

# Schedule for ICMMT2010

May. 8		Registration						
May. 9		Registration						
May. 9	09:00-21:00	Registration						
	08:00-09:10	Registration						
	09:10-09:25	09:10-09:15	Address from the ICMMT2010 General Chair	Prof. Zhenghe Feng	Chaired by Prof. Bingzhong Wang UETSC, China			
	09:30-12:10 Keynote Speeches	09:15-09:20	Address from the UESTC Vice-President	Prof. Caidong Xiong	Chaired by Prof. Bumman Kim POSTECH, Korea			
		09:20-09:25	Address from the ICMMT2010 TPC Chair	Prof. Wei Hong				
		09:30-10:10	World Largest Antenna FAST – Five-hundred meter Aperture Spherical radio Telescope	Prof. Rendong Nan <i>Chinese Academy of Sciences, China</i>				
10:10-10:50		Metamaterial Microstrip Antennas and Arrays: A New Approach for Metamaterial Research at Microwave Frequency	Prof. Le-Wei Li <i>National University of Singapore, Singapore</i>					
10:50-11:30	Quasi-optical Systems for Remote Sensing and Space-Astronomy	Prof. Xiaodong Chen <i>University of London, UK</i>	Chaired by Prof. Ruimin Xu UESTC, China					
11:30-12:10	Recent Trend of Power Amplifiers for Mobile Communication	Prof. Bumman Kim <i>POSTECH, Korea</i>						
12:10-13:30		Lunch						
13:30-17:30		A1	A2	A3	A4	A5	P1_1 (Student paper contest) P1_2	
18:00-20:00		ICMMT2010 ISC/TPC Meeting						
May. 10		08:20-12:00	B1	B2	B3	B4	B5	P2
May. 10		12:00-13:30	Lunch					
		13:30-17:30	C1	C2	C3	C4	C5	P3
		18:00-20:00	Banquet & Best Student Papers Award					
May. 11		08:20-12:00	D1	D2	D3	D4	D5	P4
May. 11		12:00-13:30	Lunch					
		13:30-17:30	E1	E2	E3	E4	E5	P5
Room Name	Room 1 Sentosa	Room 2 Kedah	Room 3 Kelantan	Room 4 303	Room 5 403	Room 6 2nd Floor Gallery of WuFu Building		
Sessions	A1~E1	A2~E2	A3~E3	A4~E4	A5~E5	P1~P5		

# **2010 International Conference on Microwave and Millimeter Wave Technology (ICMMT2010)**

## **Technical Program**

**2010-4-29**

**May 8-11, 2010**

**Wangjiang Hotel, Chengdu, China**



**电子科技大学**  
University of Electronic Science and Technology of China



## ICMMT2010 Sponsorships

### **Sponsored by:**

Chinese Institute of Electronics(CIE)

### **Co-sponsored by:**

Microwave Society of CIE, China

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Sichuan University, Chengdu, China

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### **Technically co-sponsored by:**

IEEE Microwave Theory and Techniques Society (MTT-S)

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### **Media:**

Journal of microwaves, China

Chinese Journal of Radio Science

Mobile Communications, China

“Microwave Journal” Microwave Journal, USA

Rfeda, China

Mrfn, China

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## **Greetings from ICMMT 2010 General and Executive Chairs**

It is our great pleasure to invite you to attend the 2010 International Conference on Microwave and Millimeter Wave Technologies (ICMMT2010), which is the seventh of the consecutive series initiated in 1998 to be held in China every other year. We cordially welcome you to ICMMT2010. Besides, we would like to take this opportunity to express our sincere appreciation to the leading scientists, session organizers and all contributors for their great help and valuable supports to ICMMT2010. Many thanks also to the Technical Program Committee, the Organizing Committee and the International Steering Committee as well as the sponsors and the technical sponsors for their efforts to bring all the participants an excellent technical program and an opportunity to spend a pleasant time at the conference.

ICMMT2010 will provide a broader forum for worldwide scientists and engineers of varied backgrounds to exchange information and share research results to discuss collaborations in the fields of microwave, millimeter wave and even to the far infrared and optical waves. The conference is also a platform for the new faces to become known and for the previous attendees to refresh their friendships. A large-scale exhibition of research achievements and commercial products related to the conference topics, the 2010 Microwave Industry Exhibition in Chengdu China, will be held concurrently.

Chengdu is an ancient city with more than 2300 years of history. It has a reputation of being “the Land of Abundance”. In addition, there are a number of traditional historic and cultural sights around Chengdu. We hope all of attendees an enjoyable and memorable stay in Chengdu, China.



**Zhenghe Feng**  
General Chair



**Bingzhong Wang**  
Executive Chair

## **Message from the Technical Program Chairs**

On behalf of the Technical Program Committee (TPC), we welcome all of you to attend the 2010 International Conference on Microwave and Millimeter Wave Technology (ICMMT2010) in Chengdu, the one of the famous cities in China.

A high number of 811 papers were submitted to ICMMT2010 from 17 countries and regions. More than 70 TPC members reviewed the papers for their technical merits and the interests to the microwave and millimeter wave community. Finally, a total number of 584 papers were accepted for presentation in ICMMT2010. We have arranged 25 oral sessions and 5 poster sessions from May 9 to May 11 to present the papers.

In this large event on microwave and millimeter waves, we have invited 4 Keynote Speakers from research institute and universities.

Besides the regular papers, a high number of 244 student papers were received to take part in the student-paper competition. After the peer review by the TPC members, 20 papers were selected to the final list for the three best student papers.

All paper submissions, paper review and evaluation, and paper acceptance process are on-line based. We are indeed proud of to acknowledge Mr. Guang-Qi Yang and Mr. Kaihua Gu in the State Key Laboratory of Millimeter Waves at Southeast University for their great efforts on the technical supports.

### TPC Co-Chairs

Prof. Wei Hong, Southeast University, China

Prof. Ruimin Xu, University of Electronic Science and Technology of China

Prof. Junfa Mao, Shanghai Jiaotong University, China

Prof. Kama Huang, Sichuan University, China

Prof. Cheng Liao, Southwest Jiaotong University, China

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Jun Hu, University of Electronic Science and Technology of China

## **Publication Co-Chairs**

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## **Exhibition Committee Co-Chairs**

Zilun Wei, Kingradio Tech.(ShenZhen) Co. Ltd.

