

**Special Session 1: Antenna and Components for 5G Applications**  
**Room A: Wednesday, 23<sup>rd</sup> October 2019, 13:00 – 15.15**  
**Chair: Mohamad Kamal A. Rahim; Sungtek Kahng**

Paper Number	Title	Authors
1570590196	<b>Invited</b> How to Evaluate Near-Field of Metamaterial 5G Beamforming Antennas	<i>Sungtek Kahng</i>
1570570246	X-band Rectangular to Square Waveguide Transition for Transmit array Unit Cell Characterization	Muhammad Naeem Iqbal; Mohd Fairus Mohd Yusoff; Mohamad Kamal A. Rahim; Mohamad Rijal Hamid; Zaharah Johari; <i>Huda A. Majid</i>
1570570588	Design of a Compact Meander-Based Antenna for Search and Rescue Using PDMS	Rais Ahmad Sheikh; Ping Jack Soh; <i>Mohamad Kamal A. Rahim</i> ; Azremi Abdullah Al-Hadi; Hidayath Mirza; Toufiq Md Hossain; Abdalla Ali
1570574624	Incorporation of Spiral Shaped Defected Ground Structure for Improving Radiation Characteristic of Planar Array-Antenna	Mochamad Yunus; Zero Luthfi Patriana; Evyta Wismiana; Teguh Firmansyah; <i>Budi Syihabuddin</i> ; Achmad Munir
1570570472	Bandwidth Enhancement of Substrate Integrated Waveguide Cavity Antenna Using T-Backed Slot	<i>Dian Widi Astuti</i> ; Eko Tjipto Rahardjo; Fitri Yuli Zulkifli
1570565257	Wideband (22-30GHz) mm-Wave Substrate Integrated Waveguide (SIW) Antenna for 5G Applications	Najib Mohammed AL-Fadhali; <i>Huda A. Majid</i> ; Rosli Omar; Shaharil Mohd Shah; Mr. Bashar Esmail; Prof. Mohamad Kamal A. Rahim

**Oral Session 1: Near Field – Far Field Measurements**  
**Room B: Wednesday, 23<sup>rd</sup> October 2019, 13:00 – 15.15**  
**Chair: Tapan Sarkar; Hiroyuki Arai**

<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570553137	Performing NF-FF Transformation on Amplitude Only Data Using an Array of Probes Without Probe Correction	Heng Chen; <i>Tapan Sarkar</i> ; Magdalena SalazarPalma
1570559446	Characterization of a 8-Ports Vector Antenna for Measurement Applications	<i>Christophe Morlaas</i> ; Alexandre Chabory; Johan Duploux
1570560609	VHF Antenna Far-Field Pattern Measurements at 60 MHz Using an Outdoor Antenna Range for Europa Clipper Mission	<i>Joshua M Miller</i> ; Yasser Hussein; Curtis Jin; Emmanuel Decrossas
1570560880	UHF Band Antenna Radiation Pattern Measurements in Multipath Channel Using Time Domain Gating	<i>Alexandru Tatomirescu</i>
1570563438	Permeability Determination of Metallic Wires by a Method Combining Measurement and Computer Simulation	<i>Chi-Fang Huang</i> ; Hsuan-Yi Chao
1570570430	Non-Resonant E-Field Coaxial Probe for Very near and near Field Measurements	<i>Atsushi Katsuta</i> ; Hiroyuki Arai; Masami Arai

**Special Session 2: Antenna Metrology, Precision Antenna Measurement and Related Technologies**  
**Room C: Wednesday, 23rd October 2019, 13:00 – 15.15**  
**Chair: Satoru Kurokawa; Anton Widarta**

<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570568900	Measurement of Complex Permittivity of Tissue Equivalent Liquid Poured in a Waveguide Well	<i>Yuto Shimizu; Nozomu Ishii; Tomoaki Nagaoka; Kanako Wake; Soichi Watanabe</i>
1570569565	Receiving Performance of Antenna-Coupled Electrode Electro-Optic Modulators for 5G Frequency Band	<i>Satoru Kurokawa</i>
1570570234	Impact of Azimuthal Antenna Pattern Sampling and Variation on Throughput Measurements	<i>Andrés Alayón Glazunov; Madeleine Schilliger Kildal; Jan Carlsson</i>
1570570451	Uncertainty Estimation of Antenna Gain SelfCalibration Method with Moving Flat Reflector for 5G Standard Gain Horn Antenna	<i>Michitaka Ameya</i>
1570572242	Broadband RF Attenuation Standards for Traceability of Antenna and EMC Measurements in Japan	<i>Anton Widarta</i>
1570561273	Six - Port Technology for Millimeter - Wave Metrology	<i>Kamel Haddadi; Christophe Loyez; Katir Ziouche</i>

**Oral Session 2: Radar Technique and Applications**  
**Room D: Wednesday, 23rd October 2019, 13:00 – 15.15**  
**Chair: Andaya Lestari; Romain Fouettilloux**

<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570555976	Monostatic/Bistatic Interferometric Radar for Monitoring Slander Structures	<i>Massimiliano Pieraccini; Lapo Miccinesi</i>
1570557991	77 GHz FMCW Radar Based Simultaneous Vital Signs Measurements	<i>Tjahjo Adiprabowo; Tse-Hsuan Wang; Ding-Bing Lin</i>
1570560526	Position Estimation of Two Targets Using Compensated HRRPs Obtained from 3 Radars	<i>Jaewon Yang</i>
1570561674	Characterization of X-Band Wave Absorber Made of SRR-Based Metasurface	<i>Budi Syihabuddin; Mohammad Ridwan Effendi; Achmad Munir</i>
1570570428	Improving the Angular Resolution of a Scanning Radar with Imperfectly Known Antenna Patterns	<i>Romain Fouettilloux</i>
1570569519	Concrete Thickness Measurement Model for GPR	<i>Erfansyah Ali; Aloysius Adya Pramudita; Dharu Arseno</i>

**Oral Session 3: MIMO Antennas**  
**Room A: Wednesday, 23rd October 2019, 15:30 – 17.45**  
**Chair: Robert Staraj; Yuyu Wahyu**

Paper Number	Title	Authors
1570558429	OTA Experiments on Improved Angular Accuracy Reactively Loaded $32 \times 32$ MIMO/AOA Antenna	<i>Nana Narukawa; Koichi Ogawa</i>
1570558431	Sandwiched-Monopole MIMO Array for Full-Solid Angle Flying Car-to-Car Communications	<i>Taiki Fukushima; Nana Narukawa; Koichi Ogawa; Kazuhiro Honda</i>
1570558695	Dual-Band MIMO System Based on Metal Frame for 5G Applications	<i>Shengjie Wu; Anping Zhao; Bingguang Zhong</i>
1570560158	High Isolated MIMO Antenna System for FullDuplex 5G Applications	<i>Koffi Gbafa; Aliou Diallo; Philippe Le Thuc; Robert Staraj</i>
1570573560	Experimental Study of MIMO Through the Wall Radar Using Vector Network Analyzer	<i>Aloysius Adya Pramudita; Yuyu Wahyu; Erfansyah Ali; Dedya Fitrinisaaprayunanti</i>

**Special Session 3: Non-Destructive Testing Methods for Agricultural Products**  
**Room B: Wednesday, 23<sup>rd</sup> October 2019, 15:30 – 17:45**  
**Chair: Monai Krairiksh; Kimberley W. Eccleston**

Paper Number	Title	Authors
-	<b><u>Invited</u></b> Essential of Preharvest Sensors	<i>Monai Krairiksh</i>
1570560820	Resolution Improvement in Preharvest Sensor	<i>Hoang Nam Dao; Monai Krairiksh</i>
1570566908	Observations from Radar Scans of Grape Vines Conducted over a Growing Season	<i>Kimberley W. Eccleston; Ian G Platt; Abdolabbas Jafari; Armin Werner; Christopher Bateman; Ian M Woodhead; Jaco Fourie; Jeffrey Hsiao; Peter Carey</i>
1570570314	Leaf-Shaped Textile Dipole Antenna Design	<i>Mohamad Kamal A. Rahim</i>
1570570421	Zeroth-Order Resonator Based on Mushroom-like Structure for Liquid Mixture Concentration Sensing of Sodium Chloride Solution	<i>Nonchanutt Chudpooti; Prayoot Akkaraekthalin</i>
1570570424	A Microwave Gas Sensor Using Interdigital Resonator Coated with Conducting Polymer for Agricultural Applications	<i>Nonchanutt Chudpooti; Prayoot Akkaraekthalin; Warunee Krudpun</i>

<b>Special Session 4: Research in the Fields of Radar, Telecommunications and Electronic Warfare</b> <b>Room C: Wednesday, 23<sup>rd</sup> October 2019, 15:30 – 17.45</b> <b>Chair: Zaynab Guerraou</b>		
<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570568298	Radar Cross Section of a Slightly Tilted Disk in the Fresnel Region and Real Environment	<i>Ilie Valentin Mihai</i> ; Ala Sharaiha; Razvan D. Tamas
1570574599	Particle Filter Track-before-detect for Target Detection and Tracking from Marine Radar Data	<i>Zaynab Guerraou</i>
1570570367	Recent Development in UAV-based Antenna Pattern Characterization for Weather Radars	<i>Arturo Y Umeyama Matsumoto</i> ; Jorge Salazar; Caleb Fulton; Brenton Wolf
1570574561	Frequency Reconfigurable Wideband Metamaterial Antenna Design with CSRR	Adamu Y Iliyasu; Mohamad Rijal Hamid; <i>Mohamad Kamal A. Rahim</i> ; Murtala Aminu-Baba; Mohd Fairus Mohd Yusoff

**Special Session 5: Indoor Localization and Positioning Techniques**  
**Room D: Wednesday, 23<sup>rd</sup> October 2019, 15:30 – 17.45**  
**Chair: Alessandro Cidronali; Basari**

<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570590195	<u><b>Invited</b></u> What Type of Wave Propagates in Wireless Communication - Zenneck, Surface, Lateral or Ground Waves?	<i>Tapan Sarkar; Magdalena Salazar-Palma</i>
1570566925	CNN Localization Using AP Inverse Position Estimation	<i>Satoru Aikawa; Shinichiro Yamamoto; Takuma Muramatsu</i>
1570570327	GPS/GLONASS Data Fusion and Outlier Elimination to Improve the Position Accuracy of Receiver	<i>Tan Truong Ngoc; Ali Khenchaf; Fabrice Comblet</i>
1570570385	Combined DoA-ToA Localization Technique Based on a Broadband Switched Beam Antenna	<i>Alessandro Cidronali; Giovanni Collodi; Matteo Lucarelli; Stefano Maddio; Marco Passafiume; Giuseppe Pelosi</i>
1570574658	Study on Radiation Characteristics of QRHA Based on Gaussian Ridge Profile	<i>Folin Oktafiani; Effrina Hamid; Achmad Munir</i>
1570570858	Bandwidth and Gain Improvement Using Artificial Magneto-dielectric Material with Split-Ring Resonator Array Configuration	<i>Yohanes Galih Adhiyoga; Catur Apriono; Eko Tjipto Rahardjo</i>



**Special Session 6: Millimetre-wave Components, Systems and Applications**  
**Room B: Thursday, 24<sup>th</sup> October 2019, 08:30 – 09.45**  
**Chair: Catur Apriono; Igor Shirokov**

<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570569567	Substrate Integrated Waveguide Horn Antennas at Millimeter Waves	Mudrik Alaydrus; <i>Galang Hakim</i>
1570570288	Development of a Microstrip Antenna for Glucose Detection at Millimeter Waves	Ahmad Firdausi; Mudrik Alaydrus; <i>Galang Hakim</i>
1570560397	Reconfigurable Stacked Patch Antenna Using Liquid Crystal for Millimeter Wave	<i>Ali Hajj Hassan</i> ; Elias Rachid; Mohammad Rammal; Georges El Nashef; Najib Fadlallah
1570570040	60GHz Substrate Integrated Waveguide Balun	<i>Yu Min Kim</i> ; Choon Sik Cho; Il Ho Jung; Ho Jin Kang; Jin Seop Lee; Kun Hee Ha
1570570382	Radiation Beamwidth Characterization to Enhance Terahertz Imaging Quality for Cancer Detection	<i>Intan Nurfitri</i> ; Catur Apriono

**Oral Session 4: General EM Topics**  
**Room C: Thursday, 24<sup>th</sup> October 2019, 08:30 – 09.45**  
**Chair: Fabien Ferrero**

<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570568851	Shape Reconstruction of Deposits Inside a Steam Generator Using Eddy Current Measurements	Lorenzo Audibert; Hugo Girardon; <i>Houssein Haddar</i>
1570570053	Hybrid Supply Modulator for High Power RF PA with Non-Inverting Amplifier	<i>Kun Hee Ha</i> ; Choon Sik Cho; Jin Seop Lee; Il Ho Jung; Yu Min Kim; Ho Jin Kang
1570570441	Impact of Terminal Polarization in a Urban Channel for LP-WAN Application	<i>Fabien Ferrero</i> ; Quoc Huy LE; Matthieu Loupias
1570572424	Development of Microwave Tomography System Based on Arduino NANO and Pocket VNA	<i>Desfi Nur Fikri</i> ; Prawito Prajitno; Sastra Kusuma Wijaya

**Oral Session 5: EM Modelling**  
**Room D: Thursday, 24<sup>th</sup> October 2019, 08:30 – 09.45**  
**Chair: Yisok Oh; Purnomo Priambodo**

<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570570399	Increasing Received Modulation Signal for Integrated EOM Microwave Antenna by Using Paraboloid Reflector	<i>Yus Natali</i> ; Purnomo Priambodo; Eko Tjipto Rahardjo
1570580299	Numerical Design of Dual Resonant Microstrip Surface RF Coil for MRI Application	<i>Adhi Mahendra</i> ; Basari Basari; Eko Tjipto Rahardjo
1570559858	Examination of Geophysical Model Functions for Microwave Backscattering from Sea Surfaces	<i>Yisok Oh</i> ; Tae-Kyeong Jin; Sinmyong Park
1570559867	Calibration Method Research for High Power Transient Electromagnetic Field Sensor	<i>Yunsheng Jiang</i> ; Cui Meng
1570568146	Excitation Method of Cavity Using Characteristic Modes	<i>Kazuki Kamiyama</i> ; Hiroyuki Arai

**Oral Session 6: Ultra-Wide Band System and Components**  
**Room A: Thursday, 24<sup>th</sup> October 2019, 13:00 – 15.15**  
**Chair: Catur Apriono; Igor Borisovich Shirokov**

Paper Number	Title	Authors
1570572229	<b>Invited</b> UWB Bow-Tie Antenna with Tapered Inductive Loading	<i>Andrian Andaya Lestari</i>
1570559870	Impact of Antenna Inclination Angle During Scanning Process on Radiated Emission Measurements in the Anechoic Chambers Above 1 GHz	<i>Krzysztof Sieczkarek; Adam Mackowiak</i>
1570556899	Analysis on the Parameter Estimation Performance in an UWB/IMU Tightly-Coupled System	<i>Kegen Yu; Kai Wen; Yingbing Li</i>
1570565405	Development of a Wideband Substrate Integrated Waveguide Bandpass Filter Using H-Slotted DGS	<i>Nakmouche Farouk; Hany Taher; Diaa Fawzy; Abdelmegid Allam</i>
1570569283	Experimental Investigation of Active Antenna	<i>Igor Borisovich Shirokov; Elena Shirokova</i>
1570574414	Hexagonal Triangular Fractal Antenna with Tapered Feedline and Reflector for 5G and UWB Applications	<i>B. Pratiknyo Adi Mahatmanto; Catur Apriono; Fitri Yuli Zulkifli; Eko Tjipto Rahardjo</i>

<b>Special Session 7: Small Antennas for Mobile Communication</b> <b>Room B: Thursday, 24<sup>th</sup> October 2019, 13:00 – 15.15</b> <b>Chair: Mitsuo Taguchi; Fitri Yuli Zulkifli</b>		
<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570570145	A Circularly Polarized Metasurface Antenna Comprising Printed Rectangular Loops with Gaps for GNSS Receivers	<i>Makoto Sumi</i>
1570573652	A Small Monocone Antenna with PIFA Structure	<i>Hisashi Morishita</i>
1570570455	Ultra Low Profile Inverted L Antenna Composed of CPW Printed on PET Sheet for IoT Application	<i>Mitsuo Taguchi</i>
1570570290	Study of Parasitic Element Effects of Multiband IFA for UHF and SHF Channel Systems	Erfan Rohadi; <i>Amalia Amalia</i> ; Indrazno Siradjuddin; Mitsuo Taguchi; Awan Setiawan; Supriatna Adhisuwignjo
1570572673	Stacked Interdigital Filtering Antenna with Slant Polarization	<i>Dwi Astuti Cahyasiwi</i> ; Fitri Yuli Zulkifli; Eko Tjipto Rahardjo
1570570468	Dual-band LoRa Antenna: Design and Experiments	<i>Fabien Ferrero</i> ; Mouhamed Bhoys Toure

**Special Session 8: Antenna Applications for Infrastructures 1**  
**Room C: Thursday, 24<sup>th</sup> October 2019, 13:00 – 15.15**  
**Chair: Naruto Yonemoto; Adrian Sutinjo**

Paper Number	Title	Authors
1570569643	Performance Degradation Investigations of Helicopter Forward-Looking 76 GHz MillimeterWave Radar Due to Radome	<i>Shunichi Futatsumori; Norihiko Miyazaki</i>
1570570064	Bi-static Millimeter Wave Radar Connected by Radio over Fiber for FOD Detection on Runways	<i>Naruto Yonemoto; Shunichi Futatsumori; Akiko Kohmura; Kazuyuki Morioka; Naoki Kanada; Nobuhiro Sakamoto</i>
1570570092	Simple Secondary Radar for Non-Line-Of-Sight Pedestrian Detection	<i>Tetsuya Kawanishi; Motoki Shirai; Tetsuya Miura; Keizo Inagaki; Kunihisa Jitsuno; Atsushi Kanno; Naokatsu Yamamoto</i>
1570570101	IMU-enabled Nondestructive Imaging System Based on Millimeter-Wave Radar	<i>Atsushi Kanno; Naokatsu Yamamoto; Ms. Rena Takaoka; Shintaro Otani; Hideyuki Sotobayashi</i>
1570550584	Design a Wide Band Microstrip Line Fed Antenna for TCAS Avionic System	<i>Moustafa Mohamed; Abdelmegid Allam; Diaa Fawzy</i>
1570560283	Noise Parameter Measurement and Its Application in Receiving Phased Arrays for Low-Frequency Radio Astronomy	<i>Adrian Sutinjo; Daniel Ung</i>

**Special Session 9: Techniques for Antenna Design and Measurement 1**  
**Room D: Thursday, 24<sup>th</sup> October 2019, 13:00 – 15.15**  
**Chair: Wen-Shan Chen; Nan Yang**

<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570570249	Printed IFA for WLAN/5G USB Dongle Applications	<i>Wen-Shan Chen</i> ; Pin-Feng Chen; Wen-Zhong Lee; Yung-Chun Lin
1570570380	Linearly Polarized Omnidirectional Polarization Diversity Dielectric Resonator Antenna	<i>Nan Yang</i> ; Kwok Wa Leung; Weiwei Li
1570570426	Phase Faults Detection in Antenna Array Through Amplitude-only Far Field Measurements and Sparsity Promotion-based Techniques	<i>Roberta Palmeri</i> ; Andrea Francesco Morabito; Tommaso Isernia
1570573175	Design and Measurement Considerations of Feeding Network Including Power Divider for Multi-Port Antenna Arrays	Jae-Yeong Lee; Dongkwon Choi; Kihyun Kong; <i>Junsik Yun</i> ; Youngno Youn; Wonpyo Kwon; Wonbin Hong
1570573891	Design of Truncated Microstrip Antenna with Array 4X2 for Microwave Radio Communication	<i>Syah Alam</i> ; Indra Surjati; Yuli Kurnia Ningsih; Ms. Lydia Sari
1570560709	Antenna Near-field Measurement Based on Quantum Coherence Effect of Rydberg Atom	<i>Qingyun Zeng</i> ; Zhenghui Xue; Wu Ren; Weiming Li

**Oral Session 7: Antenna and Its Array**  
**Room A: Thursday, 24<sup>th</sup> October 2019, 15:30 – 17.45**  
**Chair: Ahmad Munir; Andrej Konforta;**

Paper Number	Title	Authors
1570560884	<b>Invited</b> Practical Aspects of Antenna Element on Air Substrate Usage	<i>Ruslan V. Shaymardanov</i> ; Alexander Sergeyevich Kukharenko; Andrey Albertovich Yelizarov
1570574454	Approximation of the Active Reflection Coefficient in Phased Arrays via the Concept of Reaction	<i>Andrej Konforta</i> ; Christos Liontas; Thomas Bertuch; Thomas F. Eibert
1570574629	Radiation Characteristic of Chebyshev Function Based Power Weighted Linear Array Antennas Influenced by Element Configuration	<i>Hartuti Mistialustina</i> ; Chairunnisa Chairunnisa; Mohammad Ridwan Effendi; Achmad Munir
1570560034	A 2X2 X-band Array Antenna with Sequential Rotation Network Feeding for Communication	Farohaji Kurniawan; Josaphat Tetuko Sri Sumantyo; <i>Folin Oktafiani</i> ; Gunawan Prabowo; Achmad Munir
1570560650	16-Elements Helical Antenna System Integration with a Solar Cell Powered IoT Collector	<i>Ahmet Tekin</i> ; Naveed Ullah
1570582203	Bandwidth Enhancement Substrate Integrated Waveguide (SIW) Antenna V-shape Slot for X Band Application	<i>Anshari Akbar</i> ; Fitri Yuli Zulkifli; Eko Tjipto Rahardjo



**Oral Session 8: Bio Engineering**  
**Room B: Thursday, 24<sup>th</sup> October 2019, 15:30 – 17.45**  
**Chair: Christian Y. Pichot; Takashi Hikage**

<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570561061	In-vivo Microwave Dielectric Properties of Healthy and Carcinogenic Rat Nasal Tissues from 500 MHz to 6 GHz	Tuba Yilmaz; Nural Pastaci Ozsobaci; Fatma Ates Alkan; Nuray Kepil; <i>Ibrahim Akduman</i>
1570570359	Development of Novel 70 GHz Band Exposure Equipment System for Studies on Thermal Perception Thresholds of Biological Effects Exposed to Millimeter-Wave	<i>Keita Sakakibara</i> ; Takashi Hikage; Itsuki Kageyama; Hiroshi Masuda
1570570408	Further Developments of Applicator Concepts for Detection of Body Part Inhomogeneities	<i>Nikola Petrovic</i> ; Christian Y. Pichot; Per Olov Risman
1570570471	Single Coaxial Feed Microstrip GPS Antenna Aimed at Wearable Device Application	<i>Syahrul Ramdani</i> ; Irfandella Pratama; Basari Basari

**Special Session 10: Antenna Applications for Infrastructures 2**  
**Room C: Thursday, 24<sup>th</sup> October 2019, 15:30 – 17.45**  
**Chair: Yusuf Nur Wijayanto; Massimiliano Pieraccini**

<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570570186	Time-domain Analysis of Microwave Guided Modes Propagating Along FRPM Pipe Wall for Infrastructure Inspection	<i>Sayaka Matsukawa; Kosuke Yoshida; Tadahiro Okuda; Masaya Hazama; Satoru Kurokawa; Hiroshi Murata</i>
1570570267	Unequal Weighted Microstrip Array Antenna for Concrete Inspection Radar	<i>Try Putra Wibowo; Fitri Yuli Zulkifli</i>
1570570483	W-band Radio Communication System for High Speed Train Using Rof Technologies	<i>Nobuhiko Shibagaki</i>
1570580808	Performance of Antenna Using Linear Resistive Loading for Ground Penetrating Radar	<i>Yusuf Nur Wijayanto; Yuyu Wahyu</i>
1570541973	Microstrip Yagi Antenna Stacked with Optical Modulator for 28GHz Communication	<i>Yusuf Nur Wijayanto; Yahya Syukri Amrullah; Fajri Darwis</i>
1570555562	Monitoring of Veresk Rail Bridge Using a Radar Interferometer	<i>Massimiliano Pieraccini; Lapo Miccinesi; Ali Abdorazzagh Nejad; Azadeh Naderi Nejad Fard</i>

**Special Session 11: Techniques for Antenna Design and Measurement 2**  
**Room D: Thursday, 24<sup>th</sup> October 2019, 15:30 – 17.45**  
**Chair: Shaoyong Zheng; Koki Watanabe**

<b>Paper Number</b>	<b>Title</b>	<b>Authors</b>
1570569513	Design of A Self-diplexing Dielectric Resonator Antenna	Chaofan Zhao; Ms. Jia Min Wen; <i>Shaoyong Zheng</i> ; Ms. Xiaohua Wang
1570569868	Polarization-Reconfigurable Antennas with Different Liquid Solutions	<i>Zhe Chen</i> ; Hang Wong; Jun Xiang; Kaixu Wang
1570570230	Design of MIMO Antennas for 5G C-band/WLAN Operation in the Laptop Computer	Wen-Shan Chen; Ming-Han Liang; <i>Yu-Ren Chen</i>
1570570233	Study on Spectral-Domain Formulation of Electromagnetic Scattering by Periodic Strip Array with Period Modulation	<i>Koki Watanabe</i>
1570580857	A Simple Radiation Pattern Measurement for Large Array Antennas	<i>Bambang Dewandaru</i> ; Fitri Yuli Zulkifli; Eko Tjipto Rahardjo