMOACOUSTIC IMAGING BASED ON 997 COMPRESSIVE SENSING: A SIMULATION STUDY

Baosheng Wang, Yifei Sun, Chenzhe Li, Xiong Wang, ShanghaiTech University, China

WE-A5.2A.2: MUTUAL COUPLING REDUCTION IN WIDEBAND ELECTROMAGNETIC MEDICAL 999 IMAGING ANTENNA ARRAY USING COMPACT ELECTROMAGNETIC BAND GAP

Abdulrahman S. M. Alqadami, Nghia Nguyen-Trong, Konstanty Bialkowski, Amin Abbosh, University of Queensland, Australia

WE-A5.2A.4: A MODIFIED VIVALDI ANTENNA WITH LOW SELF-REFLECTIVITY FOR BONE HEALTH 1001 DETECTION

Gang Lu, Shengchang Lan, Kang Zhang, Kai Yao, Lijia Chen, Weichu Chen, Harbin Institute of Technology, China

WE-A5.2A.5: A SLOT ANTENNA FOR NON-INVASIVE DETECTION OF BLOOD CONSTITUENTS CONCENTRATIONS	1003
<i>Jessica Hanna, Joseph Costantine, Rouwaida Kanj, Assaad Eid, Youssef Tawk, American University of Beirut, Lebanon; Ali Ramadan, Fahad Bin Sultan University, Saudi Arabia</i>	
WE-A5.2A.7: CODEBOOK REQUIREMENTS FOR ESTIMATING MULTI-ANTENNA SAR IN LINEAR TIME	1005
<i>Arash Ebadi-Shahrivar, Patrick Fay, Bertrand Hochwald, University of Notre Dame, United States; David Love, Purdue University, United States</i>	
WE-A5.2A.8: NEAR-FIELD ELECTRICALLY SMALL SENSORS ARRAY WITH PCA FOR MICROWAVE BREAST TUMOR DETECTION	1007
<i>Maged Aldhaeabi, Saeed Bamatraf, Thamer Almoneef, Omar Ramahi, University of Waterloo, Canada</i>	
WE-A5.2A.9: A FAST METHOD TO ESTIMATE PEAK LOCAL SAR UNDER MRI WITH RF SHIMMING	1009
<i>Shuo Song, Jianfeng Zheng, Ji Chen, University of Houston, United States</i>	
 WE-A4.1A: METHODS OF INVERSE SCATTERING	
WE-A4.1A.1: FULL SPARSITY IN COMPRESSIVE PROCESSING FOR NON-LINEAR INVERSE SCATTERING	1011
<i>Nicola Anselmi, Andrea Massa, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy</i>	
WE-A4.1A.2: A CONVENIENT REWRITING TO THE 2D INVERSE SCATTERING PROBLEM BASED ON THE REDUCED SCATTERED FIELD	1013
<i>Martina Teresa Bevacqua, Tommaso Isenia, Università Mediterranea di Reggio Calabria, Italy</i>	
WE-A4.1A.3: MICROWAVE IMAGING OF STRONG SCATTERERS THROUGH A MULTI-RESOLUTION CONTRACTION INTEGRAL EQUATION METHOD	1015
<i>Marco Salucci, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy; Kuiwen Xu, Key Lab of RF Circuits and Systems of Ministry of Education, Hangzhou Dianzi University, Hangzhou, China, China; Yu Zhong, Institute of High Performance Computing, A*STAR, Singapore, Singapore</i>	
WE-A4.1A.5: MULTI-SCALE COMPRESSIVE PROCESSING FOR INVERSE SCATTERING WITHIN THE CONTRAST SOURCE FORMULATION	1017
<i>Marco Salucci, Lorenzo Poli, Nicola Anselmi, Andrea Massa, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy</i>	
WE-A4.1A.6: EXPLOITING SPARSITY IN ADAPTIVE RELEVANCE VECTOR MACHINE FOR RECONFIGURABLE SOFT-FIELD TOMOGRAPHY	1019
<i>Daniel Ospina Acero, Fernando Teixeira, Ohio State University, United States; Qussai M. Marashdeh, Tech4Imaging LLC, United States</i>	
WE-A4.1A.7: STATISTICAL BAYESIAN INVERSION OF ULTRA-DEEP ELECTROMAGNETIC LWD DATA: TRANS-DIMENSIONAL MARKOV CHAIN MONTE CARLO WITH PARALLEL TEMPERING	1021
<i>Qiuyang Shen, Jiefu Chen, University of Houston, United States; Hanming Wang, Chevron Corporation, United States; Yueqin Huang, Cyentech Consulting LLC, United States</i>	
WE-A4.1A.8: THREE-DIMENSIONAL JOINT INVERSION OF ACOUSTIC AND ELECTROMAGNETIC DATA BASED ON CONTRAST SOURCE INVERSION	1023
<i>Xiaoqian Song, Maokun Li, Fan Yang, Shenheng Xu, Tsinghua University, China; Aria Abubakar, Schlumberger, United States</i>	
WE-A4.1A.9: A MULTI-RESOLUTION EVOLUTIONARY PROGRAMMING TECHNIQUE FOR GPR APPLICATIONS	1025
<i>Maryam Hajebi, Hormozgan University, Iran; Ahmad Hoorfar, Villanova University, United States</i>	

WE-A3.1A: OPTIMIZATION METHODS IN EM DESIGNS

WE-A3.1A.1: ACCELERATED ANTENNA OPTIMIZATION USING GRADIENT SEARCH WITH SELECTIVE BROYDEN UPDATES 1027

Slawomir Koziel, Reykjavik University, Iceland; Anna Pietrenko-Dabrowska, Gdansk University of Technology, Poland

WE-A3.1A.2: DESIGN REUSING FOR EXPEDITED DESIGN OPTIMIZATION OF ANTENNA STRUCTURES 1029

Slawomir Koziel, Reykjavik University, Iceland; Adrian Bekasiewicz, Gdansk University of Technology, Poland

WE-A3.1A.3: VORONOI TESSELLATION OPTIMIZATION 1031

Ronald Jenkins, Douglas H. Werner, Pennsylvania State University, United States

WE-A3.1A.4: A COMPARISON BETWEEN GREY WOLF AND INVASIVE WEED OPTIMIZATIONS APPLIED TO MICROSTRIP FILTERS 1033

Stefano Maddio, Giuseppe Pelosi, Monica Righini, Stefano Selleri, University of Florence, Italy

WE-A3.1A.5: NATURE-INSPIRED OPTIMIZATION OF APERIODIC METASURFACES FOR ANTENNA BEAM-SHAPING 1035

Ahmad Hoorfar, Christopher Israel, Villanova University, United States

WE-A3.1A.6: SNO AND MBBO OPTIMIZATION METHODS FOR BEAM SCANNING REFLECTARRAY ANTENNAS 1037

Michele Beccaria, Andrea Massaccesi, Paola Pirinoli, Politecnico di Torino, Italy; Alessandro Niccolai, Riccardo Zich, Politecnico di Milano, Italy

WE-A3.1A.7: INVERSION-FREE EVALUATION OF SMALL GEOMETRY PERTURBATION IN METHOD OF MOMENTS 1039

Miloslav Capek, Lukas Jelinek, Czech Technical University in Prague, Czech Republic; Mats Gustafsson, Lund University, Sweden

WE-A3.1A.8: GAIN OPTIMIZATION OF A YAGI-UDA ANTENNA USING THE GENETIC ALGORITHM 1041

Abdelbaki Zeghdoud, Mohammed Cherif Derbal, Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada

WE-A3.1A.9: MACHINE-LEARNING-ASSISTED TWO-STEP ANTENNA MODELLING METHOD 1043

Qi Wu, Jiexi Yin, Chen Yu, Haiming Wang, Wei Hong, Southeast University, China

WE-A3.1A.10: COMPLEX PERMITTIVITY ESTIMATION FOR CONSTRUCTION MATERIALS BASED ON PSO METHOD 1045

Jiangui Luo, Yu Shao, Chongqing University of Posts and Telecommunications, China; Rui Zhang, China Research Institute of Radiowave Propagation, China; Xi Liao, Jie Zhang, Chongqing University of Posts and Telecommunications, China

WE-A2.2A: THEORETICAL ELECTROMAGNETICS II

WE-A2.2A.1: THEORETICAL MODAL ANALYSIS OF SQUARE WAVEGUIDES FILLED WITH EFFECTIVELY SKEW UNIAXIAL MEDIA N/A

Walid Dyab, Prince Sultan University, Saudi Arabia; Ahmed Sakr, Stanford University, United States; Ke Wu, Polytechnique Montréal, Canada

WE-A2.2A.2: COMPACT DUAL-MODE RIDGE WAVEGUIDE DUAL-BAND FILTER N/A

Ya Xie, Fu-Chang Chen, South China University of Technology, China

WE-A2.2A.3: ANALYSIS OF A 200-GHZ OAM RADIO LINK USING A GENERALIZED FRIIS TRANSMISSION EQUATION 1051

Woo Jin Byun, Electronics and Telecommunications Research Institute, Korea (South); Yong Heui Cho, Mokwon University, Korea (South)

WE-A2.2A.4: ACCELERATION OF LASER-DRIVEN LIGHT SAILS WITH SIZE COMPARABLE TO THE BEAM	1053
<i>Oscar Céspedes Vicente, Christophe Caloz, Polytechnique Montréal, Canada</i>	
WE-A2.2A.5: GEOMETRIC IMPROVEMENTS ON SOLAR CELLS FOR REDUCING REFLECTIONS	1055
<i>Bariscan Karaosmanoglu, Behre Nur Bice, Ozgur Ergul, Middle East Technical University, Turkey</i>	
WE-SP.1P: TIME-DOMAIN COMPUTATIONAL METHODS FOR COMPLEX ELECTROMAGNETIC AND MULTIPHYSICS PROBLEMS	
WE-SP.1P.1: A DGTD-BASED MULTISCALE SIMULATOR FOR ELECTROMAGNETIC MULTIPHYSICS PROBLEMS	1057
<i>Su Yan, Howard University, United States; Jian-Ming Jin, University of Illinois at Urbana-Champaign, United States</i>	
WE-SP.1P.2: 3D MULTISCALE UNCONDITIONALLY STABLE TIME-DOMAIN MODELING OF NONLINEAR RF THIN FILM MAGNETIC DEVICES	1059
<i>Zhi Yao, Han Cui, Rüstü Umut Tok, Yuanxun Ethan Wang, University of California, Los Angeles, United States</i>	
WE-SP.1P.4: FAST EVALUATION OF RETARDED ELECTROMAGNETIC POTENTIALS FOR QUANTUM CALCULATIONS	1061
<i>Dor Gabay, Amir Natan, Amir Boag, Tel Aviv University, Israel; Ali E. Yilmaz, University of Texas at Austin, United States</i>	
WE-SP.1P.6: ROLE OF CLASSICAL TIME DOMAIN CEM METHODS FOR QUANTUM ELECTROMAGNETICS	1063
<i>Thomas Roth, Sandia National Laboratories, United States; Weng Cho Chew, Purdue University, United States</i>	
WE-SP.1P.7: NUMERICAL CHERENKOV INSTABILITIES IN KINETIC PLASMA PARTICLE-IN-CELL SIMULATIONS BASED ON STRUCTURED AND UNSTRUCTURED MESHES	1065
<i>Dong-Yeop Na, Julio de Lima Nicolini, Fernando Lisboa Teixeira, Ohio State University, United States</i>	
WE-SP.1P.9: GENERALIZED TENSOR FDTD METHOD FOR SLOPED PLASMONIC INTERFACES	1067
<i>Qiming Zhao, Costas Sarris, University of Toronto, Canada</i>	
WE-SP.1P.10: A UNIT-CELL DISCONTINUOUS GALERKIN SCHEME FOR ANALYZING PLASMONIC PHOTOMIXERS	1069
<i>Liang Chen, Hakan Bagci, King Abdullah University of Science and Technology (KAUST), Saudi Arabia</i>	
WE-SP.2P: DESIGN AND INTEGRATION ASPECTS OF BEYOND 5G COMMUNICATIONS FOR MOBILE DEVICES	
WE-SP.2P.1: OVERVIEW OF 5G MM-WAVE ANTENNA DESIGN SOLUTIONS IN CELLULAR PHONES: AIP, AIA, AND AIAIP	1071
<i>Huan-Chu Huang, vivo Mobile Communication Co., Ltd, China</i>	
WE-SP.2P.3: MILLIMETER-WAVE ANTENNA ARRAYS WITH BEAM STEERING FOR 5G MOBILE TERMINALS	1073
<i>Shuai Zhang, Gert Pedersen, Aalborg University, Denmark</i>	
WE-SP.2P.4: INTEGRATION AND EVALUATION OF ANTENNA SYSTEMS FOR 5G MMWAVE MOBILE DEVICE	1075
<i>Kun Zhao, Olof Zander, Thomas Bolin, Zhinong Ying, Sony Mobile Communications, Sweden; Shuai Zhang, Gert Frølund Pedersen, Aalborg University, Denmark</i>	
WE-SP.2P.5: CORRELATION COEFFICIENT REDUCTION IN MIMO ANTENNAS USING PRS AT SUB-WAVELENGTH HEIGHTS	N/A
<i>Muhammad Umair Illahi, Muhammad Umar Khan, Tayyab Hassan, National University of Sciences and Technology (NUST), Pakistan; Rifaqat Hussain, King Fahd University of Petroleum and Minerals (KFUPM), Saudi Arabia; Mohammad Sharawi, Polytechnique Montréal, Canada</i>	

WE-SP.2P.6: ADVANCED 12×12 MIMO ANTENNAS FOR NEXT GENERATION 5G SMARTPHONES.....	1079
<i>Chisang You, LG Electronics Inc., Korea (South); Kin-Lu Wong, National Sun Yat-Sen University, Taiwan</i>	
WE-SP.2P.9: PERFORMANCE COMPARISON OF SILICON SUBSTRATES FOR IC-WAVEGUIDE INTEGRATION BASED ON A CONTACTLESS TRANSITION AT MM-WAVE FREQUENCIES	1081
<i>Alhassan Aljarosha, Piyush Kaul, A. Bart Smolders, Marion Matters-Kammerer, Rob Maaskant, Eindhoven University of Technology, Netherlands</i>	
WE-SP.2P.10: A DUAL-BAND MILLIMETER-WAVE ANTENNA FOR 5G MOBILE APPLICATIONS.....	1083
<i>Chong-Zhi Han, Guan-Long Huang, Tao Yuan, Shenzhen University, China; Chow-Yen-Desmond Sim, Feng Chia University, Taiwan</i>	
WE-A1.1P: BROADBAND/ULTRA WIDEBAND ANTENNAS AND SYSTEMS II	
WE-A1.1P.1: PRINTED CACTUS MONOPOLE ANTENNA WITH ENHANCED IMPEDANCE BANDWIDTH	1085
<i>Eric Eveleigh, Alexander Beaverstone, Natalia Nikolova, McMaster University, Canada</i>	
WE-A1.1P.2: HIGH GAIN CIRCULARLY POLARIZED STACKED CIRCULAR PATCHES LOADED WITH A CIRCULAR SECTOR NOTCHES AND VERTICAL GROUND RING FOR UHF RFID UNIVERSAL READER	1087
<i>Hany Hammad, German University in Cairo, Egypt</i>	
WE-A1.1P.3: GRAPHENE-BASED TEXTILE ULTRA WIDEBAND ANTENNAS FOR INTEGRATED AND WEARABLE APPLICATIONS	1089
<i>Isidoro Ibanez Labiano, Syeda Fizzah Jilani, Queen Mary University of London, United Kingdom; Muhammed Said Ergoktas, Coskun Kocabas, University of Manchester, United Kingdom; Elif Ozden-Yenigun, Royal College of Art, United Kingdom; Akram Alomainy, Queen Mary University of London, United Kingdom</i>	
WE-A1.1P.4: DESIGN OF COMPACT UWB COPLANAR WAVEGUIDE-FED MODIFIED SIERPINSKI CARPET FRACTAL ANTENNA	1091
<i>Abdenmour Ben Terki, Mourad Nedil, Youcef Braham Chaouche, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada</i>	
WE-A1.1P.5: A WIDEBAND ENDFIRE ANTENNA USING SWG-HIS HYBRID STRUCTURE	1093
<i>You-Feng Cheng, Cheng Liao, Institute of Electromagnetics, Southwest Jiaotong University, China; Fu-Long Jin, Yu-Ming Wu, Xiao Ding, Institute of Applied Physics, University of Electronic Science and Technology of China, China</i>	
WE-A1.1P.6: A NOVEL UWB ANTENNA FOR WIRELESS COMMUNICATION SYSTEMS USING GENETIC ALGORITHMS	1095
<i>Mohammed Cherif Derbal, Abdelbaki Zeghdoud, Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada</i>	
WE-A1.1P.7: DESIGN OF LARGE-BAND HIGHLY DIRECTIVE ANTENNA IN THE MILLIMETER WAVES RANGE AT 80 GHZ	1097
<i>Habiba Hafdallah Ouslimani, Fanhong Meng, Paris Lumière University Paris Nanterre, France</i>	
WE-A1.1P.8: DESIGN AND SIMULATION OF A POLYGONAL DISCONE ANTENNA FOR SIMPLIFIED FABRICATION AND RECONFIGURABILITY	1099
<i>Mohamad Fazeli, Kathryn Smith, University of North Carolina at Charlotte, United States</i>	
WE-A1.1P.9: ELLIPTICAL DISK CAVITY BACKED ANTENNA FOR UWB SYSTEMS	1101
<i>Carlos Ramiro Peñafiel-Ojeda, Anibal Llanga-Vargas, Marta Cabedo-Fabrés, Miguel Ferrando-Bataller, Universitat Politècnica de València, Spain</i>	
WE-A1.1P.10: WIDEBAND OMNIDIRECTIONAL CIRCULARLY POLARIZED ANTENNA FOR MILLIMETER-WAVE APPLICATIONS USING PRINTED ARTIFICIAL ANISOTROPIC POLARIZER	1103
<i>Chen Ding, Kwai-Man Luk, State Key Laboratory of Terahertz and Millimeter Waves, China</i>	

WE-A1.2P: MICROSTRIP ANTENNAS, CIRCUITS AND DESIGN I

WE-A1.2P.1: DATA ACQUISITION CIRCUIT FOR IDENTIFICATION OF RF SIGNALS' DIRECTION OF ARRIVAL1105

Tarcisio Augusto de Bonfim Gripp, Bernardo Moscardini Fabiani, Eduardo dos Santos Silveira, Daniel Chagas do Nascimento, Technological Institute of Aeronautics, Brazil

WE-A1.2P.2: AN AIR GAP LOADED LOW PROFILE MICROSTRIP ANTENNA WITH HANGING POST INTEGRATED PATCH SURFACE: A NEW APPROACH TO REDUCE CROSS POLARIZATION RADIATIONN/A

Subhradeep Chakraborty, Central Electronics Engineering Research Institute, India; Tanmoy Sarkar, Burdwan University, India; Atmakuru Nagaraju, Central Electronics Engineering Research Institute, India; Sudipta Chattopadhyay, IITK, India; Lk Singh, Mizoram University, India

WE-A1.2P.3: A COMPACT, ZERO-POWER AND LOW-NOISE HARMONIC-TRANSPONDER FOR LIQUID AND MOISTURE SENSING1109

Liang Zhu, Pai-Yen Chen, University of Illinois at Chicago, United States

WE-A1.2P.4: TWO ELEMENT SERIES FED ORIGAMI ANTENNA 1111

David Rohde, Sima Noghianian, University of North Dakota, United States; Yi-hsiang Chang, Illinois State University, United States; Satish K Sharma, San Diego State University, United States

WE-A1.2P.5: TIME-VARYING PHASE CONTROL FOR FREQUENCY TRANSLATION 1113

Debjit Sarkar, Cody Scarborough, Zhanni Wu, Anthony Grbic, University of Michigan, United States

WE-A1.2P.6: OFF-BODY DIPOLE ANTENNA WITH DOGBONE-SHAPED AMC BENDING ON THE HUMAN ARM 1115

Abdelbaki Zeghdoud, Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada

WE-A1.2P.7: PEEL-OFF AND STICK ANTENNAS FOR SMALL UNMANNED AERIAL VEHICLES 1117

Jayakrishnan Vijayamohanam, Firas Ayoub, Marios Patriotis, Christos Christodoulou, University of New Mexico, United States; James Lyke, Air Force Research Laboratory, United States

WE-A1.2P.8: CLOSELY-SPACED RESONANT CAVITY ANTENNAS FOR MEETING ETSI CLASS-2 SPECIFICATIONS 1119

Arslan Kiyani, Raheel Hashmi, Karu Esselle, Macquarie University, Australia

WE-A1.3P: MULTI-BAND ANTENNAS II

WE-A1.3P.1: STUDY OF A METHOD FOR INCREASING ISOLATION BETWEEN CLOSELY SPACED ELEMENTS INTEGRATED IN MULTI-STANDARD MULTI-ANTENNA SYSTEMS1121

Lamia Sadaoui, Luca Santamaria, Leonardo Lizzi, Robert Staraj, University Cote d'Azur, CNRS, France

WE-A1.3P.2: COMPACT, DUAL-BAND, HYBRID MONOPOLE-ASA, ANTENNA1123

Abdullah Haskou, Anthony Pesin, Jean-Yves Le Naour, Ali Louzir, Technicolor Research and Innovation, France

WE-A1.3P.3: MILLIMETER-WAVE SIW CAVITY-BACKED DUAL-BAND SELF-COMPLEMENTARY LOG-PERIODIC ANTENNA1125

Abdessalem Talbi, Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada

WE-A1.3P.4: MEASURED VERSUS SIMULATED RESULTS OF A DUAL BAND, HYBRID SUBSTRATE, AND SHARED APERTURE ANTENNA1127

Gregory Mitchell, Theodore Anthony, Army Research Laboratory, United States

WE-A1.3P.5: A NOVEL DESIGN OF MULTIBAND ANTENNA BASED ON NON-DOMINATED SORTING GENETIC ALGORITHM1129

Si Ce Wang, Yun Jie Mao, Min Jun Li, Han Kai Yang, Mei Song Tong, Tongji University, China

WE-A1.3P.6: MULTIPOINT ENHANCE GAIN SHARED APERTURE ANTENNA FOR S/X-BAND SYNTHETIC APERTURE RADAR APPLICATIONS	N/A
<i>Venkata Kishore Kothapudi, Vijay Kumar, Vellore Institute of Technology, India</i>	
WE-A1.3P.7: A DUAL-BAND BIFILAR HELICAL ANTENNA WITH PARASITIC PARALLELOGRAM LOOPS	1133
<i>Weihua Tan, Zhongxiang Shen, Nanyang Technological University, Singapore</i>	
WE-A1.3P.8: BAND-NOTCHED FILTERING CROSSED DIPOLE ANTENNA WITHOUT EXTRA CIRCUIT	1135
<i>Yaohui Zhang, Yonghong Zhang, Yong Fan, University of Electronic Science and Technology of China, China; Daotong Li, Chongqing University, China</i>	
WE-A1.3P.9: A CSRR AND SRR BASED ULTRAWIDEBAND MIMO ANTENNA WITH BAND-NOTCHED CHARACTERISTICS	1137
<i>Hongmei Li, Zhe Jiang, Harbin Institute of Technology, China</i>	
 WE-A1.4P: RECONFIGURABLE ARRAYS	
WE-A1.4P.1: TWO-ELEMENT COMPACT ANTENNA ARRAYS USING DECOUPLING NETWORKS AND PHASE SHIFTERS FOR FOUR-BRANCH SWITCHING DIVERSITY	1139
<i>Kengo Nishimoto, Yasuhiro Nishioka, Naofumi Yoneda, Mitsubishi Electric Corporation, Japan</i>	
WE-A1.4P.2: A THICK ORIGAMI FOUR-PATCH ARRAY	1141
<i>Muhammad Hamza, Constantinos L. Zekios, Stavros V. Georgakopoulos, Florida International University, United States</i>	
WE-A1.4P.3: A TIGHTLY COUPLED ARRAY LOADED ON A MIURA-ORI PATTERN	1143
<i>Muhammad Hamza, Constantinos L. Zekios, Stavros V. Georgakopoulos, Florida International University, United States</i>	
WE-A1.4P.4: STUDY OF ACTIVE VSWR IN A REDUCED BFN ANTENNA ARRAY	1145
<i>Hala Alzein, Jorick Milbrandt, Abdul-Sattar Kaddour, Cyrille Menudier, Marc Thevenot, Thierry Monediere, Univ. Limoges, CNRS, XLim, France</i>	
WE-A1.4P.5: WIDE BEAM COVERAGE DIPOLE ANTENNA ARRAY WITH PARASITIC ELEMENTS FOR UAV COMMUNICATION	1147
<i>Dong-Geun Seo, Chang-Hyun Jeong, Yu-Seong Choi, Jeong-Soo Park, Ye-Yeong Jeong, Wang-Sang Lee, GyeongSang National University, Korea (South)</i>	
WE-A1.4P.6: WAVEGUIDE-FED LENS BASED BEAM-STEERING ANTENNA FOR 5G WIRELESS COMMUNICATIONS	1149
<i>Saeideh Shad, Shafaq Kausar, Hani Mehrpouyan, Boise State University, United States</i>	
WE-A1.4P.7: A TRI-BAND DUAL-POLARIZED SLOT-RING ANTENNA FOR ARRAY DESIGN	1151
<i>Junyi Huang, Xun Gong, University of Central Florida, United States</i>	
WE-A1.4P.8: A RECONFIGURABLE WIDEBAND FEEDING NETWORK FOR POLARIZATION DIVERSE ANTENNA ARRAYS	1153
<i>Youssef Tawk, Joseph Costantine, American University of Beirut, Lebanon</i>	
WE-A1.4P.9: RECONFIGURABLE ANTENNA FOR AUTOMOTIVE RADAR SYSTEM	1155
<i>Ji Dong, Lei Zhang, Institute of Microelectronics, Tsinghua University, China</i>	
 WE-A5.1P: ELECTROMAGNETIC ENERGY HARVESTING	
WE-A5.1P.1: A DUAL-BAND ELECTROMAGNETIC ENERGY HARVESTING SURFACE	1157
<i>Faruk Erkmen, Omar Ramahi, University of Waterloo, Canada</i>	
WE-A5.1P.2: ANALYSIS OF MULTI-STAGE VOLTAGE DOUBLER FOR RF ENERGY HARVESTING	1159
<i>Alex Mouapi, Nadir Hakem, Nahi Kandil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada</i>	

WE-A5.1P.3: HIGH EFFICIENCY RF ENERGY HARVESTER FOR IOT EMBEDDED SENSOR NODES	1161
<i>Stylianos Assimonis, Queen's University Belfast, United Kingdom; Spyridon Daskalakis, Georgia Institute of Technology, United States; Vincent Fusco, Queen's University Belfast, United Kingdom; Manos Tentzeris, Georgia Institute of Technology, United States; Apostolos Georgiadis, Heriot-Watt University, United Kingdom</i>	
WE-A5.1P.4: FLEXIBLE W-BAND RECTIFIERS FOR 5G-POWERED IOT AUTONOMOUS MODULES	1163
<i>Aline Eid, Jimmy Hester, Bijan Tehrani, Manos Tentzeris, Georgia Institute of Technology, United States</i>	
WE-A5.1P.5: WIDEBAND METASURFACE FOR MICROWAVE ENERGY HARVESTING	1165
<i>Thamer Almoneef, Saud Saeed, Prince Sattam Bin Abdulaziz University, Saudi Arabia; Maged Aldhaeabi, University of Waterloo, Canada; Mohammed Bait-Suwailam, Sultan Qaboos University, Oman</i>	
WE-A5.1P.6: DUAL POLARIZATIONS SINGLE-FEED CROSS-DIPOLE ENERGY HARVESTING SURFACE	1167
<i>Ahmed Ashoor, Omar Ramahi, University of Waterloo, Canada</i>	
WE-A5.1P.7: A PERFORMANCE ANALYSIS OF SCHOTTKY DIODE TO SUPPORT RF ENERGY HARVESTING	1169
<i>Alex Mouapi, Nadir Hakem, Nahi Kandil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada</i>	
WE-A5.1P.8: OPTICAL PLASMONIC NANO-ANTENNAS ARRAY FOR ENERGY HARVESTING APPLICATIONS	N/A
<i>Patrizia Livreri, University of Palermo, Italy</i>	
WE-A5.1P.9: A DUAL-BAND RECTENNA WITH IMPROVED RF-DC SENSITIVITY FOR WIRELESS ENERGY HARVESTING	1173
<i>Sichong Li, Fadhel Ghannouchi, Rushi Vyas, University of Calgary, Canada</i>	
WE-A5.1P.10: 4X4 CIRCULARLY POLARIZED ANTENNA ARRAY FOR AMBIENT RF ENERGY HARVESTING	1175
<i>Osama Dardeer, Ain Shams University, Egypt; Hala Elsadek, Esmat Abdallah, Electronics Research Institute, Egypt; Hadia Elhennawy, Ain Shams University, Egypt</i>	
WE-A2.1P: ELECTROMAGNETIC BAND GAP STRUCTURES	
WE-A2.1P.1: A SIMPLE TECHNIQUE FOR EBG DESIGN FOR MONOPOLE ANTENNA ISOLATION IMPROVEMENT	1177
<i>Ahmed Arman, Mohammad Ali, University of South Carolina, United States; Terry Vogler, Boeing, United States</i>	
WE-A2.1P.2: MODIFIED EBG DESIGN CIRCUIT MODEL FOR ISOLATION IMPROVEMENT BETWEEN MONOPOLE ANTENNAS	1179
<i>Ahmed Arman, Mohammad Ali, University of South Carolina, United States; Terry Vogler, Boeing, United States</i>	
WE-A2.1P.3: PULSE GENERATION USING A DEGENERATE BAND EDGE STRUCTURE	1181
<i>Dmitry Oshmarin, Hamidreza Kazemi, Ahmed Abdelshafy, Filippo Capolino, University of California, Irvine, United States</i>	
WE-A2.1P.4: TILING OF SUPERSHAPED ELECTROMAGNETIC BAND GAP STRUCTURES	N/A
<i>Shady Keyrouz, Bedilu Adela, Diego Caratelli, The Antenna Company, Netherlands</i>	
WE-A2.1P.5: MICROSTRIP ANTENNA ARRAY WITH REDUCED MUTUAL COUPLING USING SLOTTED-RING EBG STRUCTURE FOR 5G APPLICATIONS	1185
<i>Oludayo Sokunbi, Hussein Attia, Sharif Sheikh, King Fahd University of Petroleum and Minerals (KFUPM), Saudi Arabia</i>	
WE-A2.1P.7: EXTERNAL MAGNETIC FIELD INDUCED CONICAL SINGULARITIES IN THE ISOFREQUENCY SURFACE OF A FERRITE-SEMICONDUCTOR METAMATERIAL	N/A
<i>Illia Fedorin, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine</i>	

WE-A2.1P.8: A COMPACT EBG FOR HIGH ISOLATION BETWEEN TWO VERY CLOSEBY WIRE-ANTENNAS FOR RFID TAGS	1189
<i>Jinyoung Kwon, Heejun Park, Changhyeong Lee, Gwanggyun Namgung, Yejune Seo, Sungtek Kahng, Incheon National University, Korea (South); Jaewook Kim, National IoT Industry Promotion Agency, Korea (South)</i>	
WE-A2.1P.9: THREE-DIMENSIONAL BANDSTOP FREQUENCY-SELECTIVE STRUCTURES BASED ON GIELIS-SHAPED LOOP RESONATOR	1191
<i>Vignesh Shanmugam Bhaskar, Eng Leong Tan, King Ho Holden Li, Nanyang Technological University, Singapore</i>	
WE-A2.1P.10: COMPOSITE LATTICE STRUCTURE FREQUENCY-SELECTED RADOME DESIGN	N/A
<i>Jiahe Mei, Tao Jiang, Yingsong Li, Yibing Li, Fang Ye, Harbin Engineering University, China; Bin Cao, Marine Design & Research Institute of China, China</i>	
WE-A2.2P: METASURFACES AND TRANSMIT/REFLECT ARRAYS	
WE-A2.2P.1: TRANSMITARRAY BASED METASURFACE LENS ANTENNA	1195
<i>Asif Ahmed, Md. Rokunuzzaman Robel, Wayne S. T. Rowe, RMIT University, Australia</i>	
WE-A2.2P.2: X-BAND REFLECTIVE ELECTROMAGNETIC BEAM CONTROLLING METASURFACES	1197
<i>Hongmei Li, Hongmei Li, Xuming Man, Xuming Man, Harbin Institute of Technology, China</i>	
WE-A2.2P.3: OMEGA-BIANISOTROPIC WIRE-LOOP HUYGENS' METASURFACE FOR WIDE-ANGLE REFRACTION	1199
<i>Michael Chen, George V. Eleftheriades, University of Toronto, Canada</i>	
WE-A2.2P.4: A CIRCUIT-BASED APPROACH TO THE SYNTHESIS OF 2-D OMEGA MATERIALS	1201
<i>Luke Szymanski, Anthony Grbic, University of Michigan, United States</i>	
WE-A2.2P.5: POLARIZATION INDEPENDENT, BROAD ANGLE RETRO-REFLECTION WITH AN OPTICAL META-GRATING	1203
<i>Hoyeong Kwon, Andrea Alù, University of Texas at Austin, United States</i>	
WE-A2.2P.6: METASURFACE FROM HYPERUNIFORM DISORDERED DISTRIBUTION	1205
<i>Haoyang Zhang, Yang Hao, Queen Mary University of London, United Kingdom</i>	
WE-A2.2P.8: TOWARDS DECREASING SIDE LOBES PRODUCED BY NEAR-FIELD PHASE GRADIENT METASURFACES	1207
<i>Khushboo Singh, Muhammad Usman Afzal, Karu Esselle, Maria Kovaleva, Macquarie University, Australia</i>	
WE-A2.2P.9: TRANSMISSIVE SUPPRESSED-ORDER DIFFRACTION GRATING (SODG)	1209
<i>Ashutosh Patri, Guillaume Lavigne, Christophe Caloz, Polytechnique Montréal, Canada</i>	
WE-A2.2P.10: AN EFFICIENT AND BROADBAND METALENS FOR X BAND	N/A
<i>Yumna Siddique, Muhammad Zubair, Information Technology University, Pakistan; Muhammad Mahmood Ali, GIK Institute of Engineering Science & Technology, Pakistan; Muhammad Qasim Mehmood, Information Technology University, Pakistan</i>	
WE-A1.5P: BROADBAND ARRAYS	
WE-A1.5P.1: ONE DUAL-POLARIZATION 10-40 GHZ PLANAR ARRAY ANTENNA FOR SATTELLITE COMMUNICATION	1213
<i>Yujie Liu, Yang Hao, Queen Mary University of London, United Kingdom</i>	
WE-A1.5P.2: LOW ANGLE SCANNING PHASED ARRAYS WITH GREATER THAN 50:1 BANDWIDTH	1215
<i>Alexander D. Johnson, Elias A. Alwan, John L. Volakis, Florida International University, United States</i>	
WE-A1.5P.3: OPTIMIZATION OF A WIDEBAND PLANAR SPARSE ARRAY BASED ON DANZER APERIODIC TILING	1217
<i>Shaoqing Hu, Chao Shu, Xiaodong Chen, Queen Mary University of London, United Kingdom; Kai Wang, East China Research Institute of Electronic Engineering, China</i>	

WE-A1.5P.4: AN EFFICIENT DESIGN APPROACH FOR WIDEBAND TIGHTLY COUPLED ANTENNA ARRAYS 1219

ARRAYS

Wenyang Zhou, Yikai Chen, Shiwen Yang, University of Electronic Science and Technology of China, China

WE-A1.5P.5: A NOVEL WIDE BAND FRACTAL-BASED LEAKY WAVE ANTENNA WITH ARRAY PATCHES N/A

Lifang Zhang, Hongjian Wang, Yang Liu, Key Laboratory of Microwave Remote Sensing, National Space Science Center (NSSC), University of Chinese Academy of Sciences (UCAS), China

WE-A1.5P.6: A BROADBAND ARRAY WITH UNBALANCED FEEDS: ELEMENTS AND POWER COMBINERS BASED ON THE FRAGMENTED APERTURE PRINCIPLE 1223

David Landgren, Georgia Tech Research Institute, United States; Theresa Brunasso, D & S Microwave Inc., United States; Kenneth Allen, Daniel Dykes, Joshua Kovitz, Jonathan Perez, James Dee, Jeremy Marsh, Charles Hunter, Glenn Smith, Georgia Tech Research Institute, United States

WE-A1.5P.7: LOSSY ANTENNA ARRAYS WITH FREQUENCY-INDEPENDENT BEAMWIDTH 1225

Carl Pfeiffer, Thomas Steffen, Defense Engineering Corp., United States; George Kakas, Air Force Research Laboratory, United States

WE-A1.5P.8: MODELING OF CIRCULARLY-POLARIZED CTS ARRAYS 1227

Michele Del Mastro, University of Rennes 1, France; Francesco Foglia Manzillo, Maciej Smierzchalski, CEA - Leti, Minatec Campus, France; David Gonzalez-Ovejero, University of Rennes 1, France; Philippe Pouliguen, Patrick Potier, Direction Générale de l'Armement (DGA), France; Ronan Sauleau, Mauro Ettorre, University of Rennes 1, France

WE-A1.5P.9: WIDEBAND APERIODIC LINEAR ARRAY SYNTHESIS WITH MOEA/D N/A

Chuang Yan, Peng Yang, Lirong Jian, Feng Yang, University of Electronic Science and Technology of China, China

WE-A1.5P.10: MILLIMETER-WAVE WIDEBAND CIRCULARLY POLARIZED ANTENNA ARRAY USING SIW-FED S-DIPOLE ELEMENTS 1231

Long Zhang, Yejun He, Sai-Wai Wong, Shenzhen University, China; Steven Gao, University of Kent, United Kingdom

WE-A1.6P: ANTENNA FEEDS AND MATCHING CIRCUITS III

WE-A1.6P.1: DESIGN OF A CHARACTERISTIC-MODE-BASED FULLY-PLANAR ANTENNA FOR INDOOR IN-BAND FULL-DUPLEX RADIOS 1233

Qianyi Li, Ting-Yen Shih, University of Idaho, United States

WE-A1.6P.2: A SUBSTRATE INTEGRATED WAVEGUIDE FILTERING SLOT ANTENNA ARRAY 1235

Ricardo Lovato, Xun Gong, University of Central Florida, United States

WE-A1.6P.3: COMPACT COMPARATOR FOR 2-D MONOPULSE ARRAY BASED ON NOVEL EIGHT-PORT COUPLER 1237

Kejia Ding, Ahmed Kishk, Concordia University, Canada

WE-A1.6P.4: BROADBAND OPTIMIZATION OF A HIGH POWER UHF BAND CYLINDRICAL SLEEVE DIPOLE ANTENNA 1239

Ray Lewis, Viasat Inc., United States

WE-A1.6P.5: ULTRA-WIDEBAND ANTENNA ARRAY BASED ON ORBITAL ANGULAR MOMENTUM 1241

Massimo Donelli, Mohammedhusen Manekiya, University of Trento, Italy; Viviana Mulloni, Giada Marchi, Fondazione Bruno Kessler (FBK), Italy

WE-UK.2P: BIOMEDICAL APPLICATIONS

WE-UK.2P.5: UWB ROTATION SCANNING SYSTEM FOR BREAST IMAGING 1243

Huihai Wang, Lin Sun, Zhenhua Hu, Shenzhen Terahertz Science and Technology Co. Ltd., China; Dan Pan, Rui Wu, Xiaofeng Zhang, Fan Yang, Shenzhen ET Medical Technology Co. Ltd., China

WE-A3.1P: HIGH PERFORMANCE COMPUTING

WE-A3.1P.1: AUXILIARY SPACE-BASED PRECONDITIONER FOR HIGHER ORDER FINITE ELEMENT METHOD 1245

Elia Amedeo Attardo, Ulrich Jakobus, Altair Engineering GmbH, Germany; Marianne Bingle, Johann van Tonder, Altair Development S.A. (Pty) Ltd, South Africa

WE-A3.1P.2: PHASED ANTENNA ARRAY BEAMFORMING USING CONVOLUTIONAL NEURAL NETWORKS 1247

Ricardo Lovato, Xun Gong, University of Central Florida, United States

WE-A3.1P.3: MODELING LARGE AND COMPLEX OBJECTS WITH FINE GEOMETRICAL DETAILS BY USING THE MASSIVELY PARALLEL COMPUTER CODES JEMS-FDTD 1249

Xuesong Meng, Xianfeng Bao, Qiang Liu, Institute of Applied Physics and Computational Mathematics, China; Zhihong Ye, Chongqing University of Posts and Telecommunications, China; Raj Mitra, University of Central Florida, United States; Haijing Zhou, Institute of Applied Physics and Computational Mathematics, China

WE-A3.1P.4: MASSIVELY PARALLEL SIMULATION OF ANTENNA ARRAY USING DOMAIN DECOMPOSITION METHOD AND A HIGH-PERFORMANCE COMPUTING SCHEME 1251

Hao-Xuan Zhang, Li Huang, Liang Zhou, Shanghai Jiao Tong University, China; Z.G Zhao, Yu-Teng Zheng, Institute of Applied Physics and Computational Mathematics, China; G.D Zhu, Wen-Yan Yin, Zhejiang University, China

WE-A3.1P.5: PARALLELIZATION EFFICIENCY OF MULTI-GPU IN CORE LU DECOMPOSITION OF DENSE MATRICES 1253

Nimrod Teneh, Elta Systems Ltd. Group & Subsidiary of IAI Ltd., Israel; Branko Mrdakovic, Milan Kostic, WIPL-D d.o.o., Serbia; Dragan Olćan, Branko Kolundzija, University of Belgrade, Serbia

TH-SP.1A: ADVANCED DGTD AND FVTD METHODS

TH-SP.1A.1: ADVANCED DISCONTINUOUS GALERKIN TIME-DOMAIN METHODS FOR CHALLENGING ENGINEERING PROBLEMS 1255

Su Yan, Howard University, United States; Jian-Ming Jin, University of Illinois at Urbana-Champaign, United States

TH-SP.1A.2: ARBITRARY HIGH ORDER DISCONTINUOUS GALERKIN TRANSIENT ANALYSIS OF PERIODIC STRUCTURES 1257

Huaguang Bao, Sawyer D. Campbell, Pingjuan L. Werner, Douglas H. Werner, Pennsylvania State University, United States

TH-SP.1A.7: DEVELOPMENT OF HIGHER-ORDER DG-FDTD TOOL FOR EFFICIENT MODELING OF COMPLEX ELECTROMAGNETIC STRUCTURES 1259

Chao-Fu Wang, National University of Singapore, Singapore

TH-SP.1A.8: PARALLEL SUBDOMAIN LEVEL DGTD METHOD WITH LOAD BALANCING 1261

Jiamei Mi, Qiang Ren, Beihang University, China

TH-SP.1A.10: DUAL-FIELD INTERIOR PENALTY DISCONTINUOUS GALERKIN TIME DOMAIN METHOD N/A

Yan Shi, Xidian University, China

TH-SP.2A: DRIVING FORWARD: ADVANCES IN PROPAGATION MODELING FOR WIRELESS SYSTEMS

TH-SP.2A.1: CONFIGURATION OF NETWORK LEVEL ALGORITHMS FOR WIRELESS TRAIN CONTROL SYSTEMS USING PHYSICS-BASED PROPAGATION MODELS 1265

Neeraj Sood, Sami Baroudi, Xingqi Zhang, Jorg Liebeherr, Costas Sarris, University of Toronto, Canada

TH-SP.2A.2: PARAMETER ESTIMATION FOR STOCHASTIC CHANNEL MODELS USING TEMPORAL MOMENTS 1267

Ayush Bharti, Ramoni Adeogun, Troels Pedersen, Aalborg University, Denmark

TH-SP.2A.4: K-FACTOR AND CORRELATION ANALYSIS OF A 2×2 MIMO OFF-BODY CHANNEL INSIDE A MINE	1269
<i>Moulay El Hassan El Azhari, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada; Larbi Talbi, Université du Québec en Outaouais, Canada; Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada</i>	
TH-SP.2A.5: PERFORMANCE ANALYSIS OF TIME-MODULATED ARRAY IN DIGITAL COMMUNICATION SYSTEM	1271
<i>Qianwei Zeng, Peng Yang, Feng Yang, Yin Lu, Yuyi Gan, University of Electronic Science and Technology of China, China</i>	
TH-SP.2A.6: PROPAGATION MODELING FOR AIR-GROUND CHANNEL OVER ROUGH SEA SURFACE IN LOW ALTITUDES	1273
<i>Zhuangzhuang Cui, Ke Guan, Danping He, Bo Ai, Zhangdui Zhong, Beijing Jiaotong University, China</i>	
TH-SP.2A.8: PATH LOSS MODEL AS A FUNCTION OF ANTENNA HEIGHT FOR 300 GHZ CHIP-TO-CHIP COMMUNICATIONS	1275
<i>Jinbang Fu, Prateek Juyal, Alenka Zajić, Georgia Institute of Technology, United States</i>	
 TH-A1.1A: MULTI-BAND ANTENNAS FOR MOBILE COMMUNICATIONS	
TH-A1.1A.1: DUAL-BAND EIGHT-ANTENNA MIMO ARRAY FOR 5G SMARTPHONE	1277
<i>Peng Yang, Kuixi Yan, Yuyi Gan, Feng Yang, University of Electronic Science and Technology of China, China</i>	
TH-A1.1A.2: A TRI-BAND SHARED-APERTURE ANTENNA FOR WI-FI MIMO AND BEAM-SCANNING WI-GIG APPLICATIONS	1279
<i>Yanran Ding, Yujian Cheng, University of Electronic Science and Technology of China (UESTC), China</i>	
TH-A1.1A.3: AN ULTRA-THIN TRIPLE-BAND SMARTWATCH ANTENNA WITH SUPPORT OF SEVERAL WIRELESS APPLICATION BANDS	1281
<i>Amirreza Jalali Khalilabadi, Ata Zadehghol, University of Idaho, United States</i>	
TH-A1.1A.4: A COMPACT TRI-BAND ANTENNA FOR VEHICLE COMMUNICATION AND NAVIGATION APPLICATIONS	1283
<i>Shan Jiang, Chang Chen, Qingyuan Zhang, Weidong Chen, University of Science and Technology of China, China; Hualiang Zhang, University of Massachusetts Lowell, United States</i>	
TH-A1.1A.5: A MIMO ANTENNA ARRAY FOR 5G MOBILE TERMINALS	1285
<i>Lijia Chen, Dajing Wang, Shufeng Zhang, Li Xia, Shengmin Jiang, Shengchang Lan, Harbin Institute of Technology, China</i>	
TH-A1.1A.6: DUAL BAND GRAPHENE NANOFLEAKS PRINTED COMPACT MONOPOLE ANTENNA FOR LOW COST WIFI APPLICATIONS	1287
<i>Ting Leng, Kewen Pan, Yutong Jiang, Zhirun Hu, University of Manchester, United Kingdom; Habiba Ouslimani, Université Paris Ouest Nanterre La Défense, France; Mahmoud A. Abdalla, Military Technical College, Egypt</i>	
TH-A1.1A.7: A LOW-PROFILE DUAL-BAND DUAL-POLARIZED BASE STATION ANTENNA ARRAY FOR SUB-6 GHZ APPLICATIONS	1289
<i>Yufeng Zhu, Yikai Chen, Shiwen Yang, University of Electronic Science and Technology of China, China</i>	
TH-A1.1A.8: LOW PROFILE TRI-BANDS ANTENNA FOR WIRELESS APPLICATIONS	1291
<i>Ali Al-Azza, Basrah uvevrsity, Iraq; Nuhad Malalla, Iraq University, Iraq; Mohamed Morsy, Texas A&M University-Texarkana, United States; Frances Harackiewicz, Southern Illinois University Carbondale, United States</i>	
TH-A1.1A.9: A NOVEL TRIPLE BAND ANTENNA FOR WLAN APPLICATION	1293
<i>Xiao Jia Huang, Hong Qin Zheng, Han Yu Shi, Yin Xuan Zhu, Mei Song Tong, Tongji University, China</i>	
TH-A1.1A.10: A CAPACITIVE LOADED CRLH IN REVERSAL TRIPLE BAND MIMO ANTENNA	1295
<i>Mahmoud A. Abdalla, Military Technical College, Egypt; Ahmed Elmowafy, Toka Ghaly, October University for Modern Sciences and Arts (MSA), Egypt</i>	

TH-A2.1A: NANOELECTROMAGNETICS

TH-A2.1A.1: NOVEL ELECTROMAGNETIC SCATTERING MODEL FOR CARBON NANOTUBE COMPOSITES USING THE MULTILAYER GREEN'S FUNCTION APPROACH 1297

Sumitra Dey, Deb Chatterjee, University of Missouri-Kansas City, United States; Edward J. Garboczi, National Institute of Standards and Technology, United States; Ahmed M. Hassan, University of Missouri-Kansas City, United States

TH-A2.1A.2: SUSCEPTIBILITY OF NANOPARTICLES STUDIED BY LANDAU-LIFSHITZ-GILBERT AND SNOEK'S EQUATIONS 1299

Quang Nguyen, Amir Zaghloul, Army Research Laboratory, United States

TH-A2.1A.3: OPTIMIZATION OF COPLANAR WAVEGUIDE STRUCTURE FOR ULTRA WIDEBAND INTEGRATED ELECTRO-OPTIC MACH ZEHNDER MODULATOR 1301

Farzaneh Arab Juneghani, Reza Safian, Imec Florida, United States

TH-A2.1A.4: SLOW LIGHT AT THE NANOSCALE BASED ON ACTIVE EPSILONNEAR- ZERO PLASMONIC WAVEGUIDES 1303

Ying Li, Christos Argyropoulos, University of Nebraska-Lincoln, United States

TH-A2.1A.5: SIGNAL ENHANCEMENT FOR FERROMAGNETIC RESONANCE MEASUREMENT OF MAGNETIC NANOWIRE ARRAY 1305

Yali Zhang, Joseph Um, Bethanie Stadler, Rhonda Franklin, University of Minnesota, Twin Cities, United States

TH-A2.1A.6: A FERROMAGNETIC RESONANCE MEASUREMENT SYSTEM FOR SMALL VOLUME MAGNETIC NANOWIRES 1307

Yali Zhang, Joseph Um, Bethanie Stadler, University of Minnesota, United States; Rhonda Franklin, University of Minnesota, Twin Cities, United States

TH-A2.1A.7: ON PROPAGATION LOSSES DUE TO IN-VIVO ELECTROMAGNETIC NANOSCALE COMMUNICATION 1309

Sarah Hussein, Youmni Ziade, Beirut Arab University, Lebanon; Raed M. Shubair, Massachusetts Institute of Technology, United Arab Emirates

TH-A2.1A.8: PERFORMANCE PARAMETER OPTIMIZATION OF GRAPHENE ENHANCED SURFACE PLASMON RESONANCE BIOSENSORS1311

Mariam M. Moussilli, Abdul Rahman El Falou, Beirut Arab University, Lebanon; Raed M. Shubair, Massachusetts Institute of Technology, United States

TH-A2.1A.9: DESIGN OF TRANSMITTING NANO-DIPOLE ANTENNA USING A SUBWAVELENGTH LASER EXCITATION METHOD 1313

Amer Abu Arisheh, Jordan University of Science and Technology, Jordan; Said Mikki, University of New Haven, United States; Nihad Dib, Jordan University of Science and Technology, Jordan

TH-A2.1A.10: ULTRA-DEEP SUB-WAVELENGTH MODE CONFINEMENT IN GRAPHENE WAVEGUIDES 1315

Ramin Emadi, Zaker Hossein Firouzeh, Reza Safian, Abolghasem Zeidaabadi Nezhad, Isfahan University of Technology, Iran

TH-A2.2A: CLOAKING/RCS REDUCTION AND ABSORPTION

TH-A2.2A.1: ON BROADBAND ACTIVE CLOAKING 1317

Aobo Chen, Francesco Monticone, Cornell University, United States

TH-A2.2A.2: DESIGN OF WAVEFORM-SELECTIVE MANTLE CLOAKS FOR ANTENNA APPLICATIONS 1319

Stefano Vellucci, "Roma Tre" University, Italy; Alessio Monti, Mirko Barbuto, "Niccolò Cusano" University, Italy; Alessandro Toscano, Filiberto Bilotti, "Roma Tre" University, Italy

TH-A2.2A.3: NUMERICAL INVESTIGATION ON GRAPHENE BASED MANTLE CLOAKING OF A PEC CYLINDER 1321

Carola Rizza, Ladislau Matekovits, Politecnico di Torino, Italy

TH-A2.2A.4: PERFECT PENETRABLE CLOAKING USING GAIN-LESS AND LOSS-LESS BIANISOTROPIC METASURFACES	1323
<i>Mojtaba Dehmollaian, University of Tehran, Iran; Christophe Caloz, Polytechnique Montréal, Canada</i>	
TH-A2.2A.5: FREQUENCY INDEPENDENT METHOD FOR RCS REDUCTION OF DIHEDRAL CORNERS USING METASURFACES	1325
<i>Anuj Modi, Constantine Balanis, Craig Bircher, Arizona State University, United States</i>	
TH-A2.2A.6: ON THE DESIGN OF METAMATERIAL RADAR ABSORBER APPLYING AMC BY CONTROLLING SURFACE RESISTANCE	1327
<i>Yixian Fang, Yutong Jiang, Kewen Pan, Zhirun Hu, University of Manchester, United Kingdom</i>	
TH-A2.2A.7: RING RESONATOR METAMATERIALS FOR RADAR CROSS SECTION REDUCTION	1329
<i>Nikolay Litov, Arpan Pal, Amit Mehta, Swansea University, United Kingdom</i>	
TH-A2.2A.8: ULTRA-WIDEBAND RCS REDUCTION BASED ON REFLECTION PHASE CANCELLATION AND TUNABLE ABSORPTION	N/A
<i>Xianliang Zeng, Linxi Zhang, Guobin Wan, Northwestern Polytechnical University, China</i>	
TH-A2.2A.9: DESIGN OF A METAMATERIAL ABSORBER WITH ULTRA-WIDE ANGLE INCIDENCE	1333
<i>Yuming Wu, Xiao Ding, Zhipeng Wang, Bing-Zhong Wang, University of Electronic Science and Technology of China, China</i>	
TH-A2.2A.10: SIMULATION DESIGN OF DUAL BAND METAMATERIAL ABSORBER BASED ON THE FRACTAL STRUCTURE	1335
<i>Mohamed Edries, Higher Institute of Engineering El Shorouk City, Egypt; Hesham A. Mohamed, Electronics Research institute, Egypt; Sherif S. Hekal, Banha University, Egypt; Mohamed A. El-morsy, Higher Institute of Engineering El Shorouk City, Egypt; Hala A. Mansour, Banha University, Egypt</i>	
 TH-A1.2A: MICROSTRIP ANTENNA ARRAYS I	
TH-A1.2A.1: A COMPACT SERIES ARRAY FOR VEHICULAR COMMUNICATION IN THE C-BAND	1337
<i>Stefano Maddio, Giuseppe Pelosi, Monica Righini, Stefano Selleri, University of Florence, Italy</i>	
TH-A1.2A.2: BROADBAND LINEAR ANTENNA ARRAYS WITH FREQUENCY-INVARIANT HALF-POWER BEAMWIDTH	1339
<i>Dakotah Simpson, Dimitra Psychogiou, University of Colorado at Boulder, United States</i>	
TH-A1.2A.3: A CIRCULARLY POLARIZED PATCH ANTENNA ARRAY FOR KU-BAND DATA-LINK	1341
<i>Muhammad Saeed Khan, Wafa Abdouni-Abdallah, Hend Al Hosani, Stylianos Triantafyllidis, Majd Al Marri, Aamna Alteneiji, Emirates Technology and Innovation Center (ETIC), Khalifa University (KU), United Arab Emirates</i>	
TH-A1.2A.4: A SIW UNIFORM CIRCULAR ANTENNA ARRAY FOR 5G APPLICATIONS FED BY A RADIALLY-SYMMETRIC EIGHT-WAY SIW POWER DIVIDER	1343
<i>Alireza Pourghorban Saghati, Alireza Pourghorban Saghati, Kamran Entesari, Texas A&M University, United States</i>	
TH-A1.2A.5: DESIGN OF A 1×4 CPW MICROSTRIP ANTENNA ARRAY ON PET SUBSTRATE FOR BIOMEDICAL APPLICATIONS	1345
<i>Umer Farooq, Adnan Iftikhar, Adnan Fida, Muhammad Saeed Khan, Muhammad Farhan Shafique, Comsats University, Pakistan; Sajid M. Asif, University of Sheffield, United Kingdom; Raed M. Shubair, Massachusetts Institute of Technology, United States</i>	
TH-A1.2A.6: A MASSIVE MIMO ARRAY ANTENNA INCORPORATING FILTERING SUB-ARRAYS	1347
<i>Hamidreza Memarzadeh, Gary Xu, Samsung Research America Inc., United States</i>	
TH-A1.2A.7: A LOW-PROFILE WIDEBAND CONNECTED DIPOLE ARRAY WITH COMPACT BALUN AND POWER DIVIDER	1349
<i>Linfeng Li, Jie-Bang Yan, University of Alabama, United States</i>	
TH-A1.2A.8: A DIRECTIVE CIRCULARLY POLARIZED PLANAR YAGI ARRAY ANTENNA	1351
<i>Yang Cheng, Yuandan Dong, University of Electronic Science and Technology of China, China</i>	

TH-A1.2A.9: BROADBAND DUAL LINEAR POLARIZED (DLP) ANTENNA ARRAY FOR ENERGY HARVESTING SYSTEM	1353
<i>Dalia Elsheakh, Electronics Research Institute, Egypt</i>	
TH-A1.2A.10: A NOVEL BROADBAND MICROSTRIP ARRAY ANTENNA WITH BEAM TILT	N/A
<i>Min Guo, Min Wang, Yuan-Bo Shang, Ming-Ming Fan, Science and Technology on Electromagnetic Scattering Laboratory, China</i>	
 TH-A1.3A: ADAPTIVE, ACTIVE AND SMART ANTENNAS	
TH-A1.3A.1: DESIGN OF A MINIATURE REACTIVE BEAM FORMING NETWORK	1357
<i>John Sanford, University of California, San Diego, United States</i>	
TH-A1.3A.2: DESIGN OF MINIATURIZED ESPAR ANTENNA FOR NEXT GENERATION COMMUNICATION SYSTEMS	1359
<i>Shafaq Kausar, Ahmed Kausar, Hani Mehrpouyan, Boise State University, United States; Hamood Rehman, National University of Sciences & Technology, Pakistan</i>	
TH-A1.3A.3: GAIN OPTIMIZATION OF A SEVEN ELEMENT ESPAR ANTENNA	1361
<i>Ahmed Kausar, Shafaq Kausar, Hani Mehrpouyan, Boise State University, United States</i>	
TH-A1.3A.4: IOT EQUIPMENT STRUCTURE WITH REDUCED RISK OF DAMAGE ON ATTACHABLE TO MANHOLE COVER	1363
<i>Yasumitsu Ban, Manabu Kai, Fujitsu Laboratories Limited, Japan</i>	
TH-A1.3A.5: BEAMFORMING OPTIMIZATION BASED ON KALMAN FILTER FOR VEHICLE IN CONSTRAINED ROUTE	1365
<i>Shaowei Dai, Qammer H. Abbasi, MingHui Li, Muhammad Ali Imran, University of Glasgow, Singapore</i>	
TH-A1.3A.6: A DODECAHEDRON SEQUENTIAL ROTATION ANTENNA ARRAY FOR SPACE DIVISION MULTIPLE ACCESS	1367
<i>Lisa Berretti, Stefano Maddio, Giuseppe Pelosi, Monica Righini, Stefano Selleri, University of Florence, Italy</i>	
TH-A1.3A.7: DIRECTION OF ARRIVAL ESTIMATION USING ROOT-TRANSFORMATION MATRIX TECHNIQUE	1369
<i>Murdifi Muhammad, Minghui Li, Qammer H. Abbasi, Cindy Goh, Muhammad Ali Imran, University of Glasgow, Singapore</i>	
TH-A1.3A.8: A CIRCULAR POLARIZED FOUR-BEAM ANTENNA FOR DIRECTION OF ARRIVAL APPLICATIONS AT 2.45GHZ	1371
<i>Stefano Maddio, Giuseppe Pelosi, Monica Righini, Stefano Selleri, University of Florence, Italy</i>	
TH-A1.3A.9: RINGING EFFECTS DUE TO NON-IDEAL COMPONENTS IN DIRECT ANTENNA MODULATION TRANSMITTERS	1373
<i>Danyang Huang, Jacob Adams, North Carolina State University, United States; Kurt Schab, Santa Clara University, United States</i>	
TH-A1.3A.10: MATCHING OF SMALL TRANSMITTING ANTENNA USING NON-FOSTER-INSPIRED TWO-TRANSMITTER SYSTEM	1375
<i>Silvio Hrabar, University of Zagreb, Croatia (Hrvatska)</i>	
 TH-A1.4A: ANTENNAS FROM TESLA TO TODAY	
TH-A1.4A.2: ROLE OF THE PARKES RADIOTELESCOPE IN THE FIRST MOON LANDING	1377
<i>Trevor Bird, Antengenuity, Australia</i>	
TH-A1.4A.3: HOW THE LUALUALEI VLF ANTENNA WAS DESIGNED	1379
<i>Ted Simpson, University of South Carolina, United States</i>	
TH-A1.4A.4: DUALBAND MULTI-CONSTELLATION GNSS ANTENNA	1381
<i>Olutola Jonah, Leo Lanctot, Ford Motor Company, United States</i>	

TH-A1.4A.5: MECHANICALLY-ROTATING ELECTRET ULF/VLF ANTENNA TRANSMITTER.....	1383
<i>Chen Wang, Yong Cui, Beihang University, China; Minsong Wei, University of California, Berkeley, United States</i>	
TH-A1.4A.6: A NOVEL STRUCTURE FOR VHF BAND DIPOLE ANTENNA MINIATURIZATION.....	1385
<i>Jiawei Long, En Li, Hu Zheng, Yihang Tu, University of Electronic Science and Technology of China, China</i>	
TH-A1.4A.7: CHALLENGES FOR ANTENNA DESIGN AT MM-WAVES.....	1387
<i>Shafaq Kausar, Ahmed Kausar, Hani Mehrpouyan, Boise State University, United States</i>	
TH-A1.4A.8: DESIGN OF RFID ANTENNA USING METAMATERIALS FOR MICROWAVES	N/A
APPLICATIONS	
<i>Amina Bendaoudi, Mohamed Debab, Zoubir Mahdjoub, Djillali Liabes University of Sidi Bel Abbés, Algeria</i>	
TH-A1.4A.9: SIMULATION AND EXPERIMENT OF A LOADED ULTRA-SMALL SYMMETRIC DIPOLE	1391
ANTENNA	
<i>Shu Lin, Jian-Lin Jiao, Yu-Wei Zhang, Zhuang Chen, Cai-Tian Yang, Hong-Jun Zhang, Harbin Institute of Technology, China</i>	
TH-A1.4A.10: COMPACT UWB SLOTTED PENTAGONAL PATCH ANTENNA FOR RADAR AND	1393
COMMUNICATION	
<i>Farah Mohd Isa, Nur Hidayah Kamaludin, Norun Abdul Malek, Sarah Mohamad, International Islamic University Malaysia, Malaysia</i>	
 TH-A2.3A: TOPICS IN METAMATERIALS AND METASURFACES	
TH-A2.3A.1: AN EASILY FABRICATED 3D DESIGN FOR INCREASED PERMITTIVITY RANGE IN	1395
ARTIFICIAL DIELECTRIC LAYERS	
<i>Mohamad Fazeli, University of North Carolina at Charlotte, United States; Justin Kasemodel, Raytheon Space and Airborne Systems, United States; Kathryn Smith, University of North Carolina at Charlotte, United States</i>	
TH-A2.3A.2: COMPLEX TRANSFORMATION OPTICS AND GENERALIZED DOUBLE NEGATIVE	1397
LAYERS	
<i>Hayrettin Odabasi, Eskisehir Osmangazi University, Turkey; Fernando Teixeira, Ohio State University, United States</i>	
TH-A2.3A.3: BROADBAND DISPERSION ENGINEERING OF CRLH TRANSMISSION LINES FOR	1399
LOW SIGNAL DISTORTION IN BACKWARD REGIME	
<i>Alessandro Brizzi, Davide Ramaccia, Alessandro Toscano, Filiberto Bilotti, Roma Tre University, Italy</i>	
TH-A2.3A.4: ULTRA-COMPACT WAVE-BASED SOLVERS FOR FRACTIONAL-CALCULUS EQUATIONS	1401
<i>Aobo Chen, Francesco Monticone, Cornell University, United States</i>	
TH-A2.3A.5: MEASUREMENT OF HYBRID GENETIC PROGRAMMING SYNTHESIZED ARTIFICIAL	1403
MAGNETIC CONDUCTORS	
<i>Scott Clemens, Hawaii Advanced Wireless Technologies Institute, United States; Gui Chao Huang, University of Hawaii, United States; Magdy Iskander, Zhengqing Yun, Hawaii Advanced Wireless Technologies Institute, United States</i>	
TH-A2.3A.6: ELECTROMAGNETICALLY INDUCED TRANSPARENCY IN METAMATERIALS USING	1405
THEORY OF CHARACTERISTIC MODES	
<i>Ozuem Anthony Chukwuka, Divitha Seetharamdoo, Hassanein Rabah, Univ. Lille Nord de France - IFSTTAR, France</i>	
TH-A2.3A.7: DEVELOPMENT OF X-BAND METAMATERIAL-INSPIRED SENSORS FOR DIELECTRIC	1407
CONSTANT DETECTION	
<i>Mark Ruiz, Nantakan Wongkasem, University of Texas Rio Grande Valley, United States</i>	
TH-A2.3A.8: 2D PERIODIC LEAKY-WAVE ANTENNAS IN THE MICROWAVE AND OPTICAL REGIMES	1409
<i>Sohini Sengupta, Energous Corporation, United States; David Jackson, University of Houston, United States; Ahmad Almutawa, Hamidreza Kazemi, University of California, Irvine, United States; Stuart Long, University of Houston, United States; Filippo Capolino, University of California, Irvine, United States</i>	
TH-A2.3A.9: SPREAD-SPECTRUM CAMOUFLAGING BASED ON TIME-MODULATED METASURFACE.....	1411
<i>Xiaoyi Wang, Christophe Caloz, Polytechnique Montréal, Canada</i>	

TH-A1.5A: SLOT ARRAYS I

TH-A1.5A.1: A COMPACT AND HIGH GAIN DIELECTRIC-LOADED 60GHZ MULTI-STEPPED 1413 WAVEGUIDE ANTENNA ARRAY

Saeideh Shad, Hani Mehrpouyan, Boise State University, United States

TH-A1.5A.2: COMPACT SLOT ANTENNA ARRAY FOR 5G COMMUNICATIONS 1415

Tiago Varum, João Matos, Instituto de Telecomunicações, Portugal

TH-A1.5A.3: EMPTY SUBSTRATE INTEGRATED WAVEGUIDE PLANAR SLOT ANTENNA ARRAY FOR 1417 5G WIRELESS SYSTEMS

Zia Ullah Khan, Akram Alomainy, Queen Mary University of London, United Kingdom; Tian Hong Loh, National Physical Laboratory, United Kingdom

TH-A1.5A.4: 2 × 2 AND 4 × 4 MIMO ANTENNAS FOR 5G MM-WAVE WIRELESS COMMUNICATION 1419

Shaker Alkaraki, Yue Gao, Queen Mary University of London, United Kingdom

TH-A1.5A.5: 1D SLOTTED WAVEGUIDE ANTENNA WITH CONTROLLED BEAMWIDTH AND 1421 SIDELOBE LEVEL RATIO

Hilal M. El Misilmani, Beirut Arab University, Lebanon; Mohammed Al-Husseini, Lebanese Center for Studies and Research, Lebanon

TH-A1.5A.6: HIGH GAIN DUAL POLARIZED OMNI ANTENNA FOR FOUR CHANNEL MIMO 1423 APPLICATIONS

John Sanford, University of California, San Diego, United States

TH-A1.5A.8: AN ELECTRONICALLY-STEERABLE PARASITIC ARRAY RADIATOR (ESPAR) USING 1425 MICROSTRIP-LINE-FED CAVITY-BACKED SLOT ANTENNAS IN THE E PLANE

Wei Ouyang, Xun Gong, University of Central Florida, United States

TH-A1.5A.9: ANALYZING THE COUPLING FROM RADIATING SLOTS IN A DOUBLE-LAYERED 1427 RADIAL LINE SLOT ARRAY ANTENNA

Mst Nishat Yasmin Koli, Muhammad Usman Afzal, Karu Esselle, Macquarie University, Australia; Md Zahidul Islam, Teleaus:Information and Communications Engineering Company, Australia

TH-A1.5A.10: A DUAL BAND AND DUAL CIRCULAR POLARIZATION RADIAL LINE SLOT ANTENNA 1429

Jinwei Shao, Feng Yang, Rui Wang, Zhiyu Xing, Jianhua Yang, University of Electronic Science and Technology of China, China

TH-A4.1A: NOVEL RADAR TECHNIQUES

TH-A4.1A.1: MILLIMETER-WAVE LOCALIZATION OF MULTIPLE TARGETS USING TDOA AND 1431 WIDEBAND FREQUENCY MODULATION

Liang Gong, Stavros Vakalis, Jeffrey Nanzer, Michigan State University, United States

TH-A4.1A.2: GAUSSIAN PROCESS REGRESSION FOR ARRAY INTERPOLATION 1433

Arjun Gupta, Christos Christodoulou, Manel Martinez Ramon, University of New Mexico, United States; Jose Luis Rojo Alvarez, Universidad Rey Juan Carlos, Spain

TH-A4.1A.3: ADAPTIVE EQUALIZATION SUPER-RESOLUTION TIME DELAY ESTIMATION WITH 1435 HIGH ACCURACY AND LOW COMPLEXITY

Foad Fereidoony, Ali Jishi, Maziar Hedayati, Yuanxun Ethan Wang, University of California, Los Angeles, United States

TH-A4.1A.4: A NEW MILLIMETER WAVE FMCW RADAR TARGET SIMULATOR BASED ON 1437 FREQUENCY SYNCHRONIZATION

Mohammad Chavoshi, Shahed Shahir, Mohammad-Reza Nezhad-Ahmadi, Safieddin Safavi-Naeini, University of Waterloo, Canada

TH-A3.1A: INTEGRAL EQUATION METHODS II

TH-A3.1A.1: MOM ANALYSIS OF CONDUCTING SURFACE-TO-WIRE STRUCTURES IN MULTILAYERED UNIAXIAL MEDIA 1439

Shubin Zeng, Donald Wilton, Jiefu Chen, University of Houston, United States

TH-A3.1A.3: FAST ALGORITHMS FOR CONVERTING AN FMM-BASED REPRESENTATION OF ELECTRICALLY LARGE INTEGRAL OPERATORS TO A MINIMAL-RANK H2-MATRIX 1441

Chang Yang, Miaomiao Ma, Dan Jiao, Purdue University, United States

TH-A3.1A.4: POTENTIAL-BASED TDIES FOR DIELECTRIC REGIONS USING MAGNETIC CURRENTS 1443

Thomas Roth, Sandia National Laboratories, United States; Weng Cho Chew, Purdue University, United States

TH-A3.1A.5: A FAST MACROMODELING APPROACH TO SIMULATE COMPLEX ELECTROMAGNETIC SURFACES 1445

Utkarsh Patel, Piero Triverio, Sean Hum, University of Toronto, Canada

TH-A3.1A.6: AN EFFICIENT BASIS-FREE LOOP-STAR PRECONDITIONER USING SPARSE DIRECT SOLVERS 1447

Yi-Ru Jeong, Ali E. Yilmaz, University of Texas at Austin, United States

TH-A3.1A.7: HIGHLY ACCURATE 3D EM MODELING BASED ON ULTRA HIGH ORDER BASIS FUNCTIONS 1449

Branko Kolundzija, Aleksandra Krneta, Dragan Olćan, University of Belgrade, Serbia; Milan Kostic, WIPL-D d.o.o., Serbia

TH-A3.1A.8: EFFICIENT AND ACCURATE ELECTROMAGNETIC SCATTERING ANALYSIS OF PERFECTLY CONDUCTING THICK PLATES 1451

Eduard Ubeda, Ivan Sekulic, Juan M. Rius, Universitat Politecnica de Catalunya (UPC), Spain

TH-A3.1A.9: NOVEL SIE FORMULATIONS FOR ACCURATE AND STABLE ANALYSIS OF NEAR-ZERO-INDEX MATERIALS 1453

Bariscan Karaosmanoglu, Utku Ozmu, Ozgur Ergul, Middle East Technical University, Turkey

TH-A3.1A.10: NOVEL INTEGRAL EQUATION FORMULATION FOR THE ANALYSIS OF CAPACITIVE STEP DISCONTINUITIES 1455

Fernando Daniel Quesada Pereira, Celia Gómez Molina, Alejandro Álvarez Melcón, Universidad Politécnica de Cartagena, Spain; Vicente Enrique Boria Esbert, Marco Guglielmi, Universidad Politécnica de Valencia, Spain

TH-A5.1A: NOVEL ENERGY HARVESTING TECHNIQUES

TH-A5.1A.1: OPTIMAL NUMBER OF COILS FOR WIRELESS POWER TRANSFER THROUGH CASCADED RESONATOR SYSTEMS 1457

Connor Badowich, Loïc Markley, University of British Columbia, Canada

TH-A5.1A.2: EFFICIENT AND MISALIGNMENT-ROBUST PT-SYMMETRIC WIRELESS POWER TRANSFER 1459

Maryam Sakhdari, Pai-Yen Chen, University of Illinois, United States

TH-A5.1A.3: ULTRA-LOW POWER PULSE WIDTH DETECTOR FOR RF WAKE-UP RECEIVERS..... 1461

Ahmed Abed Benbuk, Nour Kouzayha, Fatima Asadallah, Joseph Costantine, Zaher Dawy, American University of Beirut, Lebanon

TH-A5.1A.4: PERFORMANCE COMPARISON BETWEEN SINGLE AND MULTIPLE IMPLANTED RECEIVERS IN A HYBRID POWER/DATA TRANSFER SYSTEM 1463

Reem Shadid, Applied Science Private University, Jordan; Sima Noghianian, University of North Dakota, United States

TH-A5.1A.5: A RETRO-REFLECTIVE SCHEME FOR WIRELESS POWER TRANSMISSION IN FULLY ENCLOSED ENVIRONMENTS	1465
<i>Xin Wang, Xueqi Wang, Nanjing University of Aeronautics and Astronautics, China; Mingyu Lu, West Virginia University Institute of Technology, United States</i>	
 TH-A4.2A: INVERSE SCATTERING AND IMAGING	
TH-A4.2A.1: A TOTAL-VARIATION COMPRESSIVE PROCESSING APPROACH TO TWO-DIMENSIONAL FIELD RECONSTRUCTION	1467
<i>Baozhu Li, Nanjing Normal University, China; Giacomo Oliveri, Nicola Anselmi, Andrea Massa, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy; Wei Ke, Wanchun Tang, Nanjing Normal University, Italy</i>	
TH-A4.2A.2: JOINT STRIPMAP/SPOTLIGHT SYNTHETIC APERTURE RADAR ENABLED BY ELEMENT-LEVEL DIGITAL ARRAYS	1469
<i>Joseph Garry, James Conroy, Richard Tillman, Johns Hopkins University Applied Physics Laboratory, United States</i>	
TH-A4.2A.3: TURNTABLE ISAR IMAGING OF A CIRCULAR ARRAY	1471
<i>Kris Buchanan, Sara Wheeland, Drew Overturf, Oren Sternberg, Naval Information Warfare Center Pacific, United States</i>	
TH-A4.2A.4: COMPARISON OF PROPAGATION LOSSES IN THZ AND OPTICAL NON-LINE-OF-SIGHT IMAGING	1473
<i>Yiran Cui, Georgios Trichopoulos, Arizona State University, United States</i>	
TH-A4.2A.5: SIMPLIFIED SYNTHETIC ELECTRODE STRATEGY FOR ELECTRICAL CAPACITANCE VOLUME TOMOGRAPHY	1475
<i>Shah Chowdhury, Fernando Teixeira, Ohio State University, United States; Qussai M. Marashdeh, Tech4Imaging LLC, United States</i>	
 TH-SP.1P: INNOVATIVE RECONFIGURABLE AND MULTIFUNCTION ANTENNA ARRAYS	
TH-SP.1P.1: MASSIVE MIMO BEAMFORMING ON A CHIP	1477
<i>Christopher Merola, University of Massachusetts, United States; Marinos Vouvakis, University of Massachusetts Amherst, United States</i>	
TH-SP.1P.2: A RECONFIGURABLE K/KA BAND FILTENNA USING A DOUBLE ARM RING RESONATOR	1479
<i>Marios Patriotis, Firas Ayoub, Christos Christodoulou, University of New Mexico, United States; Michael Chryssomallis, Democritus University of Thrace, Greece</i>	
TH-SP.1P.3: BEAM RECONFIGURATION USING IMAGING REFLECTOR ANTENNAS	1481
<i>Sudhakar Rao, Northrop Grumman Aerospace Systems, United States; Philip Venezia, Custom Microwave Incorporated, United States</i>	
TH-SP.1P.5: CAPACITY-DRIVEN DESIGN OF CLUSTERED ARRAY ARCHITECTURES FOR NEW GENERATION 5G MU-MIMO SYSTEMS	1483
<i>Giorgio Gottardi, Giacomo Oliveri, Andrea Massa, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy</i>	
TH-SP.1P.6: WIDEBAND VECTOR ANTENNA USING RADIATION PATTERN RECONFIGURABILITY FOR 3-D DIRECTION FINDING	1485
<i>Johan Duploux, Christophe Morlaas, ENAC, France; Hervé Aubert, LAAS-CNRS, France; Patrick Potier, Philippe Pouliguen, Direction Générale de l'Armement (DGA), France</i>	
TH-SP.1P.7: DESIGN OF A RECONFIGURABLE METAL-PLASMA L-BAND TRANSMIT-ARRAY ANTENNA	1487
<i>Giulia Mansutti, University of Padova, Italy; Paolo Rocca, ELEDIA Research Center, Italy; Mohammad Abdul Hannan, ELEDIA Research Center (ELEDIA@UniTN – University of Trento), Italy; Federico Boulos, ELEDIA Research Center, Italy; Antonio-D. Capobianco, Paola De Carlo, University of Padova, Italy; Alberto Tuozi, ASI - Italian Space Agency, Italy</i>	

TH-SP.1P.8: TRANSMIT BEAMFORMING BASED ON 4D ANTENNA ARRAYS WITH PSEUDO-RANDOM ORTHOGONAL TIME SEQUENCES	1489
<i>Kejin Chen, Shiwen Yang, Yikai Chen, Shi-Wei Qu, University of Electronic Science and Technology of China, China; Paolo Rocca, Andrea Massa, University of Trento, Italy</i>	
 TH-SP.2P: ANTENNAS AND RF SYSTEMS FOR INTERFERENCE MITIGATION AND SPECTRUM MANAGEMENT	
TH-SP.2P.4: HARDWARE REALIZATION AND PERFORMANCE MEASUREMENT OF AN ANTI-JAM GPS ANTENNA ARRAY	1491
<i>Jeffrey Maloney, University of Massachusetts Amherst, United States; Steven Keller, Theodore Anthony, John Clark, Russel Harris, Arthur Harrison, Steven Weiss, Army Research Laboratory, United States; Do-Hoon Kwon, Ramakrishna Janaswamy, University of Massachusetts Amherst, United States</i>	
TH-SP.2P.5: MILLIMETER-WAVE FILTERING REFLECTARRAY FOR HIGH-GAIN ANTENNA APPLICATIONS	1493
<i>Geng Bo Wu, Chi Hou Chan, City University of Hong Kong, China</i>	
TH-SP.2P.6: STUDY ON FULL-DUPLEX CHANNEL CHARACTERISTIC FOR SIMULTANEOUS TRANSMIT AND RECEIVE USED IN PHASED ARRAY	1495
<i>Jie Zhang, Shengyan Li, Wensheng Chang, Tao Jiang, Bin Li, Zhiwei Liang, The 14th Research Institute of CETC, China</i>	
TH-SP.2P.7: CHARACTERISTIC MODE ANALYSIS OF THE EFFECT OF THE UAV FRAME MATERIAL ON COUPLING AND INTERFERENCE	1497
<i>Mohamed Hamdalla, Ahmed M. Hassan, Anthony Caruso, University of Missouri-Kansas City, United States</i>	
TH-SP.2P.8: A RECONFIGURABLE ANTENNA ELEMENT FOR IMPROVED PHYSICAL LAYER CONTROL	1499
<i>Benjamin McMahan, BAE Systems, United States; Ryan S. Westafer, R. Todd Lee, GTRI Advanced Concepts Laboratory, United States; Randall Lapierre, BAE Systems, United States</i>	
TH-SP.2P.9: ADAPTIVE BEAMFORMING IN HIGH-INTERFERENCE ENVIRONMENTS USING A SOFTWARE-DEFINED RADIO ARRAY	1501
<i>Daniel Gaydos, Payam Nayeri, Randy Haupt, Colorado School of Mines, United States</i>	
 TH-A1.1P: BROADBAND, WIDEBAND AND HIGH-GAIN PRINTED ANTENNAS	
TH-A1.1P.1: COMPACT MICROSTRIP PATCH ANTENNAS ON 3-D PRINTED SUBSTRATES WITH DIELECTRIC LOADING	1503
<i>Nicholas Piaquadio, Reena Dahle, State University of New York (SUNY) at New Paltz, United States</i>	
TH-A1.1P.2: A HIGH GAIN RECTENNA FOR ENERGY HARVESTING APPLICATIONS	1505
<i>Mohammed Cherif Derbal, Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada</i>	
TH-A1.1P.3: WIDE-BAND SERIES-FED PATCH ANTENNA ARRAY WITH LOW SIDE LOBES	1507
<i>Mahmoud Shirazi, Reza Safian, IMEC Nanoelectronics, United States</i>	
TH-A1.1P.4: OPEN MULTI-SLOT WIDEBAND MIMO ANTENNAS WITH MICROSTRIP FEED LINE FOR 4G LTE	1509
<i>Taylor Moat, Saeed Latif, Georgios Lazarou, University of South Alabama, United States</i>	
TH-A1.1P.5: BANDWIDTH ENHANCEMENT OF MICROSTRIP PATCH ANTENNA USING SUPERSTRATE COPPER RING FOR X-BAND APPLICATIONS	N/A
<i>Halappa Gajera, University of Mysore, India</i>	

TH-A1.1P.6: AN INTERIOR PARASITIC PATCH ANTENNA WITH WIDE ISOLATION BANDWIDTH FOR SIMULTANEOUS TRANSMIT AND RECEIVE (STAR)	1513
<i>KueiJih Lu, Carlene Goodbody, Tutku Karacolak, Washington State University Vancouver, United States; Nghi Tran, University of Akron, United States</i>	
TH-A1.1P.7: ANALYSIS OF A U-SLOT PATCH USING CHARACTERISTIC MODE ANALYSIS AND COUPLED MODE THEORY	1515
<i>John Borchardt, Tyler Lapointe, Sandia National Laboratories, United States</i>	
TH-A1.1P.8: MANIPULATION OF MICROSTRIP ANTENNA DIRECTIVITY AND RADIATION PATTERN USING NEGATIVE INDEX METAMATERIALS	1517
<i>Ramiro Valdez, Nantakan Wongkasem, University of Texas Rio Grande Valley, United States</i>	
TH-A1.1P.9: CPW-FED COMPACT POLARIZATION DIVERSITY UWB MIMO CUP-ANTENNA	1519
<i>Mohamed I. Ahmed, Electronics Research Institute, Egypt; Mai F. Ahmed, Zagazig University, Egypt</i>	
TH-A1.2P: ANTENNAS FOR 5G AND WIRELESS APPLICATIONS	
TH-A1.2P.1: DESIGN CONSIDERATION OF SYNTHETIC PHASED-ARRAY ANTENNA SYSTEMS FOR 5-G MOBILE WIRELESS NETWORK	1521
<i>Eugene Ngai, Hann-Jann (RF-Tech) Consultancy, United States</i>	
TH-A1.2P.2: ELECTROMAGNETIC FIELD EXPOSURE EVALUATION FOR 5G IN MILLIMETER WAVE FREQUENCY BAND	1523
<i>Thomas Basikolo, Takahiro Yoshida, Masanori Sakurai, Microwave Factory Company Ltd., Japan</i>	
TH-A1.2P.3: HYBRID BEAM-FORMING SMART ANTENNA FOR 5G NETWORKS	1525
<i>Ahmed Kausar, Shafaq Kausar, Hani Mehrpouyan, Boise State University, United States</i>	
TH-A1.2P.4: MODELING OF SUB-MILLIMETER WAVE COPLANAR WAVEGUIDE GRAPHENE SWITCHES	1527
<i>Panagiotis Theofanopoulos, Georgios Trichopoulos, Arizona State University, United States</i>	
TH-A1.2P.5: MULTI-BROADBAND MICROSTRIP ANTENNA FOR LTE SMARTPHONE APPLICATIONS	1529
<i>Mohamed Shaker Elgendy, Electronics Research Institute, Egypt</i>	
TH-A1.2P.6: COMPACT MICROSTRIP PATCH ANTENNA UTILIZING LOW COST SOLUTION CAST NANOMAGNETIC THIN FILM	1531
<i>Yuxiao He, Michigan State University, United States; Eric Drew, Z. John Zhang, Georgia Institute of Technology, United States; John Papapolymerou, Michigan State University, United States</i>	
TH-A1.2P.9: DUAL BEAM HIGH GAIN ANTENNA FOR 5TH GENERATION COMMUNICATION SYSTEM USING METASURFACE LENS	N/A
<i>Amit Kumar Singh, Seong-Ook Park, Korea Advanced Institute of Science and Technology (KAIST), Korea (South)</i>	
TH-A1.2P.10: RF CHANNEL PROPAGATION MODELING FOR WIRELESS SENSOR NETWORKS IN INTELLIGENT TRANSPORTATION SYSTEMS	1535
<i>Fausto Granda, Universidad de las Fuerzas Armadas ESPE, Ecuador; Leyre Azpilicueta, Mikel Celaya-Echarri, Cesar Vargas-Rosales, Tecnologico de Monterrey, Mexico; Peio Lopez-Iturri, Francisco Falcone, Universidad Publica de Navarra, Spain</i>	
TH-A1.3P: ELECTRICALLY SMALL ANTENNAS	
TH-A1.3P.1: ANALYSIS OF MULTI-ANTENNA PROXIMITY ON PERFORMANCE OF ELECTRICALLY SMALL ANTENNAS	1537
<i>Shreya Singh, Dan Sievenpiper, University of California, San Diego, United States; Faisal Alsallum, Hatim Bukhari, King Abdulaziz City for Science and Technology, Saudi Arabia</i>	

TH-A1.3P.2: ENABLING HIGH EFFICIENCY BANDWIDTH ELECTRICALLY SMALL ANTENNAS THROUGH DIRECT ANTENNA MODULATION	1539
<i>Jean Paul Santos, Foad Fereidoony, Yuanxun Ethan Wang, University of California, Los Angeles, United States</i>	
TH-A1.3P.3: HIGHLY MINIATURIZED MICROSTRIP ANTENNA WITH SLOTS AND A SUPERSTRATE FOR RFID APPLICATIONS	1541
<i>Yiyang Yu, University of Electronic Science and Technology of China, China; Haoran Zhang, Atif Shamim, King Abdullah University of Science and Technology (KAUST), Saudi Arabia</i>	
TH-A1.3P.4: MARS EXPLORATION: WIDEBAND FREQUENCY RECONFIGURABLE ELECTRICALLY SMALL MULTI-TURN LOOP ANTENNA USING MEMS SWITCH	1543
<i>Yubin Cai, Daisong Zhang, Yahya Rahmat-Samii, University of California, Los Angeles, United States</i>	
TH-A1.3P.5: OBSERVED Q AND GRAVITATIONALLY-SMALL ANTENNA BEHAVIOR OF A BINARY BLACK HOLE RADIATOR	1545
<i>Christopher Daniel, Kathryn Smith, Thomas Weldon, University of North Carolina at Charlotte, United States</i>	
TH-A1.3P.8: DEMONSTRATION OF ELECTRICALLY SMALL ANTENNAS OPERATING BELOW 400 MHZ	1547
<i>Nishanth Virushabadoss, Roderick Quaye, Rashaunda Henderson, University of Texas at Dallas, United States</i>	
TH-A1.3P.9: A COMPACT ELECTRICALLY TUNABLE VHF ANTENNA	1549
<i>Carl Pfeiffer, Defense Engineering Corp., United States; Fikadu T. Dagefu, Army Research Laboratory, United States</i>	
TH-A1.3P.10: A COMPACT DUAL BAND RING ANTENNA WITH EMBEDDING GROUNDED PATCHES	1551
<i>Yujie Li, Jiade Yuan, Fuzhou University, China; Zhizhang (David) Chen, Fuzhou University, China and Dalhousie University, Canada</i>	
 TH-A1.4P: APPLICATION OF MICROSTRIP AND PRINTED ANTENNAS	
TH-A1.4P.1: HIGH GAIN BROADBAND ANTENNA FOR POINT TO POINT COMMUNICATION SYSTEMS	1553
<i>Md Asaduzzaman Towfiq, i5 Technologies Inc, United States; Bedri Cetiner, Abdurazag Khalat, Utah State University, United States</i>	
TH-A1.4P.2: DUAL-POLARIZED ARMBAND EMBROIDERED TEXTILE ANTENNA FOR ON-/OFF-BODY WEARABLE APPLICATIONS	1555
<i>Chunxu Mao, Pennsylvania State University, United States; Dieff Vital, Florida International University, United States; Pingjuan L. Werner, Douglas H. Werner, Pennsylvania State University, United States; Shubhendu Bhardwaj, Florida International University, United States</i>	
TH-A1.4P.4: MINIATURIZED SIW-CBS PLANAR TX/RX ANTENNA ARRAYS FOR MICROWAVE CW/FMCW DOPPLER RADARS	1557
<i>Navid Naseh, Reza Ebrahimi Ghiri, Kamran Entesari, Texas A&M University, United States</i>	
TH-A1.4P.5: MICROSTRIP ANTENNA DESIGN FOR UNDERGROUND WATER PIPELINE MONITORING SENSOR	1559
<i>Manuel Ricardo Pérez Cerquera, Ivonne Neira, Pontificia Universidad Javeriana, Colombia</i>	
TH-A1.4P.6: A COMPACT HIGH GAIN X-BAND PATCH ANTENNA FOR CUBE AND SMALL SATELLITE APPLICATIONS	1561
<i>Shiou-Li Chen, National Space Organization (NSPO), National Applied Research Laboratories (NARL), Taiwan</i>	
TH-A1.4P.7: NOVEL HIGH-PERFORMANCE, DUAL-POLARIZED, CROSSED-VERTICALLY-FED MICROSTRIP ANTENNA ARRAY FOR MULTIFUNCTION PHASED ARRAY RADAR APPLICATION	1563
<i>Hadi Saeidi-Manesh, Shahrokh Saeedi, Guifu Zhang, University of Oklahoma, United States</i>	