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Xiangyu Cao, Air Force Engineering University, China  
Jixin Chen, Southeast University, China  
Rushan Chen, Nanjing University of Science and Technology, China  
Xiaodong Chen, Queen Mary, University of London, United Kingdom  
Xing Chen, Sichuan University, China  
Chonghu Cheng, Nanjing University of Post Telecommunications, China  
Feng Cheng, Southeast University, China  
Zhiqun Cheng, Hangzhou Dianzi University, China  
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Yushu Li, BITTT, China  
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Xin Lv, Beijing Institute of Technology, China  
Junhao Shen, Nanjing Changjiang Electronics Group Co., Ltd, China  
Weixing Sheng, Nanjing University of Science and Technology, China

Shengcai Shi, Purple Mountain Observatory, China  
Xiaowei Shi, Xidian University, China  
Lianyou Sun, Southeast University, China  
Wanchun Tang, Nanjing University of Science and Technology, China  
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Lezhu Zhou, Peking University, China  
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Xiaowei Zhu, Southeast University, China

### **ICMMT2010 Secretariat Staff**

Yunchuan Guo, University of Electronic Science and Technology of China  
Maoyan Wang, University of Electronic Science and Technology of China  
Bo Chen, University of Electronic Science and Technology of China  
Guangqi Yang, Southeast University, China  
Kaihua Gu, Microwave Society of Chinese Institute of Electronics, China

### **ICMMT2010 Online Support**

Guangqi Yang, Southeast University, China  
Kaihua Gu, Microwave Society of Chinese Institute of Electronics, China

## Conference Site and Office Location

The 2010 International Conference of Microwave and Millimeter Wave Technology (ICMMT2010) will be held on May 8-11, 2010, at Wangjiang Hotel, Chengdu, China. The office and session locations are shown in the back cover of this program.

## Registration

The ICMMT2010 registration begins on March 19, 2010. The registration desk is at Wangjiang Hotel on May 8 and May 9. The on-site registration fee is shown in the following table. The on-site student registration requires a valid student ID. If you have pre-registered, your name badge and Technical Program will be ready for you to pick up at the registration desk during the conference. Please wear your name badge throughout the conference. Access will be prohibited to the exhibition, tea break, interactive areas, and technical sessions if a name badge is not visible.

	On-site Registration	
	IEEE/EuMA member	Non- IEEE/EuMA member
Participants	CNY 3200	CNY 3500
Student Participants	CNY 1600	CNY 1800

## Projection Facilities

Standard LCD projector (connected to a local PC) will be provided in each conference room. If you need an overhead projector, please contact the conference office.

## Guidelines for Presentations

### INFORMATION FOR ORAL PRESENTERS

Presenters are required to report to their session room and to their Session Chair at least 15 minutes prior to the start of their session (8:05AM in the morning or 13:15 PM in the afternoon). There are no scheduled breaks in the agenda so it is mandatory that the presentations be loaded before the beginning of each session. Any delays in the start of a paper at its scheduled time due to a presenter's disregard of this guidance will result in less presentation time for that paper.

All presentations are limited to 20 minutes in their entirety. The strict limits are 15 minutes for the formal presentation and 5 minutes for questions and discussions. It is critical that we stay

on schedule to accommodate attendees who move between sessions. The Session Chair will remind the presenter in 15 minutes after start.

Each session room will be equipped with a computer with an LCD projector. This is the only permissible projection system. Presenters must use the session's computer for their presentation, i.e., their presentation must be loaded in advance on this computer. Other computers will not be permitted. Each computer is equipped with a CD-ROM drive and a USB port to read CDs and USB flash memory, respectively. If you have a special requirement to use an overhead projector, please contact with the conference office at least one hour prior to the start of their session.

The operating system for session computers is Microsoft Windows XP (or newer). The softwares available on each machine are Adobe Acrobat Reader (for PDF), MathType 5.0 and Microsoft Office 2002 (or newer) that includes Word, Excel, PowerPoint. Therefore, all presentations must be compatible with these packages. There will be full-featured computers with a projector and a CD-ROM burner available in the preview room. Presenters are argued to try out their presentations if there is any concern on the format, presentation length, etc. There will be also assistance and advice available to presenters at this place.

Please remember that the responsibility of having your paper ready for Presentation at the scheduled time is primarily in your hands as the presenter. Due to the very large number of papers and a very tight schedule, we cannot accommodate delays due to your not being ready.

### **INFORMATION FOR POSTER SESSION PRESENTATIONS**

The poster sessions will begin at 9:20 AM in the morning and 14:10 PM on the afternoon. All presenters are required to mount their papers 15 minutes prior to the start of their session. Each poster presentation will last about 2.5 hours from 9:20 – 12:00 in the morning and 14:10 – 16:50 in the afternoon. During this time, the presenter must remain at the display board to answer questions and discuss informally the contents of the display.

The poster display should include a statement of the problem, objectives of the research or project, the methodology used to solve the problem or implement the program, the major findings or outcomes and their significance, and conclusions. There should be a logical sequence -- introduction, development, and conclusion -- to your display. Each sheet should be numbered. A heading should be prepared for your presentation using lettering at least 3cm high. The heading should include the title of the poster and all author names and institutional affiliations. Your poster abstract should appear in the top left-hand corner of the board. Lettering should be simple, bold, and easily legible from a distance of one meter.

One poster board is provided for each presentation, which is 2 meter high by 1 meter wide. The background color of the board is usually beige or white. Pins or tapes are provided to mount your posters on the boards. All materials to be displayed should be prepared before you arrive. Supplies will not be available at the conference site.

# General Information

## CONFERENCE VENUE

ICMMT2010 will be held at Wangjiang Hotel, Chengdu, China.

Address: 42 Xiashahepu, Chengdu, Sichuan, China

Tel: +86-28-84790000

Fax: +86-28-84791688

Website: <http://www.wangjianghotel.com>

## TRANSPORTATION

Please refer to the website:

<http://www.mws-cie.org/icmmt2010/conference/html.php?title=Transportation> for details.

## ABOUT Chengdu

Chengdu is the political, economical and cultural center of Sichuan province, there are a great deal of humanistic sights and the natural sceneries also take a unique style. Over 1000 years ago in the Tang Dynasty, the rhesis "Standing before the window, the west mountain is covered by deep snow exist over thousands of years, a sudden cold is felt; In front of the door, boats that have traveled for tens of thousands of miles throughout East Wu are parking" was written by poet.

"Land of Abundance" – Chengdu, the biggest Campagna in the Southwest of China, holds 6 urban areas, 4 suburb areas, 6 countries, add up to 12.6 thousand square kilometers, with a population of 10 million.

As one of the famous city of historical culture in China, Chengdu in possession of abundant tourist resources. More than 1500 years ago, the poet Zuo Si of the Jin Dynasty once praised it with "spectacular and beautiful". Not only the "Poet God" Li Bai but also the "Sage in Poetry" Du Fu had profoundly eulogized this city which takes its own graceful bearing. Indeed, Chengdu is a city of peaceful and prosperous with deep cultural deposition and beautiful natural environment.

Varied folk festivals held every year in Chengdu, such as the Flower Festival, the Lantern Festival, the Folk Song Competition and the Dragon-boat Festival, can be traced back to nearly 1000 years ago. They are part of the traditional culture of folk arts in Chengdu which, while keeping the original styles and forms, are often presented with some new ideas.

Sichuan Opera, highly-reputed in the whole country for its strong local characteristics, absorbs the essence from other operas to enrich and improve itself all the time. Some of its tricks like "Bianlian" (changing facial masks) and "Penhuo" (spitting fire) can be rated as unique skills and evoke much admiration from the audience.

Sichuan food is widely enjoyed throughout China. As the popular Chinese saying goes, "the best food is found in Sichuan". Being one of the four major Chinese cuisines and with over 3000 varieties and hundreds of representative dishes, it is recognized as something special for its delicate ways of cooking. Chengdu snacks are well-known for their low price, excellent appearance and taste, and exquisite shape. Chengdu hotpot is delicious, spicy and refreshing. It can be eaten while boiling, tasting entirely unique.

Chengdu is a famous scenic region for tourists in Southwest China, characterized by the all-season scenery and the ancient culture of the Shu Kingdom during the Three Kingdom Period at the end of the Han Dynasty.

Chengdu is the birthplace of the tea culture and a major tea base of China with largest number of tea houses in the world.

## **LANGUAGE**

The official language for the Conference is English. However, in the public society, Chinese mandarin is commonly spoken in Chengdu.

## **VISA**

Each person from abroad, who wants to enter the Chinese Customs, needs to hold a visa issued by Chinese Embassy or Consulate. It should be submitted to the Chinese Embassy in your country for you to apply for the visa. You can also apply for a Visa type of common tourist, which is convenient to be issued without the requisition form and valid for 30 days.

## **CURRENCY AND CREDIT CARDS**

China's currency is RMB with its monetary unit RMB Yuan. The exchange rate is about 1 USD FOR 6.8 RMB. ONLY RMB cash is acceptable on the registration desk on the conference site. This is also the case in most large shopping centers and other hotels.

## **TAX AND TIP**

All the shopping is free of tax. Be sure to make big bargaining when buy merchandise from the Street Market. Tipping is by no means a traditional Chinese custom. Please help keep the good custom and do not tip a waiter/waitress or a taxi driver and other person who provides regular service.

## **OPENING HOURS**

Bank and Post Office Opening hours: 8:30 a.m. to 5:30 p.m., from Monday to Sunday.  
Government Office Opening hours: 8:00 a.m. - 5:00 p.m., from Monday to Friday.  
Store Opening hours: usually 9:00 a.m. to 8:00 p.m., but the large shopping center serves till 10:00 p.m., from Monday to Sunday.

## **ELECTRICITY**

In China, the standard outlets provide AC of 220 V/50 Hz.

## **TAXI**

Usually, a taxi is available along the roadsides, while you wave for it. However, at main streets it is only available at taxi stops or in front of a hotel.

## **INTERNET ACCESS**

There are WLAN with internet access in the registration room.

## **ICMMT2010 Online**

Information on ICMMT2010 has been posted on the World Wide Web at  
<http://www.mws-cie.org/ICMMT2010>

# Keynote Presentations

**2010-05-09 AM, Sunday, WuFu Hall**

**Co-Chairs: Bumman Kim, Ruimin Xu**

9:30-10:10

**World Largest Antenna FAST – Five-hundred meter Aperture Spherical radio Telescope**

Rendong Nan, *Chinese Academy of Sciences, China*

10:10-10:50

**Metamaterial Microstrip Antennas and Arrays: A New Approach for Metamaterial Research at Microwave Frequency**

Le-Wei Li, *National University of Singapore, Singapore*

10:50-11:30

**Quasi-optical Systems for Remote Sensing and Space-Astronomy**

Xiaodong Chen, *University of London, UK*

11:30-12:10

**Recent Trend of Power Amplifiers for Mobile Communication**

Bumman Kim, *Pohang University of Science and Technology, Korea*



2010-05-09 PM

Room 1

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**ORAL Session: A1 (11 presentations)**

**Microwave Antennas**

Session Chair: Haiwen Liu, Mohammad Matin

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- 13:30 - 13:50 Design of Broadband Patch Antenna for WiMAX and WLAN  
MohammadAbdulMatin, ManojPravakar, HossainHassan(**Bangladesh**)
- 13:50 - 14:10 Bandwidth Potential Analysis of GSM Antennas Based on Oval-Shaped Mobile Terminals  
YongyanDu, AnpingZhao, AnttiSalo, JarkkoSaunamaki(**China Mainland**)
- 14:10 - 14:30 A Novel Dielectric Resonator Antenna with new mode and feeding structure  
YangGao, ZhijunZhang, ZhengheFeng, Magdy FIskander, RuihongLi(**China Mainland**)
- 14:30 - 14:50 A Conformal S-Band Dual-Port Dual-Polarized Antenna for Satellite Digital Audio Broadcast  
kunpengWei(**China Mainland**)
- 14:50 - 15:10 Design of L-circularly polarized Microstrip Antenna Array at Ka band  
YiWang, LeiWang, YunqingSun(**China Mainland**)
- 15:10 - 15:30 Analysis and Design of Broadband Microstrip Patch Antenna with a Pair of Double Cross-shaped Slots  
Cun-LongLi, Hai-HuaWang, Hao-JiaLin, Xiao-WeiShi, Wen-TaoLi, LeXu(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 A Novel Pattern Reconfigurable Wideband Slot Antenna Using PIN Diodes  
Guang-minZhang, Jing-songHong, Bing-zhongWang(**China Mainland**)
- 16:10 - 16:30 A Novel Printed UWB Monopole Antenna Fed by Coaxial Cable  
ZhaochengZhang, ChenjiangGuo, JunDing, YiSu(**China Mainland**)
- 16:30 - 16:50 High Gain Ferrite Cavity-Backed Slot Antenna For RFID Application  
chaoli, quanyuanFENG(**China Mainland**)
- 16:50 - 17:10 Multi-objective Optimization Design of Multilayer RFID tag antenna by Pareto GA  
chaoli, quanyuanFENG(**China Mainland**)
- 17:10 - 17:30 A Wideband Four-Element Antenna System For Mobile Terminals  
LeiLiu, ZhengweiDu(**China Mainland**)

2010-05-09 PM  
Room 2

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**ORAL Session: A2 (11 presentations)**

**Passive Devices and Circuits**

Session Chair: Min Zhang, Fujiang Lin

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- 13:30 - 13:50 Open Loop Resonator Bandpass Filter with Wide Stopband Using Spurlines and Microstrip Stubs  
ChenXiaoQun, LiPing, LinHaoJia, TongJianZhao, ShiXiaoWei(**China Mainland**)
- 13:50 - 14:10 Compact Ultra-Wideband Bandpass Filter Implemented With Stepped Impedance Resonators And T-shaped Line  
WenjieFeng, WenquanChe, QuanXue(**China Mainland**)
- 14:10 - 14:30 A study of dual-mode patch resonator-based microwave filters  
Jia-LinLi, Jian-PengWang, Xue-SongYang, Bing-zhongWang(**China Mainland**)
- 14:30 - 14:50 Compact Microstrip Power Dividers with Slow Wave Structure and Capacitor Loading  
JunHe, BingZhongWang, WeiShao(**China Mainland**)
- 14:50 - 15:10 A Novel Compact Dual-wideband Bandpass Filter  
lingyuncai, gangzeng, xinweizhan(**China Mainland**)
- 15:10 - 15:30 A New Substrate Integrated Waveguide Six-port Circuit  
Li-nanWu, Xu-chunZhang, Chuang-mingTong, MingZhou(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 A Wide Stopband CPW Low Pass Filter Using Quarter Wavelength Stepped Impedance Resonators  
Hao-JiaLin, Xiao-QunChen, Xiao-WeiShi, LeiChen, Yan-FuBai(**China Mainland**)
- 16:10 - 16:30 A Wide Stopband Branch-Line Coupler Using Defected Ground Structure  
Jian-ZhaoTong, Xiao-QunChen, Xiao-WeiShi, LeiChen, Hao-JiaLin(**China Mainland**)
- 16:30 - 16:50 Design of Compact Planar Three-Way Dual-Band Power Divider Using Defected Ground Structure  
Yan-FuBai, Xin-HuaiWang, Xiao-WeiShi, Hao-JiaLin, Xiao-QunChen, PingLi(**China Mainland**)
- 16:50 - 17:10 Design of Planar Tri-Band Bandpass Filter  
Xiuyinzhang(**China Mainland**)
- 17:10 - 17:30 A Highly Selective Super-Wide Bandpass Filter by cascading HMSIW with Asymmetric Defected Ground Structure  
WeiLiu, FalinLiu(**China Mainland**)

2010-05-09 PM  
Room 3

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**ORAL Session: A3 (11 presentations)**

**Computational Electromagnetics**

Session Chair: Qingxia Li, Michael Buchta

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- 13:30 - 13:50 Node Localization Based on Time Reversal In Wireless Sensor Network  
Wei-weiWang, Jing-songHong, Guang-mingZhang, Bing-zhongWang(**China Mainland**)
- 13:50 - 14:10 Application of Generalized Transition Matrix to Linear Straight Wires  
WentaoChen, GaojianKe, PengWang, GaobiaoXiao(**China Mainland**)
- 14:10 - 14:30 Multi-target scattering analysis based on generalized higher-order finite-difference time-domain method  
HaiLi, Zhenhaishao, SweePingYeo, MengHiotLim(**China Mainland**)
- 14:30 - 14:50 Simulation of the 2D TMz Modes of Time-Domain Maxwell's Equations by RBF-MLM  
Sheng-jianLai, Bing-zhongWang, YongDuan(**China Mainland**)
- 14:50 - 15:10 Dispersive Finite-Difference Time-Domain Method for Modeling of Cloaking Structure  
LongWang, ShengjianLai, ZhaoyunDuan(**China Mainland**)
- 15:10 - 15:30 Rapid Analysis of Electrically Large Radome  
HongfuMeng, WenbinDou(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 Application of VSIE method to scattering problem involving conducting and anisotropic bodies  
TianLu, YanwenZhao, YingyiYang(**China Mainland**)
- 16:10 - 16:30 A New Parallel Sparse Approximation Inverse Preconditioner in MLFMA  
Dao-PuXiang, Dong-MingZhou, Jian-GuoHe(**China Mainland**)
- 16:30 - 16:50 Tackling The Slow Attenuation of The Spectral-Domain Green's Function in Sommerfeld Integrals  
Da QingLiu, Hao GangWang, HuanLi(**China Mainland**)
- 16:50 - 17:10 3-D Spherical Perfectly Matched Layer for Finite-Volume Domain Truncation  
Hong-XingZheng, weiHe, ChongPeng(**China Mainland**)
- 17:10 - 17:30 Analysis of Electromagnetic Scattering Using UV Method Enhanced Marching-on-in-Order Time-Domain Integral Equations  
Q. Q.Wang, Y. F.Shi, M. M.Li, Z. H.Fan, R. S.Chen(**China Mainland**)

**ORAL Session: A4 (11 presentations)**

**Scattering and Propagation**

Session Chair: Qingxin Chu, Yongsheng Dai

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- 13:30 - 13:50 Rain Fade Characteristics Analyses for V-Band Link in Tropical Region  
khairayubadron, fadzilismail, rafiqulislam, khaizuranabdullah, jafridin, tharekrahan  
(**Malaysia**)
- 13:50 - 14:10 FDTD Analysis of Three-Dimensional Target Covered With Inhomogeneous Unmagnetized Plasma  
ZhengliHan, JunDing, PeilinChen, ZhaochengZhang, ChenjiangGuo(**China Mainland**)
- 14:10 - 14:30 EM Scattering by Conductor Plate Coated with Multilayered Medium Having Metamaterials  
helinyang, TingXiao, YongzhiCheng, MinhuaLi, BoxunXiao, GuopingZhang(**China Mainland**)
- 14:30 - 14:50 The effects of ultraviolet communication in different working wavelength base on single-scatter model  
MingLi, LuBai, zhen-SenWu, Pin-HuaXie, Shi-MeiWang(**China Mainland**)
- 14:50 - 15:10 Mean-field approximation of fractal aggregate soot in shaped beam incidence  
LuBai, Zhen-senWu, Hai-YingLi, MingLi, Pin-HuaXie, Shi-MeiWang(**China Mainland**)
- 15:10 - 15:30 Synthesis of an Unequally Spaced Array Using DEGL Algorithm  
LeiChen, Xiao-weiShi, Tian-LingZhang, Jian-ZhaoTong, RuiLi(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 Electromagnetic Scattering of Conducting Bodies of Revolution Coated with Chiral Material  
YuyuanAn, ZhenhongFan, JianZhu, RushanChen(**China Mainland**)
- 16:10 - 16:30 Analysis of Electromagnetic Scattering of Cavities with Nonuniform Plasma Coating  
JianjunDing, S.Shang, RushanChen, ZhenhongFan(**China Mainland**)
- 16:30 - 16:50 A Numerically Efficient Transmission Characteristics Analysis of Finite Planar Frequency-Selective Surfaces Embedded in Stratified Medium  
T.Su, C.Y.Li, D. Z.Ding, RushanChen, GuiWang(**China Mainland**)
- 16:50 - 17:10 On the Channel Capacity of MIMO Rayleigh-Lognormal fading channel  
DongyaShen, AnxianLu, YanniCui, FuqiangKuang, XiupuZhang, KeWu, JianpingYao(**China Mainland**)
- 17:10 - 17:30 A simple simulating method for Nakagami fading channel  
DongyaShen, YanniCui, AofengZhang, YihuaiYang, KeWu(**China Mainland**)

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Room 5

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**ORAL Session: A5 (11 presentations)**  
**PBG and Metamaterials, Low-Noise Devices and Techniques**  
Session Chair: Dongya Shen, Kai Kang

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- 13:30 - 13:50 A 60 GHz LNA with 18.6 dB gain and 5.7 dB NF in 90nm CMOS  
KaiKang, JamesBrinkhoff, FujiangLin(**Singapore**)
- 13:50 - 14:10 A Single-layer Left-handed Material of Split-square LC Resonator Coupled with H-shaped structure  
PeilinChen, JunDing, ZhengliHan, ChenjiangGuo(**China Mainland**)
- 14:10 - 14:30 Asymmetric Ridge Waveguide Slot Antenna Using High-impedance surface  
QiangGao(**China Mainland**)
- 14:30 - 14:50 Enhancement of Directivity of Source Radiation Using Parabolic Cylinder Made of Left-handed Metamaterials  
DayongZou(**China Mainland**)
- 14:50 - 15:10 Mutual Coupling Reduction in Microstrip Antennas by Using Dual Layer Uniplanar Compact EBG (UC-EBG) Structure  
YiSu, XingLei, ZhangZhaocheng, DingJun, GuoChenJiang(**China Mainland**)
- 15:10 - 15:30 Symmetric Split Ring Resonator with Capacitor Loading for Metamaterial  
GuohongDu, XiaohongTang, FeiXiao(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 Novel Directional Coupler from Composite Right/Left-Handed Transmission Line and Artificial Transmission Line  
YunongLi, ChangjunLiu, TaoYang, WenHuang, KamaHuang(**China Mainland**)
- 16:10 - 16:30 Dual-Stop-Band Filter Designed Using CRLH Transmission Line  
PengSu, XianqiLin, XingLiu, BoZhang, YongFan(**China Mainland**)
- 16:30 - 16:50 Compact Microstrip Band-stop Filter Using IDCLLR  
YiPeng, WenxunZhang(**China Mainland**)
- 16:50 - 17:10 Ground Plane Invisibility Cloak Composed of Beam Modulation Blocks  
XiaofeiXu, YijunFeng(**China Mainland**)
- 17:10 - 17:30 A Bandpass Filter Based on Fractal Shaped Defected Ground Structure Resonators for Wireless Communication  
ShanJiang(**China Mainland**)

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Room 6

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14:10 - 16:50

**POSTER Session: P1\_1 (20 presentations)**

**Student paper contest**

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**Solid State Device and Circuits**

- P.1 60GHz Unilateralized CMOS Differential Amplifier  
XiaojunBi, YongxinGuo, JamesBrinkhoff, Mook-SengLeong, FujiangLin(**Singapore**)
- P.2 A Millimeter-Wave Solid-State Power Combining Circuit Based on Low-Loss Corporate Waveguide Structure  
DongRan, JunXu, LeiWang, MaoyanWang(**China Mainland**)

**Monolithic Integrated Circuits**

- P.3 A Wideband linear CMOS power amplifier design for 2.3-GHz and 2.6-GHz m-WiMAX system  
BoshiJin, JunghwanMoon, BummanKim(**South Korea**)
- P.4 An Ultra-high-speed Direct Digital Synthesizer MMIC  
GaopengChen, DanyuWu, ZhiJin, XinyuLiu(**China Mainland**)
- P.5 Ka-Band High Gain Low Noise Amplifier by Stacked-GCPW Transmission Line  
Hsien-ChinChiu(**Taiwan**)
- P.6 A 2.4GHz Low-IF RF Frontend for wireless sensor networks  
HaoZhang(**China Mainland**)

**Passive Devices and Circuits**

- P.7 Two Novel Substrate Integrated Waveguide filters in LTCC Technology  
FeiYang, Hong-xiYu(**China Mainland**)
- P.8 Millimeter-wave integrated waveguide power dividers for power combiner and phased array applications  
XianrongZhang, QingyuanWang, AoLiao, YuanbinXiang(**China Mainland**)
- P.9 A Novel Nth-Order Microstrip Dual-Mode Bandpass Filter with N+2 Transmission Zeros  
WeiShen, Wen-YanYin, Xiao-WeiSun, Lin-ShengWu(**China Mainland**)

**Computational Electromagnetics**

- P.10 Calderon Multiplicative Preconditioner for Acceleration of Fast Direction Multilevel Algorithm for Scattering Problem  
HuaChen, JianZhu, RushanChen, Z. H.Fan(**China Mainland**)
- P.11 An H-matrix Direct Method with Improved Solution for Finite Element Analysis of Scattering Problems  
T.Wan, Z. H.Fan, X. Q.Hu, RushanChen(**China Mainland**)

**Microwave Antennas**

- P.12 Design of Array Fed Imaging Reflector Antenna for Monopulse Limited Scan Use  
ZhenjieZhang(**China Mainland**)
- P.13 Tri-band Circularly Polarized Stacked Microstrip Antenna for GPS and CNSS Applications  
WenLiao, Qing-XinChu, ShuDuo(**China Mainland**)

**Microwave Remote Sensing and Sensors**

- P.14 Parameter Inversion of Layered Media Covered by a Rough Surface  
ZhiweiLin, XinXu, XiaojuanZhang, GuangyouFang(**China Mainland**)

**Microwave and Millimeter Wave Systems**

- P.15 Novel High efficiency Broadband Ku band Power Combiner  
DanyuWu, XiaojuanChen, GaopengChen, XinyuLiu(**China Mainland**)

**EMI and EMC**

- P.16 Generalization of Network Formulation Based on Power Balance Method and Its Application  
JuanLiu, XiangZhao, KamaHuang(**China Mainland**)  
**Wireless RF Components and Systems**
- P.17 A 10~30-GHz CMOS Distributed Amplifier for UWB Applications  
Chia-HsunChen, Hui-ChenHsu, Wu-ShiungFeng(**Taiwan**)  
**Radar & Broadband Communication Systems**
- P.18 Intermediate Frequency Circuit for a 60GHz LFMCW Radar  
yingbao, zhiguoshi, kangshengchen(**China Mainland**)  
**PBG and Metamaterials**
- P.19 The Pseudo-Brewster Angles for Anisotropic Metamaterials  
ZhengbinWang, BoZhu, YijunFeng, JunmingZhao, TianJiang(**China Mainland**)
- P.20 Bowtie Patch Antenna with Electric Dipole on a HIS Substrate  
YanLiu, Kwai ManLuk, HongChengYin(**Hong Kong**)

**Microwave Antennas**

- P.1 A novel high power integrated antenna and array  
GuangyanLiu(**China Mainland**)
- P.2 Design of a Compact Ultra-wideband Printed Antenna  
FengZhou, Zupingqian(**China Mainland**)
- P.3 A Compact CPW-Fed Microstrip Patch Antenna Combining Koch Boundary and Triangle Slot  
YinshengWei, ShaobinLiu, NanGao, YUChen(**China Mainland**)
- P.4 Broad-Band Space-Filling-Based Slot Antenna  
YuChen, ShaobinLiu, ZhaoyangDai, YinshengWei(**China Mainland**)
- P.5 Quadrifilar Helix Antenna With Mechanically Tunable Compact Geometry  
NanGao, ShaobinLiu, YinshengWei, ZhaoyangDai(**China Mainland**)
- P.6 Coaxial probe-fed Circularly Polarized Microstrip Antenna for BeiDou RDSS Applications  
Su-QinWu, Shao-BinLiu, ZhenGuo(**China Mainland**)
- P.7 A Compact High Gain Microstrip Array Antenna  
yunhonghe(**China Mainland**)
- P.8 A Novel Ultra-Wideband Planar Slot Antenna  
Zhong-WuYu, Guang-MingWang, Zhi-YingYu(**China Mainland**)
- P.9 Wide Band Harmonic Suppression Based on Koch-Shaped Defected Ground Structure for a Microstrip Patch Antenna  
Zhong-WuYu, Guang-MingWang, KeLu(**China Mainland**)
- P.10 A Novel Dual-band Micro-Strip Antenna Array  
BinHuang, JianwuWang, YingxinXu(**China Mainland**)
- P.11 Analysis and Design of A Novel UWB Antenna Array  
BinHuang, YingxinXu(**China Mainland**)
- P.12 Design of unsymmetrical slot antenna based on ANN for RFID tag  
JuhongLU, yongmingzhou, ChunlongZHENG(**China Mainland**)
- P.13 Application of Broadband Microstrip Patch Antenna as A Perfect Substitute for Monopole Antenna  
JinChen, GuangFu, Guang-deWu, shu-xiGong(**China Mainland**)
- P.14 An Improved Broadband Miniaturized loaded Open Sleeve Antenna  
JinChen, GuangFu, Guang-deWu, shu-xiGong(**China Mainland**)
- P.15 Numerical Study of Symmetrical Ultra-wideband Antipodal Slot Antenna  
WenjunLu, HongboZhu(**China Mainland**)
- P.16 A Novel Wideband and Compact Microstrip Grid Array Antenna  
guoshengwang, shuiyanglin, kaifupan, xiaoguangge, yangyang(**China Mainland**)
- P.17 Beam Scanning of Parabolic Cylindrical Spatial Power Combining Antenna  
ZeMingXie, ZhaoZhu, ShangshuXiong(**China Mainland**)
- P.18 A Broadband Circular Microstrip Antenna with Two Pairs of Slots  
HaihuaWang, CunlongLi, ZhenyaLei, ShaCui(**China Mainland**)
- P.19 Design on Super-Resolution Characteristics of Planar Microstructured Antenna Array  
Guang-DingGe, Bing-zhongWang, deshuangzhao, weishao, shuaiding, xiaofeilu(**China Mainland**)
- P.20 Nonuniform Meander-line Monopole Antenna with Back-coupled Patch for WLAN Applications  
XiaochuanWang, Wen-zhongLu(**China Mainland**)
- P.21 A Novel Coplanar CPW-Fed Square Printed Monopole Antenna for UWB Applications  
ZhangHou, LiGui-yuan, WANGJian, YinXiong(**China Mainland**)
- P.22 A Novel Ultra-wideband Knife-shape TEM Horn Antenna Design for Transient Application  
Ling-LuChen, ChengLiao, LeiChang, XuanZheng, GangSu, JianFang(**China Mainland**)
- P.23 A Novel Planar Tree-shaped Fractal Dipole Patch Antenna



- P.24 Xian-fengZeng, Chen-xinZhang, Ya-weiWang, CongXie(**China Mainland**)  
A Novel Dual-Frequency Monopole Antenna for WCDMA and 2.5 GHz Extension Band
- P.25 ShuiyangLin, GuoshengWang, kaifupan, xiaoguangge, yangyang(**China Mainland**)  
Novel Arc-shaped Antipodal Ultra-wideband Slot Antenna with Low Cross-Polarization Characteristic
- P.26 YongCheng, Wen-junLu, Chong-huCheng, WeiCao(**China Mainland**)  
Design of Triple-band LTCC Antenna Using Meander Line Structure for Mobile Handsets  
SHUPINGGONG, JINGRUNQU, YUNXIANGHU, QIUYUNFU, DONGXIANGZHOU  
(**China Mainland**)
- P.27 Design of an Array with Modified Ultra-wideband Quasi-Yagi Antennas  
zhaohuihuang, xingjiang(**China Mainland**)
- P.28 A Novel Super Thin Planar Car Antenna  
PengfeiWu, JinmingPei, GuangjunLiang(**China Mainland**)
- P.29 A Planar Ultra-wideband Antenna with Dual Notched Bands Based on SCRLH Resonator  
quansun, Yong-JiuZhao, LiQiang, BingLiu, Ji-KangWang(**China Mainland**)
- P.30 A compact linearly polarized antenna array  
chenlin(**China Mainland**)
- P.31 Broadband Microstrip Patch Antenna Array Using Stacked Structure  
fanzhang, fu-shunzhang, chenlin, GangZhao(**China Mainland**)
- P.32 Research of missile and aircraft base mounted antennas for data transmission  
congchen, jieboli, linzhang, haitaochen(**China Mainland**)
- P.33 A NOVEL COMPACT UWB NOTCH-FILTER ANTENNA WITH A DUAL-ARROWHEAD-SHAPED SLOT  
junbojiang(**China Mainland**)
- P.34 Design and Optimization of a Small Ultra-wideband Planar Monopole Antenna  
yingjiepan, WeiHua, KamaHuang(**China Mainland**)
- P.35 Design the Size Reduction Patch Antenna Based on Complementary Split Ring Resonators  
JiajunMa, xiangyucao, TaoLiu(**China Mainland**)
- P.36 The Analysis and Compensation of The Mutual Coupling for The Adaptive Array Antenna  
qingzhang, PengZong, R. BecerraDarwin(**China Mainland**)
- P.37 An E-type Microstrip Slot Antenna with Parasitic Patches in Ka-band with LTCC Technology  
WeiQuan, BoYan, ZhigangWang, JinhongWang(**China Mainland**)
- P.38 Effects of Random Errors on Directivity of Amplitude-Weighted Line Arrays  
JianwuWang, GuoqiNi, BinHuang, ZhiYang(**China Mainland**)
- P.39 A Fourth Wavelength Wideband Folded Half U-slot Microstrip Patch Antenna  
zhiweishi, FengChen, YunlinLiu, QianZhang, HuilongWang(**China Mainland**)
- P.40 Design of a TE<sub>21</sub>-Mode Coupler for Antenna Feeds  
YingyiHe, ChuanfeiShe, XianfaTang, BiaoLi(**China Mainland**)
- P.41 Dual Band-Notched UWB Antenna with Parasitic Elliptical Radiation Patch  
Jin-GangGong, Yong-ChangJiao, QiaoLi, Ya-BingYang, ShuoGai(**China Mainland**)
- P.42 Wide Band Antenna Array Using Bowtie-shaped Microstrip Patch Antenna  
fanzhang, fu-shunzhang, Ya-BingYang, zhengzhang(**China Mainland**)
- P.43 Theoretical calculation and simulation of phase center of a radial line helical array antenna  
lilizhe, zhangjianqiong, LiXiangqiang(**China Mainland**)
- P.44 Planar Reflector Antenna Design Based on Gradient-index Metamaterials  
Wei XiangJiang, Hui FengMa, Tie JunCui(**China Mainland**)
- P.45 Isosceles Triangle Sierpinski Gasket Antenna's Multiband Analysis with An Iterative Method  
QuXinbo(**China Mainland**)
- P.46 Ultra-wideband Planar Monopole Antenna with Triple Band-Notched Characteristics  
FengZhou, Zupingqian, JiweiHan(**China Mainland**)
- Radar & Broadband Communication Systems**
- P.47 Path Loss Model Development for Urban Outdoor Coverage of Code Division Multiple Access (CDMA) System in Malaysia  
MardeniBinRoslee, LeeYihPey(**Malaysia**)

2010-05-10 AM  
Room 1

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**ORAL Session: B1 (10 presentations)**

**Solid State Device and Circuits**

Session Chair: Jeffrey S. Fu, Guochi Huang

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- 8:20 - 8:40 A Millimeter-wave CMOS VCO using a TL inductor with digitally controllable artificial dielectrics  
GuochiHuang, Seong-KyunKim, HuaMa, VincentFusco, Byung-SungKim(**United Kingdom**)
- 8:40 - 9:00 A High Performance CMOS Even Harmonic Mixer with a LC Resonant Circuit  
JunjunGao, ZhiqunCheng, XuefangZhu, ShengjunXu(**China Mainland**)
- 9:00 - 9:20 High-Repetition and -Stability All-solid State Pulsers Based on Avalanche Transistor Marx Circuit  
XuelinYuan(**China Mainland**)
- 9:20 - 9:40 Analysis of the Effects of Parasitic Capacitance and Inductance on Inverse Class E Power Amplifier  
FeiYou, SongbaiHe(**China Mainland**)
- 9:40 - 10:00 Differential Oscillator Using Double-Sided Paralell-Strip Line with An Inserted Conductor Plane  
HuiTang, Jian-XinChen, Li-HengZhou, Zhi-HuaBao(**China Mainland**)
- 10:00 - 10:20 (Tea Break)
- 10:20 - 10:40 Design and Realization of a Ka band Subharmonic Mixer Using Self-designed Schottky diodes  
JinchaoMou, WeihuaYu, YongYuan, XinLv(**China Mainland**)
- 10:40 - 11:00 The research of defected ground structure application in Doherty power amplifier  
ChangweiChen, KaiyuQin(**China Mainland**)
- 11:00 - 11:20 A Novel Empirical Model for SiC MESFETs with Self-Heating Effect  
OupengLi, WenHuang, YunchuanGuo, YongboChen, RuiminXu(**China Mainland**)
- 11:20 - 11:40 W-BAND INDUCTIVE HIGH ORDER FREQUENCY MULTIPLIER BASED ON SILICON AVALANCHE DIODE  
minghuazhao(**China Mainland**)
- 11:40 - 12:00 Prospects of CMOS Technology for Millimeter-wave Radio-over-fiber Applications  
YongZhang, ThomasT.Y.Wong(**China Mainland**)

**2010-05-10 AM**  
Room 2

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**ORAL Session: B2 (10 presentations)**

**Low-Noise Devices and Techniques, High-Power Devices and Techniques**

Session Chair: Yongxin Guo, Xiaohong Tang

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- 8:20 - 8:40 Mobile Space-Charge Effects on THz-Frequency Characteristics and Parasitic Series Resistance of InP IMPATT Device at Elevated Junction Temperature  
Moumita Mukherjee (**India**)
- 8:40 - 9:00 A Simple Method for Tunable Load Impedance Matching Network of Power Amplifier  
Zhebin Wang, Shengjie Gao, Chan-Wang Park (**Canada**)
- 9:00 - 9:20 GaN Technologies and Developments: Status and Trends  
Michael Buchta, Klaus Beilenhoff, Herve Blanck, James Thorpe, Reza Behtash, Sylvain Heckmann, Helmut Jung, Zineb Ouarch, Marc Camiade (**Germany**)
- 9:20 - 9:40 Impact of Bias Current and Geometry on Noise performance of SiGe HBT Low Noise Amplifier  
Hongyun Xie, Wanrong Zhang, Pei Shen, Liang Chen (**China Mainland**)
- 9:40 - 10:00 Design of a High Power Digital Tunable Filter  
kunhe Chen, Zhang Chen, Lei Zhu (**China Mainland**)
- 10:00 - 10:20 (Tea Break)
- 10:20 - 10:40 The Design of a Vlasov Mode Converter for 94GHz TE<sub>02</sub> Mode Gyrotron  
Bin Wang, Chao-Hai Du, Pu-Kun Liu, Zhi-Hui Geng, Shou-Xi Xu (**China Mainland**)
- 10:40 - 11:00 Computer Simulation of a Novel Electron Gun with a Magnetic Reversal Field  
Xinhui Wu, Jiayin Li (**China Mainland**)
- 11:00 - 11:20 Numerical Simulation of a Planar-Electrostatic-Wiggler Field Distribution and Modulation on Relativistic Electrons  
Yan-Yan Kong (**China Mainland**)
- 11:20 - 11:40 A thermal design methodology for power SiGe HBTs with non-uniform emitter finger spacing  
D. Y. Jin, W. R. Zhang, L. Chen, N. Hu, Y. Xiao, R. Q. Wang (**China Mainland**)
- 11:40 - 12:00 A Novel Broadband Class E Power Amplifier with Inductance Feedback  
Xiang Li, Wenhua Chen, Zhijun Zhang, Zhenghe Feng (**China Mainland**)

**ORAL Session: B3** (10 presentations)

**Solid State Device and Circuits, Monolithic Integrated Circuits, Ferrite  
and SAW Components, Microwave-Optical Design, Other relevant topics**

Session Chair: Xiangyu Cao, Ji Fu

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8:20 - 8:40	Microwave Photonic Filter Based on Fiber-Optic Delay Line Byung-MinJung, Min-HoPark, Hyoung-JunKim, Dong-YuKim, Jang-SooChun, Woo-KeunSong, Jong-InSong( <b>South Korea</b> )
8:40 - 9:00	A 24GHz Sub-Harmonically Image Rejection Mixer with Various Asymmetrical Diode Pair Hsien-ChinChiu( <b>Taiwan</b> )
9:00 - 9:20	A Compact Broadband Microstrip Bandpass Filter Using Folded Multiple-Mode Resonator liuqiao( <b>China Mainland</b> )
9:20 - 9:40	A W-band Detector with High Tangential Signal Sensitivity and Voltage Sensitivity linlixie, yonghongzhang, YongFan, congshaixu, yuanbojiao( <b>China Mainland</b> )
9:40 - 10:00	Design of a 17.4GHz Push-push Dielectric Resonator Oscillator QingXia, ZongxiTang, BiaoZhang( <b>China Mainland</b> )
10:00 - 10:20	(Tea Break)
10:20 - 10:40	High Conversion Gain broadband Frequency Doubler Design WenTang, SongTang, QiuyangHe, Zhenhaishao( <b>China Mainland</b> )
10:40 - 11:00	A 6-GHz 64×3-bit ROM for DDS Application in GaAs Technology JianwuChen, DanyuWu, GaopengChen, ZhiJin, XinyuLiu( <b>China Mainland</b> )
11:00 - 11:20	Simulation of Self-biased Coplanar Circulator using Barium Ferrite Thin Films YuanWang, BinPeng, WanliZhang( <b>China Mainland</b> )
11:20 - 11:40	EVM Performance of a Radio-over-Fiber System for Multiband Wireless Signal Transmission ShuaiGe, TaijunLiu, YanYe, JiaShi, TiefengXu, QiuhuaNie( <b>China Mainland</b> )
11:40 - 12:00	Aperiodic Array Synthesis Using the Cross Entropy Method LiBian, QunWu( <b>China Mainland</b> )

2010-05-10 AM  
Room 4

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**ORAL Session: B4 (10 presentations)**  
**Passive Devices and Circuits, Photonics and Optics**  
Session Chair: Hao Zhang, Wei Shao

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| 8:20 - 8:40   | Automated EM-Based Design of Side-coupled Filters and Multiplexers by Parameter Extraction and Sensitivity Analysis<br>yizhang, XinsheYin, KunkunDong( <b>China Mainland</b> ) |
| 8:40 - 9:00   | An Ultra-Wideband Bandpass Filter Using Cross-Shaped Triple-Mode Resonator<br>XuehuiGuan, ShanJiang, PengChen, LiShen, DechangHuang, HaiwenLiu( <b>China Mainland</b> )        |
| 9:00 - 9:20   | Design of Low Loss Multi-Open-Stub Phase Shifter<br>ChenGong, QiZhu, ShanshanLi, TingxiaLi( <b>China Mainland</b> )  |
| 9:20 - 9:40   | 5-way Branch Line Power Divider on Planar Structure<br>YanliChen, QiZhu, PanpanChen, XiaojuYu( <b>China Mainland</b> )   |
| 9:40 - 10:00  | SSOR Preconditioned Far-field Expansion AIM for the Analysis of Planar Microstrip Structures<br>C.Qian, Z.H.Fan, D.Z.Ding, RushanChen, W.Zhuang( <b>China Mainland</b> )       |
| 10:00 - 10:20 | (Tea Break)  |
| 10:20 - 10:40 | A Cross-Shaped Stepped-Impedance Resonator Bandpass Filter with Wide Stopband<br>ShanJiang( <b>China Mainland</b> )  |
| 10:40 - 11:00 | A Microstrip Dual-Band Bandpass Filter Based on a Novel Admittance Inverter<br>ShanJiang( <b>China Mainland</b> )  |
| 11:00 - 11:20 | Novel Dual-Mode Square-Loop Resonator Filter Using Spurline and Slot Techniques<br>HaiwenLiu, LiShen, ZhichongZhang, LiyunShi, DechangHuang, ShanWang( <b>China Mainland</b> ) |
| 11:20 - 11:40 | Transmission Characteristic Control of Dual-Mode Filter Using Spurline Technique<br>HaiwenLiu, ZhichongZhang, ShanWang, JingWan, YangJiang, LuZhu( <b>China Mainland</b> )     |
| 11:40 - 12:00 | Simplified Treatment for Radiation Mode in Coupled-mode Analysis<br>LiYANG, Lin-LinXUE( <b>China Mainland</b> )  |

**ORAL Session: B5 (10 presentations)**

**Computational Electromagnetics**

Session Chair: Yijun Feng, XiaoFang Zhu

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- 8:20 - 8:40 A novel algorithm for transient eddy current problems  
WeiZhao, YongDuan, FengRong, Sheng-jianLai(**China Mainland**)
- 8:40 - 9:00 Combined MDA-SVD-MLFMA for Analyzing the EM Scattering of Complex Objects  
Z.N.Jiang, Z.H.Fan, X.Q.Hu, Y.Sun, RushanChen(**China Mainland**)
- 9:00 - 9:20 Incomplete LU Factorization Preconditioner for the Efficient Solution of Improved Electric Field Integral Equations  
H. H.Zhang, Z. H.Fan, RushanChen(**China Mainland**)
- 9:20 - 9:40 Augmented MLFMM for solving the electromagnetic scattering problems with fine structures  
M.Chen, D.Z.Ding, RushanChen, X.Q.Hu(**China Mainland**)
- 9:40 - 10:00 A Multiresolution Basis for Analysis of Scattering Problems  
JianjunDing, D.Z.Ding, JianZhu, RushanChen(**China Mainland**)
- 10:00 - 10:20 (Tea Break)
- 10:20 - 10:40 A Modified Spectral Shift Preconditioner for Electromagnetic scattering of Complex Objects  
X.Q.Hu, M.Chen, RushanChen, D.Z.Ding(**China Mainland**)
- 10:40 - 11:00 Electromagnetic Analysis of Electrically Large and Arbitraried Shaped FSS Using Hybrid VSIE Combined with Parallelized MLFMM  
S. F.Tao, D. Z.Ding, RushanChen, M.Chen(**China Mainland**)
- 11:00 - 11:20 A Parallelized Domain Decomposition Method with Conformal PML for Solving Electromagnetic Scattering Problems  
YueShi, Y.J.Sheng, D.F.Zhou, RushanChen(**China Mainland**)
- 11:20 - 11:40 Higher-Order FETD Method Combined with Domain Decomposition Algorithm Analysis of Substrate Integrated Waveguide Structures  
MinLi, Z. B.Ye, L.Du, RushanChen, Y.Yang(**China Mainland**)
- 11:40 - 12:00 Truncated Size of the Rough Surface for Calculating the Backscattering RCS from Combined Objects  
XiaoYanZhang(**China Mainland**)

**Solid State Device and Circuits**

- P.1 A Ultra-high Speed 12 Demultiplexer in SiGe-HBT technology  
zhengfeiHu, YingmeiChen(**China Mainland**)
- P.2 A Broad-Band Analog Phase Shifter Design on I-Q Vector Modulator  
junyin, wanshunjiang, zhigangzhang(**China Mainland**)
- P.3 Design and Optimization Dual Modulus Prescaler Using the Extended True-Single-Phase-Clock  
chaoguo, sihengzhu, junhu, jingdiao, houjunsun, XinLv(**China Mainland**)
- P.4 Designing 3.125 GHz Bang-Bang PLL for Clock Recovery in 6.25 Gbps Backplane  
Communication Receiver  
zhoumingzhu, sunlingling, wangguangyi, liujun, wenjingcai, wangjie(**China Mainland**)
- P.5 The performance of thin barrier InAlN/AlN/GaN MIS HEMT with high Dielectric Insulators  
JianjunZhou, XunDong, HaiqiLiu, TangshenChen, ChenChen(**China Mainland**)
- P.6 Design of 1:3 Unequal Wilkinson Power Divider with Defected Ground Structure  
TaoFeng, JunXu, YanMaoWang(**China Mainland**)

**Low-Noise Devices and Techniques**

- P.7 Analysis of Phase Noise Spectrum in LC Oscillator based on Nonlinear Method  
ZhipengLi, JingfuBao, PuyingTang, FeiWang(**China Mainland**)
- P.8 A Wideband Low-Noise-Amplifier with Compact Size and Improved Bandwidth  
LeiWu, MengxiaYu(**China Mainland**)
- P.9 Design of an Ultra Low Noise Amplifier for Mobile Communication in Higher Frequency Band  
lizhao, zhiqiangYu, jianyiZhou(**China Mainland**)

**High-Power Devices and Techniques**

- P.10 SOI SJ-LDMOS with Added Fixed Charges in Buried Oxide  
wenlianwang(**China Mainland**)
- P.11 Design and thermal analysis of SiGe HBT with segmented emitter fingers and non-uniform  
segment spacing  
LiangChen, Wan-rongZhang, Dong-yueJin, YingXiao, Ren-qingWang, NingHu(**China  
Mainland**)
- P.12 Design of THz, TM-Mode Coaxial Bragg Reflector for CARM Oscillators  
ChaiBin, ZhangShi Chang(**China Mainland**)
- P.13 The High-Power Radial Line Helical Circular Array Antenna: Theory and Development  
xiangqiangLI, QingxiangLIU, JianqiