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<i>Mhamad Hassanein Rabah, Divitha Seetharamdoo, Rafik Addaci, Marion Berbineau, Jean-Pierre Ghys, IFSTAR, France</i>	
<b>525.6: STUDY OF ELECTRICAL SEPARATION IN DIFFERENTIAL FEED RECTANGULAR MICROSTRIP PATCH ANTENNAS .....</b>	<b>1752</b>
<i>Ziqiang Tong, Andreas Stelzer, Johannes Kepler University Linz, Austria</i>	
<b>525.7: SPIRAL SLOTTED WAVEGUIDE ANTENNA ARRAY .....</b>	<b>1754</b>
<i>Ali Daliri, Wayne S T Rowe, Kamran Ghorbani, Chun H Wang, Sabu John, Royal Melbourne Institute of Technology (RMIT) University, Australia</i>	
<b>525.8: A CHIP PRINTED MONOPOLE ANTENNA FOR WIRELESS IMPLANTABLE BODY AREA NETWORK (WIBAN) APPLICATION .....</b>	<b>1756</b>
<i>Nur Hidayah Ramli, Muhammad Ramlee Kamarudin, Wireless Communication Centre (WCC), Universiti Teknologi Malaysia, Malaysia; Noor Asmawati Samsuri, Communication Engineering Department, Faculty of Electrical Engineering, Universiti Teknologi Malaysia, Malaysia; Ezla Najwa Ahyat, Wireless Communication Centre, Universiti Teknologi Malaysia, Malaysia; Mohd Faizal Jamlos, Universiti Malaysia Perlis, Malaysia</i>	
<b>525.9: COMPACT UWB MONOPOLE ANTENNA WITH RECONFIGURABLE BAND NOTCHES USING PIN DIODE SWITCHES .....</b>	<b>1758</b>
<i>Hamid Boudaghi, Microelectronics Research Laboratory Urmia University, Iran; Javad Pourahmadazar, Urmia University, Iran; Sajjad Abazari Aghdam, Florida Atlantic University, United States</i>	
 <b>526: ELECTROMAGNETIC THEORY</b>	
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<i>Yeqin Huang, James Zhang, Robert Adams, Weiguo Yang, Western Carolina University, United States</i>	
<b>526.2: ELECTROMAGNETIC SCATTERING OF A VECTOR BESSEL BEAM IN THE PRESENCE OF AN IMPEDANCE CONE .....</b>	<b>1762</b>
<i>Mohamed Salem, Hakan Bagci, King Abdullah University of Science and Technology, Saudi Arabia</i>	
<b>526.3: UNDERSTANDING THE ANALYTICAL FORMULATION OF THE CHARACTERISTIC MODES OF A METALLIC SPHERE .....</b>	<b>1764</b>
<i>Tomás Bernabeu-Jiménez, Felipe Vico-Bondía, Alejandro Valero-Nogueira, Marta Cabedo-Fabres, François Gallée, Eva Antonino-Daviu, Universitat Politècnica de València, Spain</i>	
<b>526.4: A PRACTICAL FORMULATION OF THE IMAGE RULE FOR ELECTROMAGNETIC SPHERICAL WAVE SOURCES ABOVE A PEC OR PMC PLANE INTERFACE .....</b>	<b>1766</b>
<i>J.Rodrigo Camacho-Perez, Intel Corporation, Mexico; Pablo Moreno, CINVESTAV, Mexico</i>	
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<i>Guy A. E. Vandenbosch, Oleksandr Svezhentsev, Katholieke Universiteit Leuven, Belgium</i>	
<b>526.6: SURFACE WAVE PROPAGATION MEASUREMENTS IN UNSHIELDED XLPE POWER CABLES .....</b>	<b>1770</b>
<i>Nazmul Alam, David Coats, Roger Dougal, Mohammad Ali, University of South Carolina, United States</i>	
<b>526.7: A TOPOLOGICAL APPROACH FOR THE ANALYSIS OF THE STRUCTURE OF ELECTROMAGNETIC FLOW IN THE ANTENNA NEAR-FIELD ZONE .....</b>	<b>1772</b>
<i>Said Mikki, Yahia M.M. Antar, Royal Military College of Canada, Canada</i>	
<b>526.8: GROUND WAVE EXCITATION BY HORIZONTAL DIPOLES.....</b>	<b>1774</b>
<i>Samir Mahmoud, Kuwait University, Kuwait; Yahia M.M. Antar, Royal Military College of Canada, Canada</i>	
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<i>Guangran Kevin Zhu, Mohammad Mojahedi, Costas D. Sarris, University of Toronto, Canada</i>	



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*Faik Bogdanov, Roman Jobava, Irina Chochia, EMCoS, Georgia*

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**532.1: UTD REPRESENTATION OF SURFACE FIELD PRODUCED BY A CONFORMAL ARRAY ON A ..... 1780  
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*Panuwat Janpugdee, Chulalongkorn University, Thailand; Prabhakar Pathak, The Ohio State University, United States; Federico Puggelli, Giorgio Carluccio, Matteo Albani, University of Siena, Italy*

**532.2: RAY-BASED UTD REPRESENTATION OF THE FIELD RADIATED BY A MAGNETIC CURRENT ..... 1782  
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*Federico Puggelli, Giorgio Carluccio, Matteo Albani, University of Siena, Italy; Janpugdee Panuwat, Chulalongkorn University, Thailand; Prabhakar Pathak, The Ohio State University, United States*

**532.3: METHOD OF ITERATIVE PHYSICAL OPTICS FOR THE ESTIMATION OF THE SCATTERING ..... 1784  
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*Christoph Statz, Sebastian Hegler, Dirk Plettmeier, Technische Universität Dresden, Germany*

**532.4: A 60 GHZ OFF-BODY CHANNEL IMPLEMENTATION ..... 1786**

*Theodoros Mavridis, Luca Petrillo, Université Libre de Bruxelles, Belgium; Julien Sarrazin, David Lautru, Aziz Benlarbi-Delai, UPMC, France; Philippe De Doncker, Université Libre de Bruxelles, Belgium*

**532.5: KD-TREE BASED FAST FACET VISIBILITY TEST IN ITERATIVE PHYSICAL OPTICS ..... 1788**

*Hao Ding, Pengcheng Gao, Yubo Tao, Hai Lin, Zhejiang University, China*

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**535.1: NEW PRINTED META MATERIALS ANTENNAS ..... 1790**

*Albert Sabban, ORT BRAUDE COLLEGE, Israel*

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*Xianming Qing, Zhi Ning Chen, Institute for Infocomm Research, Singapore*

**535.3: A SLOT ANTENNA WITH SPLIT-RING RESONATORS FOR WIRELESS SENSOR NETWORK ..... 1794  
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*Jiun-Peng Chen, Powen Hsu, National Taiwan University, Taiwan*

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*Seung-Tae Ko, Jeong-Hae Lee, Hongik University, Republic of Korea*

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*Yasser M. Madany, Alexandria University, Egypt*

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**537.1: SIW PATCH ARRAY WITH INTERNAL COUPLING PATCHES ..... 1800**

*Jose Luis Masa-Campos, David García-Valverde, Pablo Sánchez-Olivares, Bazil Taha-Ahmed, Autonoma University of Madrid (U.A.M.), Spain*

**537.2: PRINTED YAGI-UDA ARRAY FOR MIMO SYSTEMS ..... 1802**

*Haider Khaleel, Sonoma State University, United States; Hussain Al-Rizzo, Ayman Abbosh, Said Abushamleh, University of Arkansas at Little Rock, United States*

<b>537.3: A SIMPLE BROADBAND STACKED QUASI-YAGI ANTENNA.....</b>	<b>1804</b>
<i>Sungyun Jun, Kai Chang, Texas A&amp;M University, United States</i>	
<b>537.4: DUAL-POLARIZED, WIDEBAND ARRAY WITH A HYBRID WAVEGUIDE-STRIPLINE FEEDING NETWORK</b>	<b>1806</b>
<i>Shi Gang Zhou, Guan-Long Huang, Tan-Huat Chio, Temasel Laboratories, National University of Singapore, Singapore</i>	
<b>537.5: FOUR ELEMENTS ARRAY OF LUNGS SHAPE ANTENNA FOR NANOSATELLITE TELEMETRY</b>	<b>1808</b>
<i>Elyas Palantei, Syafruddin Syarif, Bayu Topalaguna, Zakiy Ubaid, Universitas Hasanuddin/Faculty of Engineering, Indonesia</i>	
<b>537.6: A MICROWAVE ANTENNA ARRAY WITH INJECTION LOCKED QUANTUM DOT LASER SOURCES</b>	<b>1810</b>
<i>Georgios Atmatzakis, The University of New Mexico, United States; David Murrell, Univerity of New Mexico, United States; Christos G. Christodoulou, Luke F. Lester, The Univerity of New Mexico, United States</i>	
<b>537.7: DESIGN OF A SINGLE-LAYER CORPORATE-FED SLOT ARRAY USING HOLLOW RECTANGULAR COAXIAL LINES</b>	<b>1812</b>
<i>Makoto Sano, Jiro Hirokawa, Makoto Ando, Tokyo Institute of Technology, Japan</i>	
<b>537.8: A L-BAND SPHERICAL SECTION LONG SLOT ANTENNA ARRAY WITH METAMATERIAL GROUND PLANE FOR SATELLITE COMMUNICATIONS</b>	<b>1814</b>
<i>Gui Chao Huang, Jonathan Pascual, Jeffrey Griffith, Nuri Celik, Magdy F. Iskander, University of Hawaii at Manoa, United States</i>	
<b>537.9: MMW MONOPULSE SLOTTED WAVEGUIDE ARRAY ANTENNA FOR DUAL-SENSOR APPLICATION</b>	<b>1816</b>
<i>Min Guo, Yuan-Yun Liu, Xiao-Bo Xuan, Shun-Shi Zhong, Shanghai University, China</i>	
<b>537.10: A NEW COMPACT MULTIBAND MICROSTRIP SLOT ANTENNA ARRAY</b>	<b>N/A</b>
<i>Arman Azadi, Mohammad Mehdi Fakharian, Pejman Rezaei, Ali Asghar Orouji, Mohammad Reza Dehghani, Semnan University, Iran</i>	
<b>537.11: 60 GHZ LIQUID CRYSTAL SLOT PHASED ARRAY USING REFLECTION-TYPE PHASE SHIFTER</b>	<b>N/A</b>
<i>Prafulla Deo, Dariush Mirshekar-Syahkal, University of Essex, United Kingdom; Lawrence Seddon, Sally Day, Anibal Fernández, University College London, United Kingdom</i>	
 <b>538: MICROSTRIP AND LOW-PROFILE ANTENNAS WITH IMPROVED PERFORMANCE</b>	
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<i>Aaron Kerkhoff, Caleb North, The University of Texas at Austin, United States</i>	
<b>538.2: MUTUAL COUPLING REDUCTION BETWEEN TWO PATCH ANTENNAS USING A NEW MINIATURIZED SOFT SURFACE STRUCTURE</b>	<b>1822</b>
<i>Said Abushamleh, Hussain Al-Rizzo, University of Arkansas at Little Rock, United States; Ahmed A. Kishk, Concordia University, Canada; Ayman Abbosh, University of Arkansas at Little Rock, United States</i>	
<b>538.3: A 77GHZ ON-CHIP MICROSTRIP PATCH ANTENNA WITH SUPPRESSED SURFACE WAVE USING EBG SUBSTRATE</b>	<b>1824</b>
<i>Mohammad Hossein Nemati, Ibrahim Tekin, Sabanci University, Turkey</i>	
<b>538.4: STUDY OF STACKED CIRCULAR PATCH ANTENNAS WITH CIRCULAR SYMMETRIC PATTERNS AS REFLECTOR FEEDS</b>	<b>1826</b>
<i>Saeed Latif, Mohmamad Qudrat-E-Maula, Lotfollah Shafai, University of Manitoba, Canada</i>	
<b>538.5: HIGH EFFICIENCY APERTURE-COUPLED STACKED-PATCH ANTENNAS WITH FOAM SUBSTRATE</b>	<b>1828</b>
<i>Custódio Peixeiro, Instituto Superior Técnico, Technical University of Lisbon, Portugal</i>	

**538.6: END-FIRE RADIATING ANTENNA ON IPD TECHNOLOGY FOR 60 GHZ COMMUNICATIONS ..... 1830**  
*Aimeric Bisognin, EPIB- STMicroelectronics - University of Nice, France; Cyril Luxey, Gilles Jacquemod, CREMANT -EPIB - University of Nice, France; Diane Titz, CREMANT -EPIB - University of Nice - Lycée Jules Ferry, France; Fabien Ferrero, CREMANT - LEAT- University of Nice, France; Romain Pilard, Frédéric Gianesello, Daniel Gloria, STMicroelectronics - Crolles, France; Claire Laporte, Hilal Ezzeddine, STMicroelectronics - Tours, France; Patrice Brachat, Orange Labs-CREMANT, France*

**538.7: 60 GHZ BROADSIDE RADIATING VIVALDI ANTENNA ..... 1832**  
*Ronny Hahnel, Dirk Plettemeier, Technische Universität Dresden, Germany*

**538.8: A TRI-POLARIZED ANTENNA WITH A CAPACITIVE COUPLING STRIP FOR IMPROVING ISOLATION ..... 1834**  
*Yi Zhang, Zhengzhou Information Science and Technology Institute, China; Kunpeng Wei, Zhijun Zhang, Zhenghe Feng, Tsinghua National Laboratory for Information Science and Technology, China*

**538.9: GAIN ENHANCEMENT OF CIRCULAR PATCH ANTENNA USING PARASITIC RING..... 1836**  
*Thennarasan Sabapathy, Mohd Faizal Jamlos, Muzammil Jusoh, Mohd Ilman Jais, Universiti Malaysia Perlis, Malaysia; Muhammad Ramlee Kamarudin, Universiti Teknologi Malaysia, Malaysia*

**538.10: A SIMPLE DESIGN OF COMPACT PATCH ANTENNA WITH HIGH DIRECTIONAL BEAM..... 1838**  
*Muzammil Jusoh, Mohd Faizal Jamlos, Universiti Malaysia Perlis, Malaysia; Muhammad Ramlee Kamarudin, Universiti Teknologi Malaysia, Malaysia; Thennarasan Sabapathy, Mohd Ilman Jais, Universiti Malaysia Perlis, Malaysia*

## **539: HIGH-FREQUENCY SCATTERING AND ASYMPTOTIC METHODS**

**539.1: ASYMPTOTIC SOLUTIONS IN THE TRANSITION REGIONS FOR SCATTERED FIELD BY A CONDUCTING CIRCULAR CYLINDER ..... 1840**  
*Keiji Goto, Le Hoang Loc, National Defense Academy, Japan*

**539.3: ANALYSIS OF SCATTERED FIELDS BY AN IMPEDANCE DISCONTINUITY OF A PLANAR SURFACE CONSIDERING THE SURFACE WAVE EFFECTS ..... 1844**  
*Toru Kawano, Toshihisa Kamei, Satoshi Tanaka, National Defense Academy, Japan; Toyohiko Ishihara, Retired from National Defense Academy, Japan*

**539.4: DIFFRACTION COMPONENTS AT REFLECTION BOUNDARY GIVEN BY MER LINE INTEGRATION FOR VARIOUS INTEGRATION PATHS ALONG THE PERIPHERY ..... 1846**  
*Pengfei Lu, Makoto Ando, Tokyo Institute of Technology, Japan*

**539.5: ANALYTIC IMPULSIVE TIME-DOMAIN UTD COEFFICIENT FOR PYRAMID-VERTEX DIFFRACTION ..... 1848**  
*Federico Puggelli, Giorgio Carluccio, Matteo Albani, University of Siena, Italy; Filippo Capolino, University of California, United States*

## **541: MICROSTRIP ANTENNAS FOR NOVEL APPLICATIONS**

**541.1: PRACTICAL DESIGN ASPECTS FOR TEXTILE ANTENNAS..... 1850**  
*Pekka Salonen, Nokia, Costa Rica; Peter de Maagt, European Space Agency ESA-ESTEC, Netherlands*

**541.2: WIDEBAND TEXTILE SLOT ANTENNA ARRAY ..... 1852**  
*Stephen Holland, Dounia Baiya, Aly Fathy, University of Tennessee, Knoxville, United States*

**541.3: INKJET PRINTED CIRCULARLY POLARIZED PATCH ANTENNA ON A CYLINDRICAL SURFACE ..... 1854**  
*Maimaitirebike Maimaiti, Reyhan Baktur, Utah State University, United States*

**541.4: DESIGN AND FABRICATION OF FLUIDIC PATCH ANTENNA BASED LIQUID METAL ALLOY (EGAIN) AND SINGLE WALL CARBON NANOTUBES NANOCOMPOSITES ..... 1856**  
*Brahim Aissa, Emile Haddad, Wes Jamroz, MPB Technologies Inc., Canada; Mourad Nedil, University of Quebec, Canada*

<b>541.5: SLOT-COUPLED WAVEGUIDE-TO-MICROSTRIP TRANSITION AND WAVEGUIDE-FED PATCH ANTENNA AT E-BAND</b>	<b>1858</b>
<i>Yifei Zhang, Shouyuan Shi, Dennis Prather, University of Delaware, United States</i>	
<b>541.6: WEARABLE TEXTILE MICROSTRIP PATCH ANTENNA FOR MULTIPLE ISM BAND COMMUNICATIONS</b>	<b>1860</b>
<i>Shengjian Jammy Chen, Thomas Kaufmann, Christophe Fumeaux, The University of Adelaide, Australia</i>	
<b>541.7: PACKAGED INTEGRATED TRANSCEIVER FOR SHORT-RANGE HIGH DATA-RATE COMMUNICATIONS AT 60 GHZ</b>	<b>1862</b>
<i>Jose Alberto Zevallos Luna, Laurent Dussopt, Alexandre Siligaris, Commissariat à l'énergie atomique et aux énergies alternatives, France</i>	
<b>541.8: STUDY ON CHARACTERISTIC IMPEDANCE OF DIFFERENTIAL RECTENNA UNIT</b>	<b>1864</b>
<i>Eisuke Nishiyuama, Hiroki Otomaru, Ichihiko Toyoda, Saga University, Japan</i>	
<b>541.9: SINGLE PATCH ANTENNA GENERATING ELECTROMAGNETIC FIELD WITH ORBITAL ANGULAR MOMENTUM</b>	<b>1866</b>
<i>Mirko Barbuto, Alessandro Toscano, Filiberto Bilotti, Roma Tre University, Italy</i>	
 <b>542: DIELECTRIC RESONATOR ANTENNAS FOR OPTICAL AND MILLIMETER-WAVE APPLICATIONS</b>	
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<i>Longfang Zou, Withawat Withayachumnankul, The University of Adelaide, Australia; Charan Shah, Arnan Mitchell, Madhu Bhaskaran, Sharath Sriram, Royal Melbourne Institute of Technology (RMIT) University, Australia; Christophe Fumeaux, The University of Adelaide, Australia</i>	
<b>542.2: GAIN ENHANCEMENT BY PLANAR CAPACITIVE SOFT CAVITY AT MILLIMETER WAVE</b>	<b>1870</b>
<i>Amer Hagrass, Tayeb A. Denidni, INRS, Canada; Mourad Nedil, University of Quebec - LRTCS, Canada</i>	
<b>542.3: ANALYSIS OF LTCC MILLIMETER-WAVE DIELECTRIC SLAB ANTENNAS</b>	<b>1872</b>
<i>S.S. Zhao, H.Y. David Yang, University of Illinois at Chicago, United States</i>	
<b>542.4: 60-GHZ LTCC DIELECTRIC RESONATOR ANTENNA ARRAY</b>	<b>1874</b>
<i>Yong-Xin Guo, National University of Singapore, Singapore; Hui Chu, Nanjing University of Science and Technology, China</i>	
<b>542.5: KA-BAND SIW-INTEGRATED DRA LINEAR ARRAY BASED ON LONGITUDINAL SLOT COUPLING</b>	<b>1876</b>
<i>Wael Abdel-Wahab, University of Ontario Institute of Technology (UOIT) / University of Waterloo (UW), Canada; Ying Wang, University of Ontario Institute of Technology (UOIT), Canada; Safieddin Safavi-Naeini, University of Waterloo, Canada</i>	
 <b>530: PARALLEL AND SPECIAL-PROCESSOR BASED NUMERICAL METHODS</b>	
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<i>Cagatay Tokgoz, Vivek Venugopal, United Technologies Research Center, United States</i>	
<b>530.2: PERFORMING LARGE FULL-WAVE SIMULATIONS BY MEANS OF A PARALLEL MLFMA IMPLEMENTATION</b>	<b>1880</b>
<i>Bart Michiels, Jan Fostier, Ignace Bogaert, Daniël De Zutter, Ghent University, Belgium</i>	
<b>530.3: GRAPHICS PROCESSING UNIT ACCELERATED FAST MULTIPOLE METHOD - FAST FOURIER TRANSFORM</b>	<b>1882</b>
<i>Quang Nguyen, Vinh Dang, Ozlem Kilic, The Catholic University of America, United States</i>	

**530.4: FAST COMPUTATION OF CYLINDRICAL GREEN'S FUNCTIONS WITH GRAPHIC PROCESSING UNIT ..... 1884**

*Jun Wu, Chao-Fu Wang, National University of Singapore, Singapore*

**530.5: BLOCK-SPARSE OUT-OF-CORE SOLVER ACCELERATED USING GPUS FOR SOLVING MOM PROBLEMS ..... 1886**

*Dusan Zoric, WIPL-D, Yugoslavia; Dragan Olcan, Branko Kolundzija, University of Belgrade, Yugoslavia*

**533: FAST COMPUTATIONAL METHODS FOR PHYSICAL OPTICS AND HIGH-FREQUENCY APPLICATIONS**

**533.1: FAST ITERATIVE MOM-PO HYBRID METHOD FOR COMPLEX ONBOARD ANTENNA ARRAY WITH LARGE-SCALE PLATFORM ..... 1888**

*Zi-Liang Liu, Xing Wang, Chao-Fu Wang, National University of Singapore, Singapore*

**533.2: HIGH-FREQUENCY PO-SBR CODE ON GPU ..... 1890**

*Chun Yun Kee, Chao-Fu Wang, Temasek Laboratories, National University of Singapore, Singapore*

**533.3: REDUCING COMPUTATIONAL WORKLOAD OF ELECTROMAGNETIC SCATTERED FIELDS FROM ELECTRICALLY LARGE QUADRATIC SURFACE AT HIGH FREQUENCY ..... 1892**

*Yu Mao Wu, Department of Electrical and Electronic Engineering, The University of Hong Kong, Hong Kong SAR of China; Weng Cho Chew, Department of Electrical and Computer Engineering, University of Illinois at Urbana-Champaign, Illinois, USA, Hong Kong SAR of China; Li Jun Jiang, Department of Electrical and Electronic Engineering, The University of Hong Kong, Hong Kong SAR of China*

**533.4: NOVEL TECHNIQUES FOR ABBREVIATED ANALYSIS OF HIGH FREQUENCY SCATTERING USING THE FRESNEL ZONE NUMBERS ..... 1894**

*Takayuki Kohama, Makoto Ando, Tokyo Institute of Technology, Japan*

**533.5: MODIFIED PHYSICAL OPTICS APPROXIMATION AND PHYSICAL THEORY OF DIFFRACTION FOR RCS CALCULATION OF DIELECTRIC COATED PEC ..... 1896**

*H. Mohammadzadeh, Abolghasem Zeidaabadi-Nezhad, Zaker Hossein Firouzeh, Reza Safian, Isfahan University of Technology, Iran*

**536: TRANSFORMATION ELECTROMAGNETICS**

**536.1: OPTIMIZATION OF QUASI-CONFORMAL TRANSFORMATION OPTICS LENSES WITH AN ARBITRARY GRIN-CAPABLE RAY TRACER ..... 1898**

*Jeremiah P. Turpin, Donovan Brocker, Douglas H. Werner, The Pennsylvania State University, United States*

**536.2: COORDINATE TRANSFORMATION APPLIED TO CHANGE PHYSICAL APPEARANCE OF RADIATING SOURCES ..... 1900**

*Paul-Henri Tichit, Shah Nawaz Burokur, André de Lustrac, IEF, Univ. Paris-Sud, CNRS, UMR 8622, France*

**536.3: FLATTENED GENERALIZED LUNEBURG LENS VIA QUASI-CONFORMAL MAPPING ..... 1902**

*Bayaner Arigong, Jin Shao, Han Ren, Rongguo Zhou, HyoungSoo Kim, YuanKun Lin, Hualiang Zhang, University of North Texas, United States*

**543: DIELECTRIC RESONATOR ANTENNAS WITH NEW CHARACTERISTICS, MATERIALS, AND APPLICATIONS**

**543.1: MINIATURIZATION OF DIELECTRIC RESONATOR ANTENNA FOR BIOMEDICAL COMMUNICATION ..... 1904**

*Shahzad Mian, Macquarie University, Australia; Yuehe Ge, Huaqiao University, China; Karu P Esselle, Macquarie University, Australia*



**543.2: POLYESTER-STYRENE/CERAMIC NANOCOMPOSITES FOR ANTENNA APPLICATIONS ..... 1906**

*Mohammadreza Tayfeh Aligodarz, University of Saskatchewan, Canada; Atabak Rashidian, University of Manitoba, Canada; David Klymyshyn, University of Saskatchewan, Canada; Michael Schulz, Martin Boerner, Thomas Hanemann, Pascal Meyer, Jürgen Mohr, Karlsruhe Institute of Technology, Germany*

**543.3: DIELECTRIC RESONATOR ANTENNA WITH METALLIC PERTURBATION: INVESTIGATION ..... 1908  
INTO MODAL FIELDS AND NEW RADIATION PROPERTIES**

*Debatosh Guha, Halappa Gajera, University of Calcutta, India; Chandrakanta Kumar, ISRO, India; Yahia M.M. Antar, Royal Military College of Canada, Canada*

**543.4: WIDEBAND CYLINDRICAL DIELECTRIC RESONATOR ANTENNA EXCITED BY A ROUNDED ..... 1910  
BEVEL SHAPED PATCH**

*Prachi C, Raghvendra Kumar Chaudhary, Kumar Vaibhav Srivastava, Indian Institute of Technology Kanpur, India*

**543.5: NEW MODE IN DIELECTRIC RESONATOR ANTENNA WITH STRAWBERRY SHAPED ..... 1912  
RADIATIONS COVERING A WIDE BEAMWIDTH**

*Debatosh Guha, Poulomi Gupta, University of Calcutta, India; Chandrakanta Kumar, ISRO, India*