TH-A1.4P.8: A 24 GHZ ISM BAND DOPPLER RADAR SYSTEM FOR MOVING TARGET SENSING	1565
<i>Sungpeel Kim, Jihoon Bang, Kyoseung Keum, Jaehoon Choi, Kyung-Young Jung, Hanyang University, Korea (South); Dong Kyoo Kim, Youjin Kim, Electronics and Telecommunications Research Institute, Korea (South)</i>	
TH-A1.4P.9: FABRIC ANTENNA FOR TEMPERATURE SENSING OVER ISM FREQUENCY BAND	1567
<i>Isidoro Ibanez Labiano, Akram Alomainy, Queen Mary University of London, United Kingdom</i>	
TH-A1.4P.10: INVESTIGATIONS OF WIDEBAND MICROSTRIP UNIT CELL TOPOLOGIES AT 28	1569
GHZ FOR FLAT LENS ANTENNA APPLICATIONS <i>Zohre Pourgholamhossein, Tayeb A. Denidni, National Institute of Scientific Research (INRS), Canada</i>	
TH-A5.2P: ADVANCES IN RADAR, MASSIVE AND MULTIUSER MIMO ANTENNA SYSTEMS	
TH-A5.2P.1: EFFECTIVE FIGURE OF MERIT DEFINITION FOR MIMO UWB RADAR CHANNELS	1571
SELECTION <i>Fugui Qi, Jianqi Wang, Fourth Military Medical University, China; Ozlem Kilic, Catholic University of America, United States; Aly E. Fathy, University of Tennessee at Knoxville, United States</i>	
TH-A5.2P.2: ON THE PHASE-ERROR TOLERANCE OF VIRTUAL ANTENNA ARRAYS IN MIMO	1573
RADARS <i>Rabia Syeda, Martijn Beurden, A. Bart Smolders, Eindhoven University of Technology, Netherlands</i>	
TH-A5.2P.3: WIRELESS FREQUENCY SYNCHRONIZATION FOR COHERENT DISTRIBUTED	1575
ANTENNA ARRAYS <i>Serge Mghabghab, Hassna Ouassal, Jeffrey Nanzer, Michigan State University, United States</i>	
TH-A5.2P.4: INVESTIGATION OF CHANNEL CORRELATION IN INDOOR WIDEBAND MASSIVE	1577
MIMO SYSTEMS <i>Murat Temiz, Yongwei Zhang, Emad Alsusa, Laith Danoon, University of Manchester, United Kingdom</i>	
TH-A5.2P.5: AN EFFICIENT FB-BASED UNDERGROUND CHANNEL ESTIMATION FOR MIMO	1579
MM-WAVE SYSTEMS <i>Widad Belaoura, National Polytechnic School, Algeria; Khalida Ghanem, Center of Development of Advanced Techniques (CDTA), Algeria; Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada; Hicham Bousbia-Salah, National Polytechnic School, Algeria</i>	
TH-A5.2P.6: ESTIMATION OF THE CROSS-CORRELATION GREEN'S FUNCTION FOR MIMO	1581
SYSTEMS <i>Debddeep Sarkar, Royal Military College, Canada, Canada; Said Mikki, University of New Haven, United States; Yahia Antar, Royal Military College of Canada, Canada</i>	
TH-A5.2P.7: RANGE AND CAPACITY OPTIMIZATION OF A 10GBPS ACCESS POINT EMPLOYING 12	1583
MIMO CHAINS <i>John Sanford, University of California, San Diego, United States; Saied Ansari, Quantenna Inc., United States</i>	
TH-A5.2P.8: DEEP LEARNING DESIGN FOR JOINT ANTENNA SELECTION AND HYBRID	1585
BEAMFORMING IN MASSIVE MIMO <i>Ahmet M. Elbir, Duzce University, Turkey; Kumar Vijay Mishra, University of Iowa, United States</i>	
TH-A5.2P.9: A NOVEL MULTI-USER SPATIAL MODULATION-BASED CODE DIVISION MULTIPLE	1587
ACCESS SCHEME <i>Khalida Ghanem, Center of Development of Advanced Techniques (CDTA), Algeria; Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada; Fadila Berrahma, Hicham Bousbia-Salah, National School Polytechnic (ENP), Algeria</i>	
TH-A5.2P.10: MULTI-USER COMMUNICATION BY ELECTROMAGNETIC VORTEX BASED ON	1589
TIME MODULATED ARRAY <i>Yiqing Liu, Chong He, Ronghong Jin, Junping Geng, Xian-Ling Liang, Weiren Zhu, Shanghai Jiao Tong University, China</i>	

TH-A2.1P: METASTRUCTURES FOR ANTENNAS

TH-A2.1P.1: DOUBLE METALOOP ANTENNA..... 1591
Hisamatsu Nakano, Tomoki Abe, Junji Yamauchi, Hosei University, Japan; Amit Mehta, Swansea University, United Kingdom

TH-A2.1P.2: A RECTANGULAR WAVEGUIDE ANTENNA WITH FILTERING AND BEAM-STEERING 1593
CAPABILITIES
Mirko Barbuto, Alessio Monti, Niccolò Cusano University, Italy; Filiberto Bilotti, Alessandro Toscano, Roma Tre University, Italy

TH-A2.1P.3: AN ULTRA-THIN COMPACT HIGHLY EFFICIENT II-SECTION CRLH-EBG BASED 1595
ANTENNA FOR ISM APPLICATIONS
Mohamed El Atrash, October University for Modern Sciences and Arts (MSA), Egypt; Mahmoud A. Abdalla, Military Technical College, Egypt; Abdelaziz A. Aboelabas, Sara S. Abd-Alwahab, October University for Modern Sciences and Arts (MSA), Egypt

TH-A2.1P.4: WIDEBAND LOW-PROFILE QUASI-YAGI ANTENNA USING ARTIFICIAL MAGNETIC N/A
CONDUCTOR
Jian Ren, Yingzeng Yin, Xidian University, China

TH-A2.1P.5: RECONFIGURABLE METASURFACE LENS THIN ANTENNA WITH 3-STATE UNIT 1599
CELLS IN 28-GHZ BAND
Mingqi Wu, Keishi Kosaka, Eiji Hankui, NEC Corporation, Japan

TH-A2.1P.7: DUAL-BAND HIGH-GAIN CIRCULARLY POLARIZED PATCH ANTENNA DESIGN USING 1601
METASURFACE
Joyson Chatterjee, Akhilesh Mohan, Vivek Dixit, Indian Institute of Technology, Kharagpur, India

TH-A2.1P.8: A LOW PROFILE FLEXIBLE CIRCULARLY POLARIZED ANTENNA FOR WEARABLE AND 1603
WLAN APPLICATIONS
Mohamed El Atrash, October University for Modern Sciences and Arts (MSA), Egypt; Mahmoud A. Abdalla, Military Technical College, Egypt; Sherif R. Zahran, Arab Academy for Science, Technology & Maritime Transport, Egypt; Abdelrahman M. Ali, October University for Modern Sciences and Arts (MSA), Egypt

TH-A2.1P.9: A WIDEBAND COMPACT FILTERING ARRAY ANTENNA USING TWO SECTIONS 1605
L-CRLH IMPEDANCE TRANSFORMER
Mahmoud A. Abdalla, Military Technical College, Egypt; Hossam Hassan, Yasmin Hammad, October University for Modern Sciences and Arts (MSA), Egypt; Mohammad Ameen, Raghendra Chaudhary, Indian Institute of Technology, India

TH-A2.2P: SPACE-TIME AND TUNABLE METASTRUCTURES

TH-A2.2P.1: SPACE-TIME MODULATED CLOAKS FOR BREAKING RECIPROCITY OF ANTENNA 1607
RADIATION
Davide Ramaccia, Roma Tre University, Italy; Dimitrios Sounas, Wayne State University, United States; Andrea Alù, CUNY Advanced Science Research Center, United States; Alessandro Toscano, Filiberto Bilotti, Roma Tre University, Italy

TH-A2.2P.2: SERRODYNE FREQUENCY TRANSLATION USING TIME-MODULATED 1609
METASURFACES
Zhanni Wu, Anthony Grbic, University of Michigan, United States

TH-A2.2P.3: TIME-MODULATED REFLECTIVE METASURFACE FOR THE CONTROL OF THE1611
REFLECTED SIGNAL FREQUENCY
Davide Ramaccia, Roma Tre University, Italy; Dimitrios Sounas, Wayne State University, United States; Andrea Alù, CUNY Advanced Science Research Center, United States; Alessandro Toscano, Filiberto Bilotti, Roma Tre University, Italy

TH-A2.2P.4: DIRECTION-OF-ARRIVAL (DOA) ESTIMATION BASED ON SPACETIME-MODULATED 1613
METASURFACE
Xiaoyi Wang, Christophe Caloz, Polytechnique Montréal, Canada

TH-A2.2P.5: VO2-BASED ACTIVE TERAHERTZ CHIRAL METAMATERIALS 1615
Lei Kang, Pennsylvania State University, United States; Shengxiang Wang, Wuhan Textile University, China; Sawyer D. Campbell, Pingjuan L. Werner, Douglas H. Werner, Pennsylvania State University, United States

TH-A2.2P.6: TOWARDS GENERALIZED TRANSISTOR-BASED MAGNETLESS NONRECIPROCAL METASURFACE 1617
Guillaume Lavigne, Christophe Caloz, Polytechnique Montréal, Canada

TH-A2.2P.7: RECONFIGURABLE METAMATERIALS FORMED THROUGH A COMBINATION OF NANOWIRE ASSEMBLIES WITH TOP-DOWN FABRICATED NANOANTENNAS 1619
Lei Kang, Sawyer D. Campbell, Douglas H. Werner, Pennsylvania State University, United States

TH-A2.2P.8: TUNABLE MULTIBAND DEVICES BASED ON ON/OFF SWITCHES IN METAMATERIALS FOR WIFI APPLICATION 1621
Bachir Belkadi, Zoubir Mahdjoub, Mohamed Lamine Seddiki, University of Sidi Bel Abbès, Algeria; Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada

TH-A2.2P.9: A WEARABLE RECONFIGURABLE ELECTROMAGNETIC METAMATERIAL ABSORBER USING ARTIFICIAL MAGNETIC INCLUSIONS 1623
Mohammed Bait-Suwaitam, Sultan Qaboos University, Oman; Thamer Almoneef, Prince Sattam bin Abdulaziz University, Saudi Arabia; Akram Alomainy, Queen Mary University of London, United Kingdom

TH-A2.2P.10: GRAPHENE METASURFACE BASED TUNABLE DOUBLE SPLIT RING RESONATOR FOR FAR INFRARED FREQUENCY REGION 1625
Vishal Sorathiya, Shobhitkumar Patel, Marwadi Education Foundation, India

TH-UB.1P: EM INTERACTION AND COUPLING

TH-UB.1P.10: PROPAGATION CHARACTERISTICS OF A RECONFIGURABLE PLASMONIC RECTANGULAR GROOVE GRATING WAVEGUIDE USING PERIODICALLY PHOTOINDUCED PLASMA 1627
Kazuo Nishimura, Ryukoku University, Japan

TH-A3.1P: SENSING AND IMAGING IN CHALLENGING ENVIRONMENTS

TH-A3.1P.1: ON THE PERFORMANCE OF POLARIMETRIC SUBTRACTION TECHNIQUE FOR THE DETECTION OF BUNKERS IN THE PRESENCE OF SURFACE CLUTTER 1629
DaHan Liao, Army Research Laboratory, United States

TH-A3.1P.2: STRUCTURAL EFFECT ON IMAGE QUALITY DEGRADATION IN GROUND-PENETRATING RADAR ARRAY 1631
Samuel Wagner, Anh-Vu Pham, University of California, Davis, United States

TH-A3.1P.3: IMAGING OF WALKING HUMAN BEHIND THE WALL USING IMPULSE RADAR..... N/A
Doojin Lee, Brandon Fong, Plinio Morita, Jennifer Boger, William Melek, George Shaker, University of Waterloo, Canada

TH-A3.1P.4: DUAL-POLARIZED THROUGH-WALL REPEATER FOR THE WIRELESS READING OF MILLIMETER-WAVE PASSIVE SENSORS 1635
Timothée Marchal, Julien Phillippe, Dominique Henry, Maria-Valeria De Paolis, Anthony Coustou, Pons Patrick, Aubert Hervé, LAAS-CNRS, France

TH-A3.1P.5: ANALYSIS OF MULTISTATIC VEHICLE-DRONE GROUND PENETRATING RADAR CONFIGURATIONS FOR MINE DETECTION 1637
Maria Garcia-Fernandez, University of Oviedo, Spain; Ann Morgenthaler, Northeastern University, United States; Yuri Alvarez-Lopez, Fernando Las-Heras, University of Oviedo, Spain; Carey Rappaport, Northeastern University, United States

TH-A3.1P.6: EXPERIMENTAL IMAGING RESULTS OF A UAV-MOUNTED DOWNWARD-LOOKING MM-WAVE RADAR	1639
<i>Weite Zhang, Juan Heredia-Jueas, Mithun Diddi, Luis Tirado, Hanumant Singh, Jose Angel Martinez-Lorenzo, Northeastern University, United States</i>	
TH-A3.1P.7: A VANADIUM DIOXIDE MICROBOLOMETER IN THE TRANSITION REGION FOR MILLIMETER WAVE IMAGING	1641
<i>Shangyi Chen, Mark Lust, Nima Ghalichechian, Ohio State University, United States</i>	
TH-A3.1P.8: SELECTION OF INCIDENT ELECTRIC FIELDS FOR ESTIMATING THE CALIBRATION FACTOR OF THE LEAD ELECTROMAGNETIC MODEL	1643
<i>Mikhail Kozlov, Max Planck Institute for Human Cognitive and Brain Sciences, Germany; Wolfgang Kainz, Food and Drug Administration, United States</i>	
TH-A3.1P.9: MULTIMODE HORN FOR A MONOPULSE SUBSYSTEM	1645
<i>Hongjian Wang, NMRS, NSSC, CAS, China</i>	
TH-A3.1P.10: FORWARD TRANSMISSION MATRIX ANALYSIS OF LORENTZ SENSOR FOR HIGH PERMITTIVITY DETECTION	1647
<i>Omar Siddiqui, Taibah University, Saudi Arabia</i>	
 TH-A3.2P: FINITE-DIFFERENCE TIME-DOMAIN METHODS	
TH-A3.2P.1: OBLIQUE THIN WIRE FOR NONUNIFORM FDTD METHOD	1649
<i>Christophe Guiffaut, Alain Reineix, CNRS, France</i>	
TH-A3.2P.2: FIELD INTERPOLATION WITH GENERALIZED BARYCENTRIC COORDINATES IN CONFORMAL FDTD SCHEMES	1651
<i>Nicolas Bui, Christophe Guiffaut, Alain Reineix, XLIM Institute, University of Limoges/CNRS, France</i>	
TH-A3.2P.3: A STABLE SUB-GRIDDING WITH TIME AND SPATIAL REFINEMENTS FOR THE FDTD METHOD	1653
<i>Francis Denanot, Christophe Guiffaut, Alain Reineix, University of Limoges, France</i>	
TH-A3.2P.4: OBLIQUE INCIDENCE PML REFLECTION ANALYSIS FOR CYLINDRICAL FDTD	1655
<i>Mohammed Hadi, Atef Elsherbeni, Colorado School of Mines, United States</i>	
TH-A3.2P.5: NUMERICAL STABILITY ANALYSIS OF M1-D LOD-FDTD METHOD FOR INHOMOGENEOUS COUPLED TRANSMISSION LINES	1657
<i>Ding Yu Heh, Eng Leong Tan, Nanyang Technological University, Singapore</i>	
TH-A3.2P.6: A STABLE 3-D FDTD METHOD WITH MULTIPLE EMBEDDED REDUCED-ORDER MODELS	1659
<i>Xinyue Zhang, Piero Triverio, University of Toronto, Canada</i>	
TH-A3.2P.7: FDTD SIMULATIONS OF THE IMPEDANCE OF A DIPOLE ANTENNA IN A PLASMA	1661
<i>Edmund Spencer, Saeed Latif, University of South Alabama, United States</i>	
TH-A3.2P.9: CONSIDERATION OF POYNTING LOCALIZED ENERGY AROUND RADIATORS: AN FDTD-BASED INVESTIGATION	1665
<i>Debdeep Sarkar, Royal Military College, Canada, Canada; Said Mikki, University of New Haven, United States; Yahia Antar, Royal Military College of Canada, Canada</i>	
TH-A3.2P.10: FDTD MODELING OF A DIPOLE ANTENNA ABOVE METASURFACE USING SURFACE IMPEDANCE BOUNDARY CONDITION	1667
<i>Akihide Kurahara, Toru Uno, Takuji Arima, Tokyo University of Agriculture and Technology, Japan</i>	

TH-A3.3P: INTEGRAL EQUATION METHODS III

TH-A3.3P.1: BINORMALIZED FACTORIZATIONS FOR MAGNETOSTATIC INTEGRAL EQUATIONS..... 1669
Robert Adams, Owen Wilkerson, John Young, Stephen Gedney, University of Kentucky, United States

TH-A3.3P.2: ON A UNIFIED APPROACH TOWARDS THE MODELING OF NONLOCAL 1671
HYDRODYNAMIC NON-CLASSICAL RESPONSE FROM PLASMONIC NANOTOPOLOGIES
Xuezhi Zheng, Mario Kupresak, Victor V. Moshchalkov, Katholieke Universiteit Leuven, Belgium; Raj Mittra, University of Central Florida, United States; Guy A. E. Vandenbosch, Katholieke Universiteit Leuven, Belgium

TH-A3.3P.3: A WELL-CONDITIONED DIFFERENTIAL SURFACE ADMITTANCE FORMULATION FOR 1673
MODELING PENETRABLE MEDIA
Shashwat Sharma, Piero Triverio, University of Toronto, Canada

TH-A3.3P.4: SOLVING REALISTIC MULTISCALE AND COMPOSITE PROBLEMS USING AN 1675
INTEGRAL EQUATION DOMAIN DECOMPOSITION APPROACH
Victor F. Martin, University of Extremadura, Spain; Diego M. Solis, University of Pennsylvania, United States; David Larios, José Manuel Taboada, Luis Landesa, University of Extremadura, Spain; Jose L. Rodriguez, Fernando Obelleiro, University of Vigo, Spain

TH-A3.3P.5: RECONSTRUCTION OF ANISOTROPIC DIELECTRIC OBJECTS BASED ON INTEGRAL 1677
EQUATION METHOD
Qing Xu, Xi Yuan Du, Ze Yuan Lu, Yi Fan Zhang, Mei Song Tong, Tongji University, China

TH-A3.3P.6: THE EFFECT OF ANTENNA IN THE FORWARD MODEL OF NEAR FIELD MICROWAVE 1679
IMAGING SYSTEMS
Akın Dalkılıç, ASELSAN Inc., Turkey; Lale Alatan, Middle East Technical University, Turkey

TH-A3.3P.7: A NOVEL SCHEME FOR EVALUATING HYPERSINGULAR VOLUME INTEGRALS 1681
OVER TETRAHEDRAL ELEMENTS
Hong Qin Zheng, Yin Xuan Zhu, Han Yu Shi, Mei Song Tong, Tongji University, China

TH-A3.3P.8: OPTIMIZATION OF A MICROWAVE TOMOGRAPHY ALGORITHM USING THE DDA AS A 1683
FAST FORWARD SOLVER
Samar Hosseinzadegan, Andreas Fhager, Mikael Persson, Chalmers University of Technology, Sweden; Paul Meaney, Dartmouth College, United States

TH-A3.3P.9: ACCURATE SOLUTION OF ELECTROMAGNETIC SCATTERING BY CONDUCTING 1685
OBJECTS BASED ON NYSTRÖM METHOD
Shu Na Jiang, Han Kai Yang, Li Zhang, Mei Song Tong, Tongji University, China

TH-A3.3P.10: ACCELERATION OF FINITE PERIODIC STRUCTURES ANALYSIS THROUGH 1687
FULL-DOMAIN BASIS FOR MATRIX COMPRESSION
Alberto Serna, Luis Landesa, José Manuel Taboada, University of Extremadura, Spain

TH-UA.2P: EM-FIELD METROLOGY

TH-UA.2P.1: RAPIDLY DEPLOYABLE PORTABLE SYSTEM FOR REAL-TIME ANTENNA 1689
DIAGNOSTICS AND CHARACTERIZATION
Guillermo Alvarez-Narciandi, Jaime Laviada, Yuri Alvarez-Lopez, Fernando Las-Heras, University of Oviedo, Spain

TH-A4.1P: ENGINEERED SCATTERING SURFACES

TH-A4.1P.1: DESIGN OF ULTRA-BROADBAND RCS-REDUCTION CHECKERBOARD SURFACE 1691
USING AMC CIRCUIT MODEL
Meshaal Alyahya, Constantine Balanis, Craig Birtcher, Arizona State University, United States; Hussein Shaman, Waleed Alomar, King Abdulaziz City for Science and Technology, Saudi Arabia; Saud Saeed, Prince Sattam bin Abdulaziz University, Saudi Arabia

TH-A4.1P.2: PHYSICAL OPTICS MODELING OF SCATTERING BY CHECKERBOARD STRUCTURE FOR RCS REDUCTION	1693
<i>Meshaal Alyahya, Constantine Balanis, Craig Birtcher, Arizona State University, United States; Hussein Shaman, Waleed Alomar, King Abdulaziz City for Science and Technology, Saudi Arabia</i>	
TH-A4.1P.3: RADAR CROSS SECTION REDUCTION OF A FOLDABLE MICROSTRIP PATCH ARRAY	1695
<i>Akash Biswas, Muhammad Hamza, Constantinos L. Zekios, Stavros V. Georgakopoulos, Florida International University, United States</i>	
TH-A4.1P.4: DESIGN AND FABRICATION OF ENGINEERED REFLECTOR FOR WIDEBAND LINEAR-TO-CIRCULAR POLARIZATION CONVERTER	1697
<i>Mourad Ibrahim, Prince Sultan University, Saudi Arabia; Abdelhady Mahmoud, Amr Awamry, Banha University, Egypt; Zhi Hao Jiang, Wei Hong, Southeast University, China; Mustafa K. Taher Al-Nuaimi, Shenzhen University, China</i>	
FR-SP.1A.4: A NOVEL 60-CM NONSPHERICAL 3-D PRINTED VOXELIZED LENS ANTENNA: DESIGN, FABRICATION AND MEASUREMENT	1699
<i>Yahya Rahmat-Samii, Jordan Budhu, University of California, Los Angeles, United States; Richard Hodges, Douglas Hofmann, Donald Ruffatto, NASA Jet Propulsion Lab, California Institute of Technology, United States</i>	
FR-SP.1A.7: A 3-D PRINTING KA-BAND TWISTED WAVEGUIDE FILTER WITH FILTERING AND POLARIZATION ROTATION	1701
<i>Yi Zhang, Jun Xu, Fan Zhang, Xi He, Xiaoyan Li, Ying Sun, Shengjian Xu, University of Electronic Science and Technology of China, China</i>	
FR-SP.1A.8: TUNABLE 3D-PRINTED COAXIAL-CAVITY FILTERS WITH MIXED ELECTROMAGNETIC COUPLING	1703
<i>Kshitij Sadasivan, Dimitra Psychogiou, University of Colorado at Boulder, United States</i>	
FR-SP.1A.9: PRINTED 5G RECONFIGURABLE WIRELESS MODULES USING ADDITIVE MANUFACTURING TECHNIQUES	1705
<i>Tong-Hong Lin, Manos Tentzeris, Georgia Institute of Technology, United States</i>	
FR-SP.2A: ANTENNA INNOVATIONS AND OPEN CHALLENGES FOR SMALL SATELLITES AND CUBESATS	
FR-SP.2A.1: A REVIEW OF JPL DEPLOYABLE CUBESAT ANTENNAS	N/A
<i>Nacer Chahat, Emmanuel Decrossas, Tom Cwik, NASA Jet Propulsion Lab, California Institute of Technology, United States</i>	
FR-SP.2A.2: METAL-ONLY MODULATED METASURFACE ANTENNA FOR CUBESAT PLATFORMS	1709
<i>David Gonzalez-Ovejero, Centre National de la Recherche Scientifique (CNRS), France; Adham Mahmoud, Xavier Morvan, Université de Rennes 1, France; Mauro Ettore, Centre National de la Recherche Scientifique (CNRS), France; Ronan Sauleau, Université de Rennes 1, France; Stefano Maci, University of Siena, Italy; Goutam Chattopadhyay, Nacer Chahat, NASA Jet Propulsion Lab, California Institute of Technology, United States</i>	
FR-SP.2A.4: HIGH-FREQUENCY CUBESAT PLATFORM SCATTERING USING HIGHER-ORDER METHOD OF MOMENTS	1711
<i>Jakob Rosenkrantz de Lasson, Oscar Borries, Cecilia Cappellin, Tonny Rubæk, TICRA, Denmark</i>	
FR-SP.2A.5: DESIGN OF A QUASI-OPTICAL SI/GAAS W-BAND BEAM-FORMING METASURFACE ANTENNA	1713
<i>Okan Yurduseven, Choonsup Lee, Nacer Chahat, NASA Jet Propulsion Lab, California Institute of Technology, United States; David Gonzalez-Ovejero, Mauro Ettore, Ronan Sauleau, IETR, University of Rennes 1, France; Goutam Chattopadhyay, NASA Jet Propulsion Lab, California Institute of Technology, United States</i>	
FR-SP.2A.6: DESIGN AND MEASUREMENTS OF A 1M KA-BAND MESH DEPLOYABLE REFLECTOR ANTENNA FOR CUBESATS	1715
<i>Yahya Rahmat-Samii, Vignesh Manohar, University of California, Los Angeles, United States; Richard Hodges, NASA Jet Propulsion Lab, California Institute of Technology, United States; Gregg Freebury, Tendeg LLC, United States</i>	

FR-SP.2A.7: MEASURING GPS TRANSMIT ANTENNA PATTERN USING ON-ORBIT RECEIVERS 1717
Tianlin Wang, Christopher Ruf, Bruce Block, University of Michigan, United States; Andrew O'Brien, Ohio State University, United States

FR-SP.2A.8: DEPLOYABLE CIRCULARLY POLARIZED UHF PRINTED LOOP ANTENNA FOR MARS 1719
CUBE ONE (MARCO) CUBESAT
Emmanuel Decrossas, NASA Jet Propulsion Lab, California Institute of Technology, United States; Phillip E. Walkemeyer, Canvas Technology, United States; B. Savannah Velasco, California State Polytechnic University - Pomona, United States; Nacer Chahat, NASA Jet Propulsion Lab, California Institute of Technology, United States

FR-SP.2A.10: X-BAND ARCHIMEDEAN SPIRAL ANTENNA ARRAY WITH SLOPED-WALL BACKING 1721
CAVITY
Katelyn Isbell, Yang-Ki Hong, Woncheol Lee, Hoyun Won, Minyeong Choi, University of Alabama, United States

FR-A5.1A: ULTRA-WIDEBAND COMPONENTS AND SYSTEMS

FR-A5.1A.1: BEAMFORMING APERTURES WITH WIDEBAND LOW-COST FRONT-ENDS 1723
Rimon Hokayem, Elias A. Alwan, John L. Volakis, Florida International University, United States

FR-A5.1A.2: ONLINE DIAGNOSTIC ULTRA-WIDEBAND ANTENNA SYSTEM IN HIGH VOLTAGE 1725
POLYMERIC INSULATOR
Jungang Yin, Runqi Wu, Hunan University, China; Jian Yang, Xiangdong Xu, Chalmers University of Technology, Sweden

FR-A5.1A.3: BROADBAND MMWAVE SPLITTERS BASED ON DIELECTRIC WAVEGUIDES..... 1727
Christoph Baer, Ruhr University Bochum, Germany

FR-A5.1A.4: A QUASI-OPTICAL TESTBED FOR TERAHERTZ ON-WAFER DEVICE AND CIRCUIT 1729
CHARACTERIZATION
Yiran Cui, Georgios Trichopoulos, Arizona State University, United States

FR-A5.1A.5: MILLIMETER-WAVE AUTOMOTIVE RADAR CHARACTERIZATION AND TARGET 1731
SIMULATOR SYSTEMS
Shahed Shahir, Mohammad-Reza Nezhad-Ahmadi, Mohammad Chavoshi, Gholamreza Rafi, Safieddin Safavi-Naeini, University of Waterloo, Canada

FR-A5.1A.6: INLINE MILLIMETER WAVE RADAR PHASE MEASUREMENTS UTILIZING HIGH 1733
ORDER WAVEGUIDE MODES
Birk Hattenhorst, Christoph Baer, Christian Schulz, Thomas Musch, Ruhr University Bochum, Germany

FR-A5.1A.7: ON THE DISTORTION OF UWB CIRCULARLY POLARIZED TIME-DOMAIN PULSES IN 1735
PRESENCE OF ROTATION
Adam Narbudowicz, Wroclaw University of Science and Technology, Poland; Janusz Przewocki, University of Gdansk, Poland; Max Ammann, Technological University Dublin, Ireland

FR-A5.1A.8: A NOVEL ULTRA-WIDEBAND COMMUNICATION SYSTEM USING AN ANALOG 1737
TIME-REVERSAL MODULE
Zhipeng Wang, Bing-Zhong Wang, Yuming Wu, Deshuang Zhao, University of Electronic Science and Technology of China, China

FR-A5.1A.9: GRAPHENE PRINTED UWB MONOPOLE ANTENNA FOR WIRELESS 1739
COMMUNICATION APPLICATIONS
Kewen Pan, Ting Leng, Yutong Jiang, Yixian Fang, Xinyao Zhou, University of Manchester, United Kingdom; Mahmoud A. Abdalla, Military Technical College, Egypt; Habiba Ouslimani, University Paris, France; Zhirun Hu, University of Manchester, United Kingdom

FR-A5.1A.10: UWB ANTENNA PRINTING ON GLASS SUBSTRATE THROUGH COST-EFFECTIVE 1741
COPPER FOILS
Umer Farooq, Adnan Iftikhar, Adnan Fida, Muhammad F. Shafique, Comsats University, Pakistan; Sajid M. Asif, University of Sheffield, United Kingdom; Benjamin D. Braaten, North Dakota State University, United States

FR-A1.1A: CIRCULARLY POLARIZED PATCH AND PRINTED ANTENNAS

FR-A1.1A.1: ALL-METAL DUAL-FREQUENCY CIRCULARLY POLARIZED HIGH GAIN ANTENNA FOR N/A POTENTIAL EUROPA LANDER

Nacer Chahat, John Luke Wolff, Brant Cook, Polly Estabrook, NASA Jet Propulsion Lab, California Institute of Technology, United States

FR-A1.1A.2: A CIRCULARLY POLARIZED PLANAR 2×2 DIPOLE ARRAY ANTENNA FED BY A MODIFIED ... 1745 4-WAY GYSEL POWER DIVIDER

Eunyoung Park, Sangkil Kim, Pusan National University, Korea (South); Nathan Seongheon Jeong, University of Alabama, United States

FR-A1.1A.3: ANALYSIS OF CIRCULAR POLARIZATION PROPERTIES OF 4X4 ARRAYS AT KA-BAND..... 1747

Lukasz Greda, Wahid Elmarissi, Achim Dreher, German Aerospace Center (DLR), Germany

FR-A1.1A.4: A DEFECTED GROUND STRUCTURE FOR CIRCULARLY POLARIZED (CP) 1749 MICROSTRIP ANTENNA DESIGN

Kun Wei, Bo-Cheng Zhu, Peking University, China; Ming-Liang Tao, Yue-Xian Wang, Northwestern Polytechnical University, China

FR-A1.1A.5: OMNIDIRECTIONAL TRIPLE-BAND PRINTED DIPOLE ANTENNA BASED ON A DUAL 1751 FREQUENCY SRRS

Nilton Santos-Valdivia, Patricia Castillo-Aranibar, Universidad Católica San Pablo, Peru; Daniel Segovia-Vargas, Alejandro García-Lampérez, Universidad Carlos III de Madrid, Spain

FR-A1.1A.6: COMPACT BROADBAND CIRCULARLY POLARIZED MICROSTRIP ANTENNA WITH A 1753 CROSS-SLOTTED GROUND PLANE

Ruipan Zhang, Jiawei Huang, Jun Ding, Guohua Zhai, East China Normal University, China

FR-A1.1A.7: A SHARED-APERTURE BROADBAND CIRCULARLY POLARIZED ANTENNA FOR 1755 SATELLITE COMMUNICATIONS AND NAVIGATION

Yu-Yang Zheng, C.C Liu, East China Research Institute of Electronic Engineering, China; Yan Ran Ding, University of Electronic Science and Technology of China, China

FR-A1.2A: MUTUAL COUPLING IN ANTENNA ARRAYS

FR-A1.2A.1: MUTUAL COUPLING AND FAILURE ANALYSIS IN PHASED ANTENNA ARRAYS..... 1757

Abdelmoniem Hassan, Ahmed Kishk, Concordia University, Canada

FR-A1.2A.2: A CHARACTERISTIC MODE BASED DECOUPLING APPROACH 1759

Sandip Ghosal, Arijit De, Ajay Chakrabarty, Indian Institute of Technology, Kharagpur, India; Raed M. Shubair, Massachusetts Institute of Technology, United States

FR-A1.2A.3: A COMPACT 2 BY 2 PRINTED YAGI-UDA ANTENNA ARRAY WITH ENHANCED ISOLATION 1761 AND GAIN

Nivedita Parthasarathy, Ramesh Abhari, Santa Clara University, United States

FR-A1.2A.4: A BROADBAND H-PLANE PATCH ANTENNA DECOUPLING TECHNIQUE 1763

Soroush Rasti Boroujeni, Safieddin Safavi-Naeini, University of Waterloo, Canada

FR-A1.2A.5: REDUCED ACTIVE IMPEDANCE VARIATION BY USING TIME MODULATED ARRAY 1765

Mohammad Hossein Mazaheri, Mohammad Fakharzadeh, Mahmood Akbari, Sharif University of Technology, Iran; Safieddin Safavi-Naeini, University of Waterloo, Canada

FR-A1.2A.6: COUPLING REDUCTION OF PRINTED YAGI ANTENNA ARRAYS FOR 1767 MILLIMETER-WAVE IMAGING APPLICATIONS

Mostafa Alvandian, University of Tehran, Iran; Mohammad Fakharzadeh, Sharif University of Technology, Iran; Mohammadreza Ranjbar Naeini, University of Wisconsin-Madison, United States

FR-A1.2A.7: DOES LOW MUTUAL COUPLING IMPLY LOW ANTENNA CORRELATION?	1769
<i>Xiaoming Chen, Muhammad Abdullah, Qinlong Li, Shitao Zhu, Hongyu Shi, Anxue Zhang, Xi'an Jiaotong University, China</i>	
FR-A1.2A.8: COUPLING EFFECTS ON POLARIZATION-AGILE PATCH ANTENNA ARRAYS	1771
<i>Hsinju Chen, Shih-Yuan Chen, National Taiwan University, Taiwan; Jennifer Bernhard, University of Illinois at Urbana-Champaign, United States</i>	
FR-A1.2A.9: A NOVEL SELF-RESTRAINED DECOUPLING TECHNIQUE FOR TWO ANTENNAS	N/A
<i>Min Li, Heming Yao, Lijun Jiang, University of Hong Kong, China</i>	
 FR-A5.2A: ELEMENTS AND ARRAYS FOR SENSING AND MEASUREMENT	
FR-A5.2A.1: A LOG-PERIODIC BASED BROADBAND REJECT FILTER FOR DIELECTRIC CONSTANT CHARACTERIZATION	1775
<i>Moussa Bteich, Joseph Costantine, Rouwaida Kanj, Youssef Tawk, American University of Beirut, Lebanon; Ali Ramadan, Fahad Bin Sultan University, Saudi Arabia; Assaad Eid, American University of Beirut, Lebanon</i>	
FR-A5.2A.2: EXCITATION OF CIRCULARLY POLARIZED WAVE IN SUBSTRATE INTEGRATED E-PLANE WAVEGUIDE	1777
<i>Venkata Naga Kalyan Ram Akunuru, Xuan Hui Wu, Minnesota State University, Mankato, United States</i>	
FR-A5.2A.3: NEW POTENTIAL OF A DIRECT PRINTED LORA ANTENNA.....	1779
<i>Camille Delfaut, Fondation Grenoble INP, France; Tan-Phu Vuong, IMEP- LaHC, France; Nadège Reverdy-Bruas, Denis Curtil, LGP2, France; Cecile Venet, Schneider, France</i>	
FR-A5.2A.4: DUAL-PORT STACKED ANNULAR RING MICROSTRIP PATCH ANTENNA WITH VERTICAL PINS FOR ISOLATION ENHANCEMENT	N/A
<i>Guangjun Wen, Fuzhen Xie, University of Electronic Science and Technology of China, China; Haobing Zhang, Southwest China Research Institute of Electronic Equipment, China; Wenxian Zheng, Shenzhen Intellifusion Technologies Co., China; Daniele Insera, University of Electronic Science and Technology of China, China</i>	
FR-A5.2A.5: CIRCULARLY POLARIZED PROXIMITY FEED PATCH ANTENNA FOR FMCW RADAR	1783
<i>Anindya Ghosh, Debashish Chakravarty, Indian Institute of Technology, Kharagpur, India</i>	
FR-A5.2A.6: A DUAL BAND UWB ANTENNA FOR WCE SYSTEMS	1785
<i>Arifin Farhadur, Pran Kanai Saha, Bangladesh University of Engineering and Technology, Bangladesh</i>	
FR-A5.2A.7: SINGLE ANTENNA CHANGEOVER SWITCH FOR UHF RFID COMMUNICATIONS AND RF ENERGY HARVESTING	1787
<i>Paul S. Taylor, Robert Horne, John C. Batchelor, University of Kent, United Kingdom</i>	
FR-A5.2A.8: N-WAY SPATIAL POWER COMBINING IN SIW FOR HIGH POWER GENERATION MMICS -SCALABILITY BOUNDS	1789
<i>Artem Roev, Marianna Ivashina, Chalmers University of Technology, Sweden; Rob Maaskant, Marion Matters-Kammerer, Eindhoven University of Technology, Netherlands</i>	
FR-A5.2A.9: EVALUATION OF ELECTROMAGNETIC TIME REVERSAL SPATIAL FOCUSING (EMTR-SF)	1791
<i>Ahmed Abdelraheem, Dimitrios Peroulis, Purdue University, United States</i>	
FR-A5.2A.10: WIDE-ANGLE SCANNING CONFORMAL ARRAY ANTENNA BASED ON THE QCTO	N/A
<i>Wei Huang Fan, Juan Lei, National Key Laboratory of Antennas and Microwave Technology, China</i>	
 FR-A5.3A: WIRELESS POWER TRANSFER	
FR-A5.3A.1: MISALIGNMENT RESILIENT, NEAR FIELD WIRELESS POWER TRANSFER (WPT) ANTENNAS USING ANCHOR SHAPE	1795
<i>Dieff Vital, Shubhendu Bhardwaj, John L. Volakis, Florida International University, United States</i>	

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<i>Mahmoud Sharafi, Constantinos L. Zekios, Stavros V. Georgakopoulos, Florida International University, United States</i>	
FR-A5.3A.3: RETRO-DIRECTIVE ARRAY ANTENNA WITH PARABOLIC SHAPE STRUCTURE FOR SHORT-RANGE MICROWAVE POWER TRANSFER	1799
<i>Sol Kim, Jeong-Wook Kim, Jin-Woo Kim, Ghoo Kim, Jong-Won Yu, Korea Advanced Institute of Science and Technology (KAIST), Korea (South)</i>	
FR-A5.3A.4: SIMULTANEOUS WIRELESS POWER & DATA TRANSMISSION FOR WEARABLE APPLICATIONS	1801
<i>Mahmoud Sharafi, Constantinos L. Zekios, Stavros V. Georgakopoulos, Florida International University, United States</i>	
FR-A5.3A.5: DESIGN AND CHARACTERIZATION OF A COMPACT RECTENNA FOR STRUCTURAL HEALTH MONITORING APPLICATIONS	1803
<i>Alassane Sidibe, Alexandru Takacs, Abderrahim Okba, Hervé Aubert, LAAS-CNRS, Université de Toulouse, CNRS, INP, F-31400 Toulouse, France</i>	
FR-A5.3A.6: A DUAL-POLARIZED MULTI-ANTENNA STRUCTURE FOR SIMULTANEOUS TRANSMISSION OF WIRELESS INFORMATION AND POWER	1805
<i>Boules A. Mouris, KTH Royal Institute of Technology, Sweden; Christos I. Kolitsidas, Ericsson, Sweden; Ragnar Thobaben, KTH Royal Institute of Technology, Sweden</i>	
FR-A5.3A.7: UNIPLANAR RECTENNA DESIGNS MATCHED WITH EITHER ACTIVE OR PASSIVE DC-TO-DC CONVERTER	1807
<i>Abdul Quddious, Photos Vryonides, Symeon Nikolaou, Frederick University, Cyprus; Marco A. Antoniadis, University of Cyprus Nicosia, Cyprus</i>	
FR-A5.3A.8: A NEW GRADIENT DESCENT POSITIONING METHOD IN WIRELESS SENSOR NETWORK BASED ON RECEIVED SIGNAL STRENGTH	1809
<i>Hussein Hijazi, Nahi Kandil, Nour Zaarour, Nadir Hakem, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada</i>	
FR-A5.3A.9: DESIGN OF A COMPACT HIGH-GAIN SLOTTED TRAPEZOIDAL ANTENNA AT 2.45 GHZ FOR ENERGY HARVESTING.	1811
<i>Mohamed Mansour, Haruichi Kanaya, Kyushu University, Japan</i>	
 FR-A2.1A: DESIGN OF METAMATERIALS AND METASURFACES	
FR-A2.1A.1: A TWO-DIMENSIONAL LC-NETWORK METAMATERIAL ON AN IRREGULAR GRID	1813
<i>Do-Hoon Kwon, University of Massachusetts Amherst, United States</i>	
FR-A2.1A.2: MULTI-OBJECTIVE OPTIMIZATION OF META-ATOMS	1815
<i>Eric B. Whiting, Sawyer D. Campbell, Douglas H. Werner, Pingjuan L. Werner, Pennsylvania State University, United States</i>	
FR-A2.1A.3: METASURFACE DESIGN USING ELECTROMAGNETIC INVERSION	N/A
<i>Trevor Brown, Chaitanya Narendra, University of Manitoba, Canada; Yousef Vahabzadeh, Christophe Caloz, École Polytechnique de Montréal, Canada; Puyan Mojabi, University of Manitoba, Canada</i>	
FR-A2.1A.4: DUAL-BAND NEGATIVE PERMITTIVITY METAMATERIAL USING CROSSED LOOP RESONATOR	N/A
<i>Soumen Pandit, Priyadip Ray, Akhilesh Mohan, Indian Institute of Technology, Kharagpur, India</i>	
FR-A2.1A.5: METASURFACE DESIGN FOR CROSS-POLARIZATION CONVERSION AND ABSORPTION APPLICATIONS	1821
<i>Afzal Ahmed, Fahad Ahmed, Farooq Ahmad Tahir, National University of Sciences and Technology (NUST), Pakistan</i>	
FR-A2.1A.6: BROADBAND LINEAR TO CIRCULAR REFLECTION POLARIZATION CONVERTER	1823
<i>Filippo Costa, Simone Genovesi, Agostino Monorchio, University of Pisa, Italy; Shengjun Zhang, Yichun Cui, Jiaqi Liu, Beijing Institute of Space Long March Vehicle, China</i>	

FR-A2.1A.7: DIELECTRIC METASURFACE FOR WAVE FOCUSING AND VORTEX BEAM GENERATION	N/A
<i>Valeriy Odit, Irina Munina, Mikhail Odit, St. Petersburg Electrotechnical University LETI, Russia</i>	
FR-A2.1A.8: DESIGN OF MULTILAYERED META-LENSES FOR IMAGE RESOLUTION ENHANCEMENT	1827
<i>Mark Ruiz, Nantakan Wongkasem, University of Texas Rio Grande Valley, United States</i>	
FR-A2.1A.9: A METASURFACE WITH CONTROLLED ANGULAR PHASE DISPERSION FOR CONTINUOUS ILLUMINATION ANGLES	N/A
<i>Ying Li, Jun Yang, Guangsheng Deng, Hefei University of Technology, China; Qi Zhu, University of Science and Technology of China, China</i>	
FR-A2.1A.10: WIDEBAND ANISOTROPIC UNIT CELL DESIGN FOR PERFECT CROSS-POLARIZATION CONVERSION	1831
<i>Mourad Ibrahim, Prince Sultan University, Saudi Arabia; Abdelhady Mahmoud, Benha University, Egypt; Amr Awamry, Banha University, Egypt; Zhi Hao Jiang, Wei Hong, Southeast University, China; Mustafa K. Taher Al-Nuaimi, Shenzhen University, China</i>	
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FR-A5.4A.1: DUAL TUNABLE MULTIFUNCTIONAL RECONFIGURABLE VIVALDI ANTENNA FOR COGNITIVE/MULTI-STANDARD RADIO APPLICATIONS	1833
<i>Keerthipriya S, Chinmoy Saha, Indian Institute of Space Science and Technology, India; Jawad Siddiqi, Yahia Antar, Royal Military College of Canada, Canada</i>	
FR-A5.4A.2: EVALUATION ON PSEUDO-DOPPLER ANTENNA ARRAY USING SOFTWARE-DEFINED-RADIO	1835
<i>Hoyun Won, Yang-Ki Hong, Katelyn Isbell, Leo Vanderburgh, Jonathan Platt, Minyeong Choi, University of Alabama, United States</i>	
FR-A5.4A.3: ADAPTIVE MODULATION FOR MU-MIMO-OFDM SYSTEMS IN UNDERLAY COGNITIVE RADIO NETWORKS	1837
<i>Rym Labdaoui, University Houari Boumedienne of Science and Technology, Algeria; Khalida Ghanem, Center of Development of Advanced Techniques (CDTA), Algeria; Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada; Fatiha Youcef Ettoumi, University Houari Boumedienne of Science and Technology, Algeria</i>	
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<i>Hakim Tayakout, Khalida Ghanem, Center of Development of Advanced Techniques (CDTA), Algeria; Hicham Bousbia-Salah, National School Polytechnic (ENP), Algeria</i>	
 FR-A5.6A: CHAMBER TECHNOLOGY FOR MIMO ANTENNA MEASUREMENTS	
FR-A5.6A.1: DUAL POLARIZED PLANE WAVE GENERATOR DESIGN FOR DIRECT FAR-FIELD TESTING	1841
<i>Francesco Scattone, Darko Sekuljica, Andrea Giacomini, Francesco Saccardi, Microwave Vision Italy SRL, Italy; Jim Acree, John Estrada, MVG Inc, United States; Lars Jacob Foged, Microwave Vision Italy SRL, Italy</i>	
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<i>Benjamin Arnold, Michael Jensen, Brigham Young University, United States</i>	
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<i>Benjamin Arnold, Michael Jensen, Brigham Young University, United States</i>	

FR-A5.6A.5: BEAM PROBABILITY METRIC FOR 5G OTA TESTING IN MULTI-PROBE ANECHOIC CHAMBER SETUPS	1847
<i>Huaqiang Gao, Weimin Wang, Beijing University of Posts and Telecommunications, China; Wei Fan, Aalborg University, Denmark; Yongle Wu, Yuanan Liu, Beijing University of Posts and Telecommunications, China; Gert Frølund Pedersen, Aalborg University, Denmark</i>	
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FR-A3.1A.1: NUMERICAL ANALYSIS ON MULTIPACTOR EFFECTS IN COAXIAL CABLES VIA PARTICLE-IN-CELL ALGORITHM	1849
<i>Dong-Yeop Na, Indranil Nayak, Fernando Teixeira, Ohio State University, United States</i>	
FR-A3.1A.2: MIMICKING ANTENNA NEAR-FIELD MEASUREMENTS USING FULL WAVE SOLVERS FOR ERROR CHARACTERIZATION	1851
<i>Vignesh Manohar, Yahya Rahmat-Samii, University of California, Los Angeles, United States</i>	
FR-A3.1A.3: AUTOMATIC GENERALIZED QUADRILATERAL SURFACE MESHING IN COMPUTATIONAL ELECTROMAGNETICS BY DISCRETE SURFACE RICCI FLOW	1853
<i>Cam Key, Branislav Notaros, Colorado State University, United States</i>	
FR-A3.1A.4: FAST METHOD FOR FIRST-PRINCIPLES-BASED PARASITIC EXTRACTION OF INTEGRATED CIRCUIT LAYOUT	1855
<i>Li Xue, Dan Jiao, Purdue University, United States</i>	
FR-A3.1A.5: SPARSE RECOVERY WITH PREDICTABLE ACCURACY IN NOISY SPHERICAL ANTENNA NEAR-FIELD MEASUREMENTS	1857
<i>Bernd Hofmann, Thomas F. Eibert, Technical University of Munich, Germany</i>	
FR-A3.1A.6: LOW-COST MOM-SOLUTION OF BLOOD TUBE SCATTERING	1859
<i>Ala Eldin Omer, George Shaker, Safieddin Safavi-Naeini, Raed M. Shubair, University of Waterloo, Canada</i>	
FR-A3.1A.7: PREDICTING MRI RF EXPOSURE FOR COMPLEX-SHAPED MEDICAL IMPLANTS USING ARTIFICIAL NEURAL NETWORK	1861
<i>Qianlong Lan, Jianfeng Zheng, Ji Chen, University of Houston, United States</i>	
FR-A3.1A.8: PRELIMINARY STUDY ON DIFFERENCES BETWEEN FULL- AND SUB-STRUCTURE CHARACTERISTIC MODES	1863
<i>Shang Xiang, Buon Kiong Lau, Lund University, Sweden</i>	
FR-A3.1A.9: REFLECTION BEHAVIOR OF METASURFACE USING FULL-WAVE AND CHARACTERISTIC MODE ANALYSES	1865
<i>Mohammed Alharbi, Constantine Balanis, Craig Birtcher, Arizona State University, United States; Hussein Shaman, King Abdulaziz City for Science and Technology, Saudi Arabia</i>	
FR-A3.1A.10: SURFACE RECONSTRUCTION OF LARGE REFLECTOR ANTENNAS BASED ON A HYBRID OF CMA-ES AND HIO ALGORITHMS	1867
<i>Yueshu Xu, Qian Ye, Shanghai Jiao Tong University, China; Ahmad Hoorfar, Villanova University, United States</i>	
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FR-A1.3A.1: COMPARISON OF THE RADIATION CHARACTERISTICS FOR BALANCED- AND UNBALANCED-FEED GRID ARRAY ANTENNAS COMPOSED OF RECTANGULAR LOOP CELLS	1869
<i>Toru Kawano, National Defense Academy, Japan; Hisamatsu Nakano, Hosei University, Japan</i>	
FR-A1.3A.2: MICROFLUIDIC SWITCHES WITH INTEGRATED ACTUATION FOR MM-WAVE BEAM-STEERING ARRAYS	1871
<i>Enrique González, Gokhan Mumcu, University of South Florida, United States</i>	

- FR-A1.3A.3: LOW-COST DUAL-POLARIZED 60 GHZ PATCH ANTENNA ARRAY IN PCB PROCESS 1873**
Haiyang Xia, Jincan Hu, Lianming Li, Fu-Chun Zheng, Southeast University, China; Tao Zhang, Xidian University, China
- FR-A1.3A.4: SIMULATION DESIGN OF BEAM-SCANNING SELF-PHASE-SHIFT DIPOLE ARRAY BASED 1875**
ON LIQUID-METAL MATERIALS
Yuwei Zhang, Shu Lin, Zhiyuan Sun, Yang Li, Zhuang Chen, Cai-Tian Yang, Hongjun Zhang, Alexander Denisov, Harbin Institute of Technology, China
- FR-A1.3A.5: DESIGN OF A ROTMAN LENS ANTENNA ARRAY FOR WIDE-SCAN AND BEAM 1877**
UNIFORMITY APPLICATIONS
Rui Wang, Feng Yang, Peng Yang, Yi Yan, University of Electronic Science and Technology of China (UESTC), China
- FR-A5.5A: ON-CHIP ANTENNAS**
- FR-A5.5A.1: ON-CHIP SLOT RING ANTENNA INTEGRATED WITH VOLTAGE CONTROLLED 1879**
OSCILLATOR AT 140 GHZ IN 40NM CMOS TECHNOLOGY
Wei-Kai Chen, Yu-Teng Chang, Hsin-Chia Lu, National Taiwan University, Taiwan
- FR-A5.5A.2: GAIN ENHANCEMENT OF ON-CHIP ANTENNAS USING MINIATURIZED-ELEMENT 1881**
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Mohammad Mahdi Honari, University of Michigan, United States; Pedram Mousavi, University of Alberta, Canada; Kamal Sarabandi, University of Michigan, United States
- FR-A5.5A.3: DISC-LOADED, VERTICAL TOP-HAT MONOPOLE ANTENNA AT 225 GHZ FOR ON-CHIP 1883**
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Rounak Singh Narde, Jayanti Venkataraman, Amlan Ganguly, Rochester Institute of Technology, United States
- FR-A5.5A.4: GROUNDED COPLANAR WAVEGUIDE-FED MILLIMETER WAVE VOLUMETRIC 1885**
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- FR-A5.5A.5: A FABRICATION COMPATIBLE ON-CHIP LINEAR TAPERED SLOT ANTENNA WITH CPW 1887**
FEED
Arup Ray, Arijit De, Tarun Kanti Bhattacharyya, Indian Institute of Technology, Kharagpur, India
- FR-A5.7A: ANTENNAS FOR RFID APPLICATIONS**
- FR-A5.7A.1: FREQUENCY AND POLARIZATION AGILE RFID PATCH ANTENNA WITH REDUCED 1889**
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Enrico Tolin, Francesca Vipiana, Politecnico di Torino, Italy; Achim Bahr, Simona Bruni, Winfried Simon, IMST GmbH, Germany
- FR-A5.7A.2: A PATCH ANTENNA WITH LIQUID CRYSTAL ELASTOMER SWITCHING FOR PASSIVE 1891**
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- FR-A5.7A.3: CIRCULARLY POLARIZED V-SHAPED PATCH ANTENNA FOR RFID APPLICATION 1893**
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MANAGEMENT
Seong-Hyeop Ahn, Jeong-Soo Park, Dong-Geun Seo, Yu-Seong Choi, Ye-Yeong Jeong, Wang-Sang Lee, Gyeongsang National University, Korea (South)
- FR-A5.7A.5: AN ASYMMETRIC UHF RFID TAG ANTENNA WITH MULTIPLE SLITS LOADING..... N/A**
Chow-Yen-Desmond Sim, Yu-Zhang Huang, Chong-Zuo Chen, Feng Chia University, Taiwan; Horng-Dean Chen, National Kaohsiung Normal University, Taiwan; Tuan-Yung Han, National Taitung College, Taiwan; Guan-Long Huang, Shenzhen University, China

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Guangyao Yang, Shengbo Ye, Yicai Ji, Guangyou Fang, Key Laboratory of Electromagnetic Radiation and Sensing Technology, Chinese Academy of Sciences, Beijing 100190, China, China

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FR-A5.1P.1: STUDY OF 3D PRINTED HONEYCOMB MICROWAVE ABSORBERS	1981
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FR-A5.1P.2: 3D PRINTED 2.45 GHZ YAGI-UDA LOOP ANTENNA UTILIZING MICROFLUIDIC CHANNELS AND LIQUID METAL	1983
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FR-A5.1P.3: A 3D PRINTED LENS ANTENNA FOR 5G APPLICATIONS	1985
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FR-A5.1P.4: AN OFFSET-FED WIDEBAND 3D PRINTED APERTURE COUPLED TRAPEZOIDAL DIELECTRIC RESONATOR ANTENNA	1987
<i>Ami Desai, Payam Nayeri, Colorado School of Mines, United States</i>	
FR-A5.1P.5: 3D PRINTED INHOMOGENEOUS MICROWAVE LENSE OF AN ARBITRARY SHAPE.....	1989
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FR-A5.1P.6: 3D-PRINTED SCANNING DIELECTRIC LENS ANTENNA.....	1991
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FR-A5.1P.7: A 3D PRINTED FRAGMENTED APERTURE ANTENNA	1993
<i>Kevin Cook, David Richardson, Justin Htay, James Dee, Christopher Howard, Georgia Tech Research Institute, United States</i>	
FR-A5.1P.8: A 3D PRINTED COMPACT PIFA FOR 5G APPLICATIONS.....	1995
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FR-A5.1P.9: DESIGN AND TEST OF 3-D PRINTED SPHERICAL GROUND PLANES FOR MONOPOLE ANTENNAE	1997
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FR-A5.1P.10: A 3-D PRINTED CIRCULARLY POLARIZED FILTERING ANTENNA.....	1999
<i>Yi Zhang, Jun Xu, Xi He, Fan Zhang, Ying Sun, Xiaoyan Li, Bo Liu, University of Electronic Science and Technology of China, China</i>	
 FR-A1.3P: RADIATORS AND THEIR ARRAY INTEGRATION	
FR-A1.3P.1: A WIDE COVERAGE S-BAND ARRAY WITH DUAL POLARIZED CONNECTED BOWTIE ANTENNA ELEMENTS	2001
<i>Prabhat Khanal, Jian Yang, Marianna Ivashina, Chalmers University of Technology, Sweden; Anders Hook, Ruoshan Luo, SAAB AB, Sweden</i>	
FR-A1.3P.2: POTENTIALITIES OF REDUCED BEAMFORMING ANTENNAS USING MAGNETO-ELECTRIC DIPOLES	2003
<i>Abdul-Sattar Kaddour, Jorick Milbrandt, Hala Alzein, Cyrille Menudier, Marc Thevenot, Univ. Limoges, CNRS, XLim, France; Philippe Pouliguen, Patrick Potier, Direction Générale de l'Armement (DGA), France; Maxime Romier, Centre national d'études spatiales, France</i>	

- FR-A1.3P.3: DUAL-POLARIZED PLANAR PHASED ARRAY ANTENNA WITH SEMI-OPEN CAVITY STRUCTURES** N/A
Peng Zhang, Shi-Wei Qu, University of Electronic Science and Technology of China, China
- FR-A1.3P.4: A 60 GHZ LTCC MAGNETO-ELECTRIC DIPOLE PHASED ARRAY WITH SYMMETRIC HYBRID FEEDING NETWORK** 2007
Tao Zhang, Zhangming Zhu, Xidian University, China; Lianming Li, Haiyang Xia, Tie Jun Cui, Southeast University, China
- FR-A1.3P.5: BROAD BAND AND WIDE SCAN SIW CAVITY-BACKED PHASED ARRAYS FOR 5G APPLICATIONS** 2009
Hao Liu, University of Electronic Science and Technology of China, China; Anyong Qing, Southwest Jiaotong University, China; Zhengdong Yu, Shengzhang Zhang, RDW Technology Co., Ltd, Chengdu, China
- FR-A1.3P.6: A PLANAR ULTRAWIDEBAND WIDE-ANGLE SCANNING TIGHTLY COUPLED ARRAY LOADED WITH METAL STRIPS**2011
Zhiguo Jiang, Shaoqiu Xiao, Zhixin Yao, University of Electronic Science and Technology of China, China
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Yan Li, Shaoqiu Xiao, Bing-Zhong Wang, University of Electronic Science and Technology of China, China
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Fu-Long Jin, Xiao Ding, Zhipeng Wang, Wei Shao, University of Electronic Science and Technology of China, China
- FR-A1.3P.9: A DEPLOYABLE METAMATERIAL REFLECTARRAY ANTENNA FOR MICROSATELLITE APPLICATION** N/A
Amit Kumar Singh, Seong-Ook Park, Korea Advanced Institute of Science and Technology (KAIST), Korea (South)
- FR-A2.2P: TUNABLE AND RECONFIGURABLE FREQUENCY SELECTIVE SURFACES**
- FR-A2.2P.1: FULLY INKJET-PRINTED TUNABLE HYBRID N-RPPLE MIURA (N-RIM) FREQUENCY SELECTIVE SURFACES** 2019
Syed Abdullah Nauroze, Manos Tentzeris, Georgia Institute of Technology, United States
- FR-A2.2P.2: AN INDEPENDENTLY TUNABLE UNIPLANAR DUAL BAND BAND-STOP FREQUENCY SELECTIVE SURFACE** 2021
Nibirh Jawad, Loïc Markley, University of British Columbia, Canada
- FR-A2.2P.3: A DUAL-BAND ORIGAMI FSS** 2023
Akash Biswas, Constantinos L. Zekios, Stavros V. Georgakopoulos, Florida International University, United States
- FR-A2.2P.4: DUAL BEAM END-FIRE ANTENNA USING CANTILEVER-ENABLED FREQUENCY SELECTIVE SURFACES** 2025
Arun Kesavan, Institut national de la recherche scientifique (INRS), Canada; Tayeb A. Denidni, National Institute of Scientific Research (INRS), Canada
- FR-A2.2P.5: HIGHER ORDER PLASMA-BASED TUNABLE ABSORBER USING MAGNETO-DIELECTRIC SUBSTRATES** 2027
Komlan Payne, Jay K. Lee, Syracuse University, United States; Kevin Xu, Jun H. Choi, University at Buffalo, The State University of New York, United States
- FR-A2.2P.6: BEAM STEERING USING ACTIVE SUPERSTRATE ANTENNA FOR WLAN APPLICATIONS** 2029
Nosherwan Shoaib, Sana Ilyas, Aimen Raza, Tayyab Hassan, National University of Sciences and Technology (NUST), Pakistan
- FR-A2.2P.7: A NOVEL DUAL POLARIZED TUNABLE FREQUENCY SELECTIVE SURFACE WITH VARACTORS** 2031
Yuting Zhao, Yingsong Li, Harbin Engineering University, China; Xiaoguang Liu, University of California, Davis, United States

FR-A2.2P.8: BENDING ANALYSIS OF SWITCHABLE FREQUENCY SELECTIVE SURFACE BASED ON FLEXIBLE COMPOSITE SUBSTRATE	2033
<i>Hijab Zahra, Syed Muzahir Abbas, Raheel Hashmi, Macquarie University, Australia; Ladislau Matekovits, Politecnico di Torino, Italy; Karu Esselle, Macquarie University, Australia</i>	
FR-A2.2P.10: PRELIMINARY STUDY OF A CYLINDRICAL MICROSTRIP METASURFACE USING THE STATE SPACE METHOD	2035
<i>Barbara Cappello, Ladislau Matekovits, Politecnico di Torino, Italy; Krishna Naishadham, Georgia Institute of Technology, United States</i>	
FR-A5.2P: SUB-6 GHZ MIMO ANTENNA DESIGN	
FR-A5.2P.1: ORIGAMI MULTIMODE RING ANTENNA BASED ON CHARACTERISTIC MODE ANALYSIS	2037
<i>Nicholas Russo, Constantinos L. Zekios, Stavros V. Georgakopoulos, Florida International University, United States</i>	
FR-A5.2P.2: A RECONFIGURABLE UWB MIMO ANTENNA FOR INDOOR AND OUTDOOR COMMUNICATION APPLICATIONS	2039
<i>Narayan Agnihotri, Adnan Kantemur, Jinpil Tak, Hao Xin, University of Arizona, United States</i>	
FR-A5.2P.3: DUAL-BAND PRINTED MONOPOLE ANTENNA FOR INDOOR MIMO APPLICATIONS	2041
<i>Mohamed Morsy, Texas A&M University-Texarkana, United States</i>	
FR-A1.5P: SLOT ARRAYS II	
FR-A1.5P.1: A NOVEL COMPACT HIGH-GAIN FILTENNA USING GAP WAVEGUIDE TECHNOLOGY	2043
<i>Hossein Sarbandi Farahani, Wolfgang Bösch, Technical University of Graz, Austria</i>	
FR-A1.5P.2: DESIGN OF A TRANSVERSE SLOT ARRAY IN GROOVE GAP WAVEGUIDE USING HORNS AT 28 GHZ BAND	2045
<i>Chih-Kai Hsieh, Malcolm Ng Mou Kehn, National Chiao Tung University, Taiwan; Eva Rajo-Iglesias, Universidad Carlos III de Madrid, Taiwan</i>	
FR-A1.5P.3: A HIGH GAIN SLOTTED WAVEGUIDE ARRAY FILTERING ANTENNA	2047
<i>Yi Zhang, Jun Xu, Fan Zhang, Xi He, Xiaoyan Li, Bo Liu, University of Electronic Science and Technology of China, China</i>	
FR-A1.5P.4: PARTITION WAVEGUIDE SLOTTED ARRAY WITH SHAPED PATTERNS	2049
<i>Hongjian Wang, Yunhua Zhang, NSSC, CAS, China</i>	
FR-A1.4P: POLARIZATION RECONFIGURABLE ANTENNAS	
FR-A1.4P.1: POLARIZATION AND BANDWIDTH RECONFIGURABLE RECTANGULAR DIELECTRIC RESONATOR ANTENNA	N/A
<i>Beijia Liu, Changhui Wang, Jinghui Qiu, Nannan Wang, Shengchang Lan, Hua Zong, Harbin Institute of Technology, China</i>	
FR-A1.4P.2: RESEARCH ON POLARIZATION-RECONFIGURABLE HOLOGRAPHIC METASURFACE	2053
<i>Mei Li, Ming-Chun Tang, Chongqing University, China; Yaohui Zhang, University of Electronic Science and Technology of China, China</i>	
FR-A1.4P.3: POLARIZATION RECONFIGURABLE PATCH ANTENNA WITH A CONTINUOUSLY ROTATABLE POLARIZATION PLANE	2055
<i>Makoto Sano, Makoto Higaki, Toshiba Corporation, Japan</i>	
FR-A1.4P.4: A HIGH-GAIN QUAD-POLARIZATION RECONFIGURABLE ANTENNA	2057
<i>Guoying Lin, Yuehui Cui, RongLin Li, South China University of Technology, China</i>	

FR-A1.4P.5: DUAL-BAND AND DUAL-POLARIZED RECONFIGURABLE BEAM-STEERING ARRAY FOR WLAN APPLICATIONS 2059

YuYi Gan, Peng Yang, Feng Yang, University of Electronic Science and Technology of China, China

FR-A1.6P: ARRAY HARDWARE SYSTEMS

FR-A1.6P.1: BALANCED-DIPLEXER FREQUENCY DIVISION DUPLEX SUBARRAY FOR X-BAND PHASED ARRAY 2061

Elie Tianang, Mohamed Elmansouri, Ljubodrag Boskovic, Dejan Filipovic, University of Colorado at Boulder, United States

FR-A1.6P.2: 1D ARRAY ANTENNAS IN TANDEM FOR A LARGE GAIN AND MOVING THE DIRECTION OF THE END-FIRE BEAM 2063

Changhyeong Lee, Heejun Park, Gwangyun Namgung, Sungtek Kahng, Incheon National University, Korea (South); Yong-Seok Lim, Korea Electronics Technology Institute, Korea (South)

FR-A1.6P.3: WIDE-ANGLE SCANNING PHASED ARRAY ANTENNA 2065

Bowen Ji, Gu Yang, Company of Brave Sky Technology, China

FR-A1.6P.4: A SIW LEAKY-WAVE BEAM SCANNING ARRAY 2067

Xiao Ding, Yu-Ming Wu, Fu-long Jin, Zhi-Peng Wang, Bing-Zhong Wang, University of Electronic Science and Technology of China, China

TUP-A4.5P: WAVE PROPAGATION IN INDOOR ENVIRONMENT

TUP-A4.5P.1: INDOOR PATH LOSS VARIATIONS WITH FREQUENCY AND VISIBILITY CONDITIONS AT 3.5 GHZ BAND 2069

Iñigo Cuiñas, Manuel García Sánchez, Universidade de Vigo, Spain; Arne Feys, Wout Debaenst, Jo Verhaevert, Ghent University, Belgium

TUP-A4.5P.2: 32-GHZ OUTDOOR-TO-INDOOR CHANNEL MEASUREMENT OF PROPAGATION LOSSES AND DELAY SPREAD 2071

Juyul Lee, Kyung-Won Kim, Myung-Don Kim, Jae-Joon Park, Electronics and Telecommunications Research Institute, Korea (South)

TUP-A4.5P.3: ON THE NON-STATIONARITY OF DEVICE TO DEVICE CHANNELS WITH DUAL MOBILITY IN INDOOR ENVIRONMENT 2073

Gloria Makhoul, Raffaele D'Errico, The French Alternative Energies and Atomic Energy Commission (CEA), micro- and nanotechnologies and their integration into systems (LETI), Minatec campus and Université Grenoble-Alpes, France; Claude Oestges, Université catholique de Louvain, Belgium

TUP-A4.5P.4: WIDEBAND PROPAGATION CHANNEL MEASUREMENTS IN AN INDOOR OFFICE ENVIRONMENT AT 26 GHZ 2075

Lorenzo Rubio Arjona, Vicent M. Rodrigo Peñarrocha, Universitat Politècnica de Valencia, Spain; Herman Fernández, Universidad Pedagógica y Tecnológica de Colombia, Spain; José-María Molina-García-Pardo, Universidad Politécnica de Cartagena, Spain; Bernardo Bernardo, Juan Reig, Universitat Politècnica de València, Spain; Jesús R. Pérez, Rafael P. Torres, Luis Valle, José Basterrechea, Marta Domingo, Universidad de Cantabria, Spain

TUP-A4.5P.5: A MEASUREMENTS BASED CHARACTERIZATION OF FADING IN INDOOR MILLIMETER-WAVE DISTRIBUTED ANTENNA SYSTEMS 2077

Lei Zhang, Seong Ki Yoo, Simon Cotton, Queen's University Belfast, United Kingdom

TUP-A4.2P: PROPAGATION AND SCATTERING IN COMPLEX AND RANDOM MEDIA

TUP-A4.2P.1: A MODIFIED BECKMANN-KIRCHHOFF SCATTERING MODEL FOR SLIGHTLY ROUGH SURFACES AT TERAHERTZ FREQUENCIES 2079

Fawad Sheikh, Thomas Kaiser, University of Duisburg-Essen, Germany

TUP-A4.2P.2: MODELING OF POWER DELAY PROFILE IN THE DESKTOP SIZE METAL CAVITY AT 300 GHZ	2081
<i>Jinbang Fu, Prateek Juyal, Alenka Zajić, Georgia Institute of Technology, United States</i>	
TUP-A4.2P.3: FULL WAVE ANALYSIS FOR ESTIMATING WAVE ATTENUATION IN A RANDOM VOLUME OF METALLIC WIRES USING MONTE CARLO SIMULATION	2083
<i>David Geroski, Kamal Sarabandi, University of Michigan, United States</i>	
TUP-A4.2P.4: FULLY-COHERENT ELECTROMAGNETIC SCATTERING MODEL FOR 3D DENSE RANDOM VOLUMES	2085
<i>Mostafa Zaky, Kamal Sarabandi, University of Michigan, United States</i>	
TUP-A4.2P.5: APPLICABILITY OF SSTDR ANALYSIS OF COMPLEX LOADS	2087
<i>Evan Benoit, Naveen Kumar Tumkur Jayakumar, Samuel Kingston, Mashad Uddin Saleh, Michael Scarpulla, University of Utah, United States; Joel Harley, University of Florida, United States; Cynthia Furse, University of Utah, United States</i>	
TUP-A4.2P.6: ACCURACY OF THE APPROXIMATION OF DYADIC GREEN'S FUNCTION FOR MULTILAYERED UNIAXIAL ANISOTROPIC MEDIUM	2089
<i>Hui-Ling Hu, Ping-Ping Ding, Fudan University, China</i>	
TUP-A4.2P.7: FINITE ELEMENT DOMAIN DECOMPOSITION METHOD FOR ROUGH SEA SURFACE SCATTERING	2091
<i>Ozlem Ozgun, Hacettepe University, Turkey; Mustafa Kuzuoglu, Middle East Technical University, Turkey</i>	
TUP-A4.2P.8: A TARGET RECOGNITION-BASED NLOS IDENTIFICATION ALGORITHM	2093
<i>Weikun Lyu, Yanjiong Li, Zhe Liu, Chen Huang, Ruisi He, Beijing Jiaotong University, China</i>	
TUP-A4.2P.9: QUANTITATIVE EVALUATION ON MEMORY CHARACTERISTICS OF HIGH-SPEED RAILWAY FADING CHANNEL	2095
<i>Huimin Zhang, Siyu Lin, Jianwen Ding, Beijing Jiaotong University, China</i>	
TUP-A4.2P.10: MILLIMETER-WAVE CHANNEL MEASUREMENT BASED RAY-TRACING CALIBRATION AND ANALYSIS IN METRO	2097
<i>Chunfu Zheng, Ziheng Xu, Danping He, Ke Guan, Bo Ai, Beijing Jiaotong University, China; Juan Moreno Garc'ia-Loygorri, Universidad Politécnic de Madrid, Spain</i>	
 TUP-A4.3P: PROPAGATION IN TUNNEL-LIKE ENVIRONMENTS	
TUP-A4.3P.1: EFFECT OF ANTENNA POLARIZATION, DIRECTIVITY AND PLACEMENT ON CHANNEL PROPAGATION OF AN ARCH-SHAPED UNDERGROUND MINE TUNNEL	N/A
<i>Intikhab Hussain, Frederick Cawood, Rex van Olst, University of Witwatersrand, South Africa</i>	
TUP-A4.3P.2: ESTIMATING THE NUMBER OF MODES IN UNDERGROUND MINE TUNNEL	2101
<i>Ali Nehme, Nahi Kandil, Nadir Hakem, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada</i>	
TUP-A4.3P.3: COMPARATIVE STUDY OF FOUR PATH LOSS MODELS FOR UWB OFF-BODY PROPAGATION CHANNEL INSIDE A MINE	2103
<i>Moulay El Hassan El Azhari, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada; Larbi Talbi, Université du Québec en Outaouais, Canada; Mourad Nedil, Université du Québec en Abitibi-Témiscamingue (UQAT), Canada</i>	
TUP-A4.3P.4: FOUR YEAR CLOUD ATTENUATION STUDY IN A TROPICAL STATION	2105
<i>Mustapha Adewusi, Lagos state University, Nigeria; Temidayo Omotosho, Lola Akinyemi, Sayo Akinwumi, Covenant University, Nigeria; Funmi Ometan, Lagos state University, Nigeria</i>	

TUP-A4.6P: WAVE PROPAGATION IN URBAN AND SUBURBAN ENVIRONMENTS

TUP-A4.6P.1: RESEARCH ON KERNEL FUNCTIONS OF SVM FOR LINE-OF-SIGHT IDENTIFICATION IN VEHICLE-TO-VEHICLE MIMO SYSTEM 2107

Chen Huang, Andreas F. Molisch, Rui Wang, Pan Tang, University of Southern California, United States; Ruisi He, Zhangdui Zhong, Beijing Jiaotong University, China

TUP-A4.6P.2: TEMPORAL HF NOISE CROSS-CORRELATION TRENDS IN SAN DIEGO WATERS 2109

Kris Buchanan, Lu Xu, Chris Dilay, Oren Sternberg, David Hilton, Naval Information Warfare Center Pacific, United States

TUP-A4.6P.3: OPTIMIZATION OF RURAL CELLULAR COVERAGE ON THE ISLANDS OF HAWAII2111

Scott Clemens, Zhengqing Yun, Magdy Iskander, Hawaii Advanced Wireless Technologies Institute, United States

TUP-A4.6P.4: INTER- AND INTRA-CLUSTER CHARACTERISTICS OF MIMO INDUSTRIAL CHANNELS2113

Jessen Narrainen, Gloria Makhoul, Raffaele D'Errico, The French Alternative Energies and Atomic Energy Commission (CEA), micro- and nanotechnologies and their integration into systems (LETI), Minatec campus and Université Grenoble-Alpes, France

TUP-A4.6P.5: A COMPARISON OF SPATIAL INTERPOLATION METHODS TO DETERMINE THE COVERAGE AREA OF A WIRELESS SYSTEM2115

Bruno Fialho, Humberto Andrade, Idalmir Queiroz Junior, Glauco Fontgalland, Universidade Federal Rural do Semi-Árido (UFERSA), Brazil

TUP-A4.6P.6: DOPPLER EFFECT ON HIGH-SPEED RAILWAY AT 465 MHZ2117

Yanfei Niu, Jianwen Ding, Dan Fei, Zhangdui Zhong, Beijing Jiaotong University, China; Yanbing Liu, Jiaxun Feihong Intelligent Technology Institute, China

TUP-A4.6P.7: CHANNEL MEASUREMENT AND MODELING IN HIGHWAY SCENARIO AT 460 MHZ2119

Guo Wang, Gang Zhu, Siyu Lin, Jianwen Ding, Dan Fei, Huimin Zhang, Beijing Jiaotong University, China

TUP-A4.6P.8: MEASUREMENT-BASED PROPAGATION CHARACTERISTICS AT 28 GHZ AND 39 GHZ IN SUBURBAN ENVIRONMENT 2121

Peize Zhang, Jin Li, Haiming Wang, Wei Hong, Southeast University, China

TUP-A4.6P.9: CHANNEL CHARACTERIZATION FOR MMWAVE V2I COMMUNICATION IN URBAN SCENARIO 2123

Bin Sun, Hao Qiu, Ke Guan, Danping He, Beijing Jiaotong University, China; Dawei Li, China Academy of Launch Vehicle Technology, China; LiuJun Zhao, China Railway Design Corporation, China

TUP-A4.6P.10: EFFICIENT DELAY AND AOA ESTIMATION USING VECTOR ANTENNA FOR RADIO PROPAGATION MEASUREMENTS 2125

Bensheng Yang, Peize Zhang, Haiming Wang, Wei Hong, Southeast University, China

TUP-A4.4P: WAVE PROPAGATION IN ATMOSPHERIC ENVIRONMENT

TUP-A4.4P.1: ANALYSIS OF OXYGEN ABSORPTION AT 60 GHZ FREQUENCY BAND..... 2127

Muberra Arvas, Istanbul Medipol Univesity, Turkey; Mohammad Alsunaidi, Marmara university, Turkey

TUP-A4.4P.2: ANALYSIS OF THE SBAS SIGNAL AVAILABILITY AT LOW LATITUDE REGIONS N/A

Caio C. Marques, Bruno J. Affonso, Embraer, Brazil; Jonas Sousa Santos, Instituto Tecnológico de Aeronáutica, Brazil; Bruno C. Vani, Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, Brazil; Alison Moraes, Instituto de Aeronáutica e Espaço - IAE, Brazil; Leonardo P. Marini, Bruno M. Paiva, Instituto de Controle do Espaço Aéreo - ICEA, Brazil; João F. Galera Monico, Universidade Estadual Paulista Julio de Mesquita Filho, Brazil

TUP-A4.4P.3: AIRBORNE MEASUREMENT OF INSTRUMENT LANDING SYSTEM SIGNALS USING A UAV 2131

James C. West, Joseph D. Jantz, Taylor Mitchell, Dane C. Johnson, Gary Ambrose, Oklahoma State University, United States

TUP-A4.4P.4: PROPAGATION OF LOW-FREQUENCY BROADBAND ELECTROMAGNETIC FIELD WAVEFORMS IN THE ATMOSPHERE	2133
<i>Aleksandr Voronin, Junseob Kim, Ping Yang, Robert Nevels, Aleksei Zheltikov, Texas A&M University, United States</i>	
TUP-A4.4P.5: CHANNEL CHARACTERIZATION AND SIMULATION FOR UNMANNED AERIAL VEHICLE COMMUNICATION	2135
<i>Luoyan Zhu, Danping He, Ke Guan, Bo Ai, Zhangdui Zhong, Beijing Jiaotong University, China; Dawei Li, China Academy of Launch Vehicle Technology, China</i>	
TUP-A4.4P.6: ATMOSPHERIC ATTENUATION ANALYSIS IN INDOOR THZ COMMUNICATION CHANNELS	2137
<i>Fawad Sheikh, Mai Alissa, University of Duisburg-Essen, Germany; Adnan Zahid, Qammer H. Abbasi, University of Glasgow, United Kingdom; Thomas Kaiser, University of Duisburg-Essen, Germany</i>	
TUP-A4.4P.7: ANALYSIS OF CLOSE RANGE EVAPORATION DUCT INVERSION FROM LATPROP RADAR DATA COLLECTED DURING CASPER WEST RESEARCH CAMPAIGN	2139
<i>Joshua Compaleo, Caglar Yardim, Luyao Xu, Shanka Wijesundara, Joel Johnson, Robert Burkholder, Ohio State University, United States; Tony de Paolo, Scripps Institution of Oceanography, United States; Qing Wang, Naval Postgraduate School, United States</i>	
TUP-A4.4P.10: COMPARISON OF ALGORITHMS AND INPUT VECTORS FOR SEA-ICE CLASSIFICATION WITH L-BAND POLSAR DATA	2141
<i>Kai-Shiun Yang, Jean-Fu Kiang, National Taiwan University, Taiwan</i>	
 TUP-A4.1P: MILLIMETER-WAVE PROPAGATION	
TUP-A4.1P.1: PATH LOSS AND DIRECTIONAL GAIN MEASUREMENTS AT 28 GHZ FOR FACTORY AUTOMATION	2143
<i>Dmitry Chizhik, Jinfeng Du, Reinaldo Valenzuela, Juergen Otterbach, Rolf Fuchs, Johannes Koppenborg, Nokia Bell Labs, United States</i>	
TUP-A4.1P.2: THZ MIMO CHANNEL CHARACTERIZATION FOR WIRELESS DATA CENTER-LIKE ENVIRONMENT	2145
<i>Chia-Lin Cheng, Seun Sangodoyin, Alenka Zajić, Georgia Institute of Technology, United States</i>	
TUP-A4.1P.3: IMPLEMENTATION AND EVALUATION OF UNIFORM GRID SPACE PARTITION FOR RAY TRACING IN COMMUNICATION	N/A
<i>Hang Mi, Bo Ai, Ke Guan, State Key Laboratory of Rail Traffic Control and Safety, Beijing Jiaotong University, China; Liju Zhu, Tianyun Shui, Hui Mei, Chenji Liu, Jiangxi Mobile Communication Company Limited, China</i>	
TUP-A4.1P.4: A HIGH-PERFORMANCE COMPUTING CLOUD-BASED RAY-TRACING PLATFORM – CLOUDRT	N/A
<i>Wei Liu, China Mobile Group Design Institute Co., Ltd., China; Ke Guan, Danping He, Beijing Jiaotong University, China; Yebing Ren, China Mobile Group Design Institute Co., Ltd., China; Wencui Shen, Liang Zhou, Jiangxi Mobile Communication Company Limited, China</i>	
TUP-A4.1P.5: THE INFLUENCE OF SATELLITE LINKS OVER 5G MMWAVE TERRESTRIAL CHANNEL IN TYPICAL URBAN SCENARIO	N/A
<i>Lei Ma, Ke Guan, Beijing Jiaotong University, China; Wulong Li, Jiangxi Mobile Communication Company Limited, China; Dong Yan, Beijing Jiaotong University, China; Wei Sun, Hang Qi, China Mobile Group Design Institute Co., Ltd., China</i>	
 THP-A1.1P: ANTENNA THEORY I	
THP-A1.1P.1: DOUBLE LAYER HARD SURFACE FOR DUAL-POLARIZATION APPLICATIONS	2153
<i>Riddhi Goswami, Ahmed Kishk, Concordia University, Canada</i>	
THP-A1.1P.2: DESIGN OF A WIDEBAND COAXIAL COLLINEAR ANTENNA	2155
<i>Ali Hosseini-Fahraji, Majid Manteghi, Virginia Polytechnic Institute and State University, United States</i>	

THP-A1.1P.3: A NEW APPROACH TO DESIGN HIGH DIRECTIVITY, COMPACT OMNIDIRECTIONAL CP ANTENNA ARRAYS	2157
<i>Wei Lin, Richard Ziolkowski, University of Technology Sydney, Australia</i>	
THP-A1.1P.4: EVALUATION OF THE FAR-ZONE ELECTRIC FIELDS RADIATED BY THIN ELLIPTICAL LOOP ANTENNAS	2159
<i>Ryan J. Chaky, Douglas H. Werner, Pennsylvania State University, United States</i>	
THP-A1.1P.6: APPLICATION OF DIELECTRIC AND MAGNETIC LAYERED SUBSTRATE IN ANTENNA GAIN ENHANCEMENT	2161
<i>Ala Alemaryeen, Sima Noghianian, University of North Dakota, United States</i>	
THP-A1.1P.7: EXTRAPOLATION OF ANTENNA NEAR-FIELD MEASUREMENTS USING THE ITERATIVE GREEDY ALGORITHMS	2163
<i>Ming-Da Zhu, Xidian University, China; Tapan Sarkar, Syracuse University, United States; Yu Zhang, Xidian University, China</i>	
THP-A1.1P.8: RESONANCE TUNING COST IN RADIATION EFFICIENCY OF ELECTRICALLY SMALL ANTENNAS	2165
<i>Lukas Jelinek, Czech Technical University in Prague, Czech Republic; Kurt Schab, Santa Clara University, United States; Miloslav Capek, Czech Technical University in Prague, Czech Republic</i>	
THP-A1.1P.9: A FLAT LUNEBERG LENS ANTENNA FOR WIDE-ANGLE BEAM SCANNING	2167
<i>Kunning Liu, Shiwen Yang, Shi-Wei Qu, Yikai Chen, University of Electronic Science and Technology of China, China</i>	
 THP-A1.2P: ANTENNA THEORY II	
THP-A1.2P.1: A FREQUENCY MULTIPLIER AND PHASE MODULATION APPROACH FOR MECHANICAL ANTENNAS OPERATING AT SUPER LOW FREQUENCY (SLF) BAND	2169
<i>Navid Barani, Kamal Sarabandi, University of Michigan, United States</i>	
THP-A1.2P.2: SIMULTANEOUS TRANSMIT AND RECEIVE (STAR): CIRCULATORS VERSUS NONRECIPROCAL ANTENNAS	2171
<i>Pedram Loghmannia, Majid Manteghi, Virginia Polytechnic Institute and State University, United States</i>	
THP-A1.2P.3: BENDING AND TWISTING TESTS FOR RF PERFORMANCES OF TEXTILE TRANSMISSION LINES	2173
<i>Dieff Vital, Shubhendu Bhardwaj, John L. Volakis, Florida International University, United States</i>	
THP-A1.2P.4: A SIMPLE HIGH-PERFORMANCE FIRST-ORDER P-BAND PROBE FOR SPHERICAL NEAR-FIELD ANTENNA MEASUREMENTS	2175
<i>Magnus Brandt-Møller, Olav Breinbjerg, Technical University of Denmark, Denmark</i>	
THP-A1.2P.5: SYNTHESIS OF 2-D SHAPED BEAMS THROUGH GENERIC FIXED-GEOMETRY ARRAYS: A NEW HYBRID APPROACH	N/A
<i>Giada Maria Battaglia, Università Mediterranea di Reggio Calabria, Italy; Gennaro Giovanni Bellizzi, Department of Radiation Oncology, Erasmus MC, Netherlands; Andrea Francesco Morabito, Università Mediterranea di Reggio Calabria, Italy; Gino Sorbello, Università di Catania, Italy; Tommaso Isernia, Università Mediterranea di Reggio Calabria, Italy</i>	
THP-A1.2P.6: THEORY OF HORIZONTAL DIPOLE OVER A DIELECTRIC-COATED IMPEDANCE SURFACE	2179
<i>Mahesh Singh, Bratin Ghosh, Indian Institute of Technology, India; Kamal Sarabandi, University of Michigan, United States</i>	
THP-A1.2P.7: BEAM PATTERN ANALYSIS OF 1.5-D SPARSE ARRAY FOR MILLIMETER-WAVE IMAGING SYSTEMS	2181
<i>Hojatollah Zamani, Mohammad Fakharzadeh, Arash Amini, Sharif University of Technology, Iran; Mohammadreza Ranjbar Naeini, University of Wisconsin-Madison, United States</i>	

- THP-A1.2P.8: DISPERSION DIVISION MULTIPLE ACCESS TECHNIQUE BASED ON 2183**
ELECTROMAGNETIC TIME REVERSAL
Ren Wang, Bing-Zhong Wang, Sheng Liu, Zhipeng Wang, Yuming Wu, University of Electronic Science and Technology of China, China
- THP-A1.2P.9: ANALYZING THE RESPONSE OF SPATIAL CORRELATION WITH VARIED Q-POWER N/A**
VALUES OF COSINE DISTRIBUTION
Emmanuel Ampoma Affum, Kwame Nkrumah University of Science and Technology, Ghana; Wen Guangjun, Yong Huang, Parfait I. Tebe, Kwadwo Ntiamoah-Sarpong, University of Electronic Science and Technology of China, China; Maxwell Afriyie Oppong, Kwame Agyeman Prempeh Agyekum, Emmanuel Addo, Kwame Nkrumah University of Science and Technology, Ghana
- THP-A1.2P.10: A NOVEL OAM GENERATOR WITH THIRD ORDER META-FSS 2187**
Fuheng Zhang, Guo-Min Yang, Feng Xu, Ya-Qiu Jin, Fudan University, China
- THP-A1.3P: ANTENNAS IN THEORY AND PRACTICE**
- THP-A1.3P.1: HOW TO PHASE ANTENNA ARRAYS AND METASURFACES OF ARBITRARILY 2189**
ORIENTED AND POLARIZED ELEMENTS?
Hossein Mehrpour Bernety, David Schurig, University of Utah, United States
- THP-A1.3P.3: UTILIZATION OF SYMMETRIES IN METHOD OF MOMENTS..... 2191**
Michal Masek, Miloslav Capek, Lukas Jelinek, Czech Technical University in Prague, Czech Republic; Kurt Schab, Santa Clara University, United States
- THP-A1.3P.4: THEORY OF VERTICAL DIPOLE OVER A DIELECTRIC-COATED IMPEDANCE 2193**
SURFACE
Bratin Ghosh, Mahesh Singh, Dhruvajyoti Bhattacharya, Indian Institute of Technology, India; Kamal Sarabandi, University of Michigan, United States
- THP-A1.3P.5: SUSPENDED HIGHLY-EFFICIENT ON-CHIP PHASED ARRAY ANTENNA AT 60 GHZ..... 2195**
Jiantong Li, Nima Ghalichechian, Ohio State University, United States
- THP-A1.3P.6: A COMPACT RADOME MOUNTED MONOPULSE ANTENNA FOR 2197**
DIRECTION-FINDING APPLICATIONS
Jae Sik Kim, Dae Woong Woo, Hae-Chang Jeong, Gak-Gyu Choi, So Su Kim, Agency for Defense Development, Korea (South)
- THP-A1.3P.7: WIDEBAND NEAR-ZONE RADIATIVE SIGNAL COLLECTOR SYSTEM FOR 2199**
DETECTION OF ELECTROMAGNETIC EMISSION FROM DISTRIBUTED SOURCES
Seyed Mohammad Amjadi, Menglou Rao, Kamal Sarabandi, University of Michigan, United States
- THP-A1.3P.8: A COMPACT EFFICIENT D-BAND MICROMACHINED ON-CHIP DIFFERENTIAL PATCH 2201**
ANTENNA FOR RADAR APPLICATIONS
Wael Ahmad, Maciej Kucharski, Herman Ng, IHP - Leibniz-Institut für innovative Mikroelektronik, Germany; Dietmar Kissinger, Ulm University, Germany
- THP-A1.3P.9: A MINIATURIZED AND RECONFIGURABLE ON-CHIP SLOT ANTENNA FOR RFID 2203**
APPLICATIONS
Arup Ray, Arijit De, Tarun Kanti Bhattacharyya, Indian Institute of Technology, Kharagpur, India