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#### **ORAL Session: TP-2(A)** Microwave Antennas -2 Session Co-Chairs: Zhijun Zhang, Hai Lin 16:00 - 16:20 Optimized Omni-directional Biconical Microstrip Antenna 765 JINJIE YAO, XIA WU, GUANHUA HE, LIANG HOU, HUA GUO (China, Mainland) 768 16:20 - 16:40 A Tri-Band Dual-Polarized Cylindrical Dielectric Resonator Antenna with High Isolation Zhong Lei, Hong Jingsong, Luo Chaoming (China, Mainland) 771 16:40 - 17:00 A Novel Impedance Matching Method of Helix Antenna Dunwei Liao (China, Mainland) 17:00 - 17:20 Circular Polarization Transmitarray Element with Linear Polarization Feed 774 yuefeng hou, Xiao Liu, Yue Li, Zhijun Zhang, Zhenghe Feng (China, Mainland) 777 17:20 - 17:40 Radar Cross Section Reduction for Microstrip Antenna Using Broadband Chessborad Artificial Magnetic Conductor Structure Chen Yang (China, Mainland)

## **2016-06-07 PM** ROOM B

#### **ORAL Session: TP-2(B) High-Power Devices and Techniques** Session Chair: Wenhua Chen **781** 16:00 - 16:30 Energy-Efficient Broadband Doherty Power Amplifier for Carrier Aggregation (Invited) Wenhua Chen, Xiaofan Chen, Zonghao Wang, Zhenghe Feng (China, Mainland) 16:30 - 16:50 optimization design of high efficiency in 140GHz folded waveguide slow wave structure 782 Lei Wengiang (China, Mainland) 785 16:50 - 17:10 Design and experiment of the electron-optical system for 0.14THz TWT Yi Jiang (China, Mainland) 787 17:10 - 17:30 Power-Combined Multipliers at 60 GHz Based on Fundamental Frequency Vector Modulation Pengfei Sun, Liang Wu, Jinyi Ding, Yiqiang Gao, Rong Qian, Xiaowei Sun (China, Mainland)

## 2016-06-07 PM

like Slow-wave Plate

#### ROOM C

16:00 - 16:30

16:30 - 16:50

16:50 - 17:10

17:10 - 17:30

#### **ORAL Session: TP-2(C)** Microwave and Millimeter Wave Systems -2 Session Co-Chairs:Xiaowei Zhu, Xin Lv Investigation on Linearity Enhancement for Millimeter Wave Power Amplifiers (Invited) N/A Xiaowei Zhu, Chao Yu (China, Mainland) Far-field Time Reversal Super-resolution Imaging of Sources at Microwave Wavelengths Aided by a Grating-792 Zhi-Shuang Gong, Bing-Zhong Wang, Xiao-Hua Wang (China, Mainland) 795 A 2×2 Integrated Heterodyne Receiver Array for Terahertz Imaging Application

798

## 2016-06-07 PM ROOM D

### **ORAL Session: TP-2(D) EMI and EMC**

Dalu Guo, Xin Lv, Haidong Qiao, Zhaohui Ma, Mingxun Li, Jinchao Mou, Yuxing Cui (China, Mainland)

A High Stop-band Suppression W-band Waveguide E-plane Filter for millimeter-wave applications

Wen JunWu, Rui Zhang, Xuan XuanFan (China, Mainland)

|      |           | Session Co-Chairs: Xiao-Min Pan, Jiaheng Wang  |     |
|------|-----------|--|-----|
| 16:0 | 0 - 16:20 | Tri-band superconducting filter with controllable frequencies and bandwidths                         | 802 |
|      |           | Yuning Feng, Shoujia Sun, Xinshe Yin (China, Mainland)   |     |
| 16:2 | 0 - 16:40 | Resonant Frequency Simulation of Metal Cavity Based FCC-FDTD Method                                  | 804 |
|      |           | zhiyang zhang, Lixia Yang, Wa Kong (China, Mainland)   |     |
| 16:4 | 0 - 17:00 | Efficient MPI Parallel Interpolative Decomposition   | 807 |
|      |           | Huang Silu, Xu Hang, Pan Xiao-Min, Sheng Xin-Qing (China, Mainland)                                  |     |
| 17:0 | 0 - 17:20 | The Equivalent Source Modeling of Electromagnetic Interference Coupling on the Cable                 | 810 |
|      |           | Wei Zhang, Zhaowen Yan, Jianwei Wang, Ying Xiong (China, Mainland)                                   |     |
| 17:2 | 0 - 17:40 | Analyzing the Influence of Electromagnetic Parameters of Composite Material on Antenna Operating and | 813 |
|      |           | Coupling Degree  |     |
|      |           | Aixin Chen, Meng Zhang, Chang Qin, Jiaheng Wang (China, Mainland)                                    |     |

## **2016-06-08 AM** ROOM A

#### **ORAL Session: WA-1(A) Microwave Antennas** Session Co-Chairs: Junhong Wang, Wen Zhou 08:00 - 08:20 Low-Sidelobe Non-Uniform Transverse Slotted Antenna Array Fed by Substrate Integrated Waveguide 817 Jingxue Wang, Yunjie Geng, Junhong Wang (China, Mainland) 820 08:20 - 08:40 A High Gain UWB Vivaldi Antenna with Band Notched Using Capacitively Loaded Loop (CLL) Resonators li yao, jun xiao, hua zhu, nan li, xiuping li (China, Mainland) 08:40 - 09:00 Design of Gear-Type Microstrip Circular Antenna for Orbital Angular Momentum Generation 823 Jiajun Liang, Shengli Zhang, Wen Zhou (China, Mainland) 09:00 - 09:20 Research on the Radiation Characteristics for the Seawater Antenna 826 Chao Feng, Fu-ping Deng, Liang Zhou, Guang Hong, Wei-xin Zhang (China, Mainland) 829 09:20 - 09:40 A Double Dipoles per Cell Structure for Solving Common-mode Resonance in Tightly Coupled Dipole Array Shengchen Lu, Changqing Gu, Guodong Han (China, Mainland)

## **2016-06-08 AM** ROOM B

#### **ORAL Session: WA-1(B) Passive Devices and Circuits** Session Co-Chairs: Houjun Sun, De-Xin Qu 08:00 - 08:20 A Novel W-Band Waveguide Bandpass Filter Based on Nonresonating Nodes 833 Yu Xiao, Tang Li, Houjun sun (China, Mainland) 08:20 - 08:40 Converting Symmetric Mode into Ultra-High-order Asymmetric Mode 836 bin huang, Chao-Hai Du, Xiang-Bo Qi, Heng-He Tang, Pu-Kun Liu (China, Mainland) 08:40 - 09:00 N/A Novel Wideband Differential Bandpass Filters Using Modified Branch-Line Structure Zhipeng Li, Qi Li, Jing Li, jiangniu Wu (China, Mainland) N/A 09:00 - 09:20 A double-isolated wide-band Rat-race hybrid XuChun Zhang, Zhenheng Liao (China, Mainland) 09:20 - 09:40 A Stripline Diplexer With Stopband and Isolation Performances Enhanced by Metalized Holes 845 Zheng Chen, Kun Li, Xing-Jian Zhong, De-Xin Qu (China, Mainland)

## 2016-06-08 AM

## ROOM C

# ORAL Session: WA-1(C) Antennas & Device Session Co-Chairs: Cuiping Yu, Weihua Yu

|               | Session Co-Chairs. Culping 14, Wellia 14  |     |
|---------------|---|-----|
| 08:00 - 08:20 | Design and Measurement Analysis of Class AB Power Amplifier                               | 849 |
|               | Chengguo Liu (China, Mainland)  |     |
| 08:20 - 08:40 | Design of a terahertz metamaterial modulator at independent dual bands                    | N/A |
|               | Wenchao Min, Hao Sun, Qilian Zhang, Rui Tong, Huifeng Ding, Xiaowei Sun (China, Mainland) |     |
| 08:40 - 09:00 | Compact Quad-Mode Microstrip Bandpass Filter With Wide Passband and Harmonic Suppression  | N/A |
|               | Shoujia Sun, Yuning Feng, Xinshe Yin (China, Mainland)                                    |     |
| 09:00 - 09:20 | Frequency-Reconfigurable Water Antenna Integrated with Solar Cell                         | 858 |
|               | Meng Zou, Zhongxiang Shen, Jin Pan (China, Mainland)                                      |     |
| 09:20 - 09:40 | C-Band Wide Beam Microstrip Antenna Array   | 861 |
|               | Y.Y Zheng, Y. J. Cheng, D. T. Li (China, Mainland)  |     |
|               |   |     |

## 2016-06-08 AM

## ROOM D

## ORAL Session: WA-1(D)

|               | Others Session Co-Chairs: Xiaowen Xu, Xiao-Min Pan   |     |
|---------------|--|-----|
| 08:00 - 08:20 | Thermal Simulation of Amplifier Unit Based on Flotherm   | 865 |
|               | Ma jianzhuang (China, Mainland)  |     |
| 08:20 - 08:40 | Study of the proximity effect and the distribution parameters of Multi-conductor transmission line | 868 |
|               | Guizhen Lu, Qingxin Guo, Zengrui Li (China, Mainland)  |     |
| 08:40 - 09:00 | Radar Cross Section Reduction for Microstrip Antenna Using Shaping technique                       | 871 |
|               | Longjian Zhou, Feng Yang (China, Mainland)   |     |
| 09:00 - 09:20 | Bridge Micro Doppler Phenomenon Analysis by Using SFCW Radar System                                | 874 |
|               | hang huang, Pingping xu (China, Mainland)  |     |
| 09:20 - 09:40 | Microwave and millimeter wave measurements for diagnosing the electron temperature in EAST plasmas | N/A |
|               | Yong Liu (China, Mainland)   |     |



09:40 - 10:30 **POSTER Session: WA-P WA-P** 

Session Chair:Xiaoming Liu

|      |  | 000             |
|------|--|-----------------|
| P.1  | A Novel Dicke Microwave Radiometer without Temperature Control for Reference Match Load  | 880             |
| D 2  | Yan Li, Liang Lang, Qingxia Li, Siyuan Liu, Liangqi Gui (China, Mainland)  | 002             |
| P.2  | Assessment on Brightness Temperature Linear Calibration for Multi-Band Microwave Radiometers   | 883             |
| P.3  | xinyue liu, xiaoqi huang, hongxing zheng, yajing li (China, Mainland) The Deconvolution Technique for Spatial Resolution Enhancement of MMSI on FY-4 Satellite | 886             |
| Г.3  | Weidong Hu, Jinjia Ji, Wenqi Wang, Yangyi Zhao, Xin Lv (China, Mainland)   | 000             |
| P.4  | Tomographic SAR Imaging based on GTD model and Compressed Sensing  | 889             |
| 1.7  | Shou Qing Jia, Dong Sheng La (China, Mainland)   | 007             |
| P.5  | Multi-polarized Millimeter-Wave Imaging for Concealed Weapon Detection   | 892             |
| 1.0  | Xun Li, Shi yong Li, Guo Qiang Zhao, Hou Jun Sun (China, Mainland)   | -               |
| P.6  | SIMO Array Imaging Based on Compressed Sensing and Fast Iterative Shrinkage-Thresholding Algorithm   | 895             |
|      | Yi Liao, Shuang Liu, Haomiao Xie, HouJun Sun (China, Mainland)   |                 |
| P.7  | Virtual Array Based APC for a Tri-reflector CATR   | 898             |
|      | Yifei Ma, Yuan Yao, Cheng Yang, Zejian Lu, Junsheng Yu, Xiaodong Chen, Hai Wang, Xiaoming Liu, Zhijiao<br>Chen, Limei Qi ( <b>China, Mainland</b> )            |                 |
| P.8  | A 60GHz Four-Channel Receiver Front-End for Multiple-Beam Phased Array   | 901             |
|      | xiaodong He, pei Li, yuefei Dai, tongli Yuan, Qinghua Lai (China, Mainland)  |                 |
| P.9  | Design of a Q-Band Superheterodyne Transceiver   | 904             |
|      | Liang Ma, Zhe Chen, Jianyi Zhou (China, Mainland)  |                 |
| P.10 | A Ku-Band Ultra-wideband Frequency Agile Source  | 907             |
|      | Wei Jian He, Xin Huai Wang, Xiao Shuang Li, Zhuan Xing Yuan, Lei Tang (China, Mainland)  |                 |
| P.11 | Compact K-Band FMCW Ranging Radar System Based On Single-chip Transceiver  | 910             |
| D 44 | Xiao shuang Li, Xin Huai Wang, Cong Zhang, Wei Jian He (China, Mainland)   | <b>3</b> .T / A |
| P.12 | Measurement and Simulation of 28GHz Millimeter-Wave Propagation Characteristics In the Indoor Environment  | N/A             |
| D 44 | Shuangde Li, Yuanjian Liu, Xiaojun Zhang, Zhipeng Chen, Guanyun Wang (China, Mainland)   | 016             |
| P.13 | Design and Implementation of a 94GHz High Resolution Stepped Frequency Radar   | 916             |
| D 14 | Wei-dong Hu, Yang-yi Zhao, Hao Ren, Jin-jia Ji, Meng-da Wu, Xin Lv (China, Mainland)   | 010             |
| P.14 | Design of Q-band Transmitter RF Front-End Module   | 919             |
| D 15 | Xiang Wang, Hong-Lei Sun, Xiao-Wei Zhu (China, Mainland) Cooperative Wireless Power Transmission Method Based on Time Reversal Technology                      | 922             |
| P.15 | guangmin zhang, Yue Song, Gangbing Song (China, Mainland)  | 722             |
| P.16 | Simulation and Analysis of the Ultra-Wideband RF Front-End Mixed Signal Circuits   | 925             |
| 1.10 | Hao-Ran Zhu, Tao Ni, Yue-Fei Dai, Xiao-Dong He, Li-Jun Du, Shan-Xiang Hu ( <b>China, Mainland</b> )  | / <b>_</b> U    |
| P.17 | Automatic target recognition method for millimeter-wave body scanner   | 928             |
|      | Yijie Niu, Ziye Wang, Lingbo Qiao, Ziran Zhao ( <b>China, Mainland</b> )   |                 |
| P.18 | The design of a wide-band SP6T Electromechanical Coaxial Switch  | 931             |
|      | xiangrui bu, weihua xiong, chunhua wen (China, Mainland)   |                 |
| P.19 | A Design of Variable Frequency AGC Based on Ultrashort Wave Receiver   | 934             |
|      | Lei Tang, Qiulin Huang, Xiaowei Shi (China, Mainland)  |                 |
| P.20 | A Novel Microstrip Compact Power Divider Using High-Performance Band-Pass Filter Based on Liquid Crystal   | N/A             |
|      | Xiaohong Rao, Youhui Zhang, Yupeng Liu, Tao Yang, Weipin Cao, Di Jiang, Baichuan Gan (China, Mainland)   |                 |
| P.21 | Cavity Bandpass Filters with Quasi-Elliptic Response at 220GHz   | 940             |
|      | Jiangqiao Ding, Shengcai Shi, Wen Wu (China, Mainland)   |                 |

| P.22 | Design of 340GHz Liquid Crystal Modulator Based on Double-Layer Metal Hole Arrays                                | 943          |
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|      | jun yang, Junying Li, Tianyu xia, Guangsheng Deng, Zhiping Ying (China, Mainland)                                |              |
| P.23 | Dual Band Polarization-Insensitive Ultra-Thin Metamaterial Absorber for Submillimeter Wave Band                  | 946          |
|      | Ping Cheng, jun yang, Zhan Xue, Zhiping Yin, Longzhen Qiu, Guangsheng Deng (China, Mainland)                     |              |
| P.24 | Micromachined WR-1.0 Waveguide Band-pass Filter  | 949          |
|      | Shuang Liu, Jiang Hu, Zuhao Xuan, Yong Zhang, Ruimin Xu (China, Mainland)  |              |
| P.25 | Application of NUFFT to Terahertz FMCW 3-D Imaging   | 952          |
|      | li wu, yu lingge, gong qingchang, sheng shupeng (China, Mainland)  |              |
| P.26 | Research on the circuit structure of THz detector in CMOS  | 955          |
|      | Leijun Xu, Jianing Guang, Xue Bai, Hanping Mao (China, Mainland)   |              |
| P.27 | The Design and Matching of THz On-chip Antenna in CMOS   | 958          |
|      | Leijun Xu, Fucheng Tong, Xue Bai, Hanping Mao (China, Mainland)  |              |
| P.28 | The THz characteristics of air-core dielectric tube  | N/A          |
|      | Zhihui Wang (China, Mainland)  |              |
| P.29 | A Hybrid Method for Calculating Dipole Moment Model from Near-Field Scanning                                     | 964          |
|      | Xin Tan, Xiaochun Li, Junfa Mao (China, Mainland)  |              |
| P.30 | A New Design and Implementation of Expanding Testing Space of a Transverse Electromagnetic Cell                  | 967          |
|      | Chunjiang Song, Xiaoyao Feng (China, Mainland)   |              |
| P.31 | Engineering of Variable Length Optical Needle Based on Uniform Line Source Antenna                               | 970          |
| 1.31 | yanzhong yu, Weijie Zhang, Quansheng Zhong, Shaokun Guo (China, Mainland)  | 770          |
| P.32 | Recursive Algorithm for Phase shifting Interferometry Using in Fourier Domain Optical Coherence                  | 973          |
| 1.32 | Tomography   | <i>710</i>   |
|      | Yanjun Li (China, Mainland)  |              |
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| P.33 | Design of a Novel Compact Dual-band Wilkinson Power Divider with Improved Isolation                              | 976          |
| D 24 | Hao Zhang, Wei Kang, Wen Wu (China, Mainland)  | 070          |
| P.34 | A 16 Watt X-Band GaN High Power Amplifier MMIC for Phased Array Applications                                     | 979          |
| D 25 | Youn Sub Noh, InBok Yom (South Korea)  | 002          |
| P.35 | A Novel Blocker Rejection Receiver Front-End for Single-Chip UHF RFID Reader                                     | 982          |
| D 26 | Pengfei Tian, Zhibo Song, Feng Yang, Runxi Zhang, Chunqi Shi (China, Mainland)                                   | 985          |
| P.36 | Design of X-band Parallel Broad-side Coupled Microstrip Couplers on Single-layer Substrates                      | 903          |
| D 27 | Zhao Hui, Jin Tao, Dai Haiyang (China, Mainland) Design of A Broadband UHF Near-Field RFID Reader Antenna        | 988          |
| P.37 | yinping min, Yuan Yao, junsheng yu, xiaodong chen, Limei Qi, zhijiao chen, Hai Wang, Cheng Yang (China,          | 700          |
|      | ymping min, Tuan Tao, Junsheng yu, xiaoaong chen, Limei Qi, zhijiao chen, Hai wang, Cheng Tang (China, Mainland) |              |
| P.38 | Frequency Reconfigurable Hybrid with Broad Tuning Bandwidth  | 991          |
| 1.50 | hongtao li, Bin-jie HU, Hong-Lin Zhang, Xiao-dong WEI, Wei-sen ZENG (China, Mainland)                            | ,,, <u>,</u> |
| P.39 | Electrically Tuned Pre-selection of Ultra Wide Band RF Front-end   | 994          |
| 1.37 | Jiang Jia, XIXI FENG, Huaizu Wang, Riqiang Huang, Lin Guo (China, Mainland)                                      |              |
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| P.40 | An Eight channels UHF-Band digital array module  | 997          |
|      | Shanxiang Hu, Han GAO, Qiang WANG, Zonghai JI, xiaozheng Liu, Haoran Zhu, Lijun Du, Xiaodong He                  |              |
| D 41 | (China, Mainland) The Book time True discounting of the marcheting CEAR Book on the Multi-come DCR               | 1000         |
| P.41 | The Real-time Two-dimensional High-resolution CFAR Based on the Multi-core DSP                                   | 1000         |
| D 43 | Kaibo Cui, Xi Chen, Naichang Yuan (China, Mainland)  | 1002         |
| P.42 | A Fast Imaging Algorithm Using an IR-UWB Radar   | 1003         |
| D 42 | QiYuan Liu, ShengQiang Lou, Zhan Wang, ShuangXun LI (China, Mainland)  | 1006         |
| P.43 | A Simple Design of Wideband Filter with Miniaturized Size  | 1000         |
| D 44 | shuai yang (China, Mainland)   | 1009         |
| P.44 | An Improved Polarization and DOA Estimation Algorithm  | 1009         |
| D 45 | Shuai Liu, Feng-gang Yan, Ming Jin, Xiao-lin Qiao (China, Mainland)  | N/A          |
| P.45 | Development and Implement of a Compact Transceiver SiP Module  | 11/71        |
| P.46 | Ji Jianhua (China, Mainland)  A fast time-delay calculation method in TWR detection through two layers           | 1015         |
| 1.40 | Qi Zhang, Wentai Lei (China, Mainland)   | 1013         |
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| P.47 | Single-Layer Transmissive Phase Gradient Metasurface With High-Efficiency Anomalous Refraction              | 1018 |
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|      | Yaqiang Zhuang, Guangming Wang, Chenxin Zhang, Xiaokuan Zhang, Binfeng Zong (China, Mainland)               |      |
| P.48 | Ultrathin Broadband Focusing Metasurface for High-Gain Antenna Application with High Efficiency             | 1021 |
|      | Haisheng Hou, Guangming Wang, Haipeng Li (China, Mainland)  |      |
| P.49 | A Compact Band-stop Filter Based on Novel Dual Composite Right-/Left-handed Transmission Line               | 1024 |
|      | Yiting Shuai, Tong Zhang (China, Mainland)  |      |
| P.50 | Polarization-insensitive absorptive frequency selective surface with a transparent window at high frequency | 1027 |
|      | Qiang Chen, Shilin Yang, Yunqi Fu (China, Mainland)   |      |
| P.51 | Design of Two-stage Chaotic Colpitts Oscillator   | 1029 |
|      | Wenlan Chen, Linhua Zheng, Xiaoxia Song (China, Mainland)   |      |
| P.52 | The design of a double layer microwave absorber based on studying microwave absorbing characteristics       | 1032 |
|      | jin zhang, zebin fan, hua chen, jinhui peng, shaohua ju (China, Mainland)                                   |      |
| P.53 | The Influence of China Unicom 3G Signal on The Telemetry System Analysis                                    | N/A  |
|      | Qiang Su, Ning JuWang, Tong TongZhang, Lin Quan, Gang Quan (China, Mainland)                                |      |

## **2016-06-08 AM** ROOM A

|               | ORAL Session: WA-2(A) PBG and Metamaterials Session Co-Chairs: Junhong Wang, Xi Yang  |      |
|---------------|---|------|
| 10:30 - 10:50 | Circular Metasurface Based on SSPP and Application on Beam Width Enhancement of Slot Antenna  | 1039 |
|               | Si-Jia Li, Xiang-Yu cao, Yu-Long Zhou, Jiang-Feng Jiang-Feng Han, Zhao Zhao Zhang, Yi Yi Zhao, Jun Jun Gao, Xiao Xiao Liu (China, Mainland) |      |
| 10:50 - 11:10 | Preparation of Graphene and its Performance Analysis  | N/A  |
|               | Sheng Wan (China, Mainland)   |      |
| 11:10 - 11:30 | Ku-band Circularly-Polarized Omni-directional Monopole Antenna based on Metamaterial Polarizers   | 1046 |
|               | Yingran He, Ning Ding, Biao Du (China, Mainland)  |      |
| 11:30 - 11:50 | Design of V-Shape-Meander-Line Reconfigurable EBG Structure   | 1048 |
|               | Yan Zhang, Yu-fei Liang, Ling-yu Kong, Shan-wei Lü (China, Mainland)  |      |
| 11:50 - 12:10 | Dual-band polarization control of reflection with novel metasurface   | 1051 |
|               | Lin Hai, Lin Hai, Zhou Jing (China, Mainland)   |      |

## **2016-06-08 AM** ROOM B

#### **ORAL Session: WA-2(B)** Others Session Co-Chairs: Houjun Sun, Cuiping Yu 10:30 - 10:50 Design of a Microstrip Filter Based on Microwave Printed Circuit Board 1055 CHEN ENGANG (China, Mainland) 10:50 - 11:10 1058 Embedded Package Inductor for High Speed SerDes Design Boping Wu, Tingting Mo, Jianjun Nan (United States) 11:10 - 11:30 Low Power Microwave Exposures at 968MHz Increase the Growth Rate of Breanomyces bruxellensis Yeast 1061 Cells Vuk Vojisavljevic, Hamad SulimanAlsuhaim, Elena Pirogova (Australia) 1064 11:30 - 11:50 Current Statistic Model and Adaptive Tracking Algorithm Based on Kalman and Smooth Variable Structure wenliang chen, hongping zhou, fei shen, zhongyi guo (China, Mainland)

## **2016-06-08 AM** ROOM C

#### **ORAL Session: WA-2(C)** Others Session Co-Chairs: Xin-Qing Sheng, Weihua Yu N/A 10:30 - 10:50 A Broadband Class-F Power Amplifier with Compact Matching Network for Multiband LTE Mobile Applications Junming Lin, Zhihao Zhang, Kai Yu, Jiajin Li, Yaohua Zheng, Gary Zhang (China, Mainland) 10:50 - 11:10 Investigation on G-band Sheet Electron Beam Travelling Wave Tube with Staggered Double-vane Structure N/A Cunjun Ruan, Jun Dai, Renjie Li, Min Zhan (China, Mainland) 11:10 - 11:30 1075 Design of a bending dipole RFID antenna at UHF band Xiaping Yu, Jian Dong, Yu Hu, HUabin REN, Donglin Li, Jingwen ZHOU, Kongliang RONG (China, Mainland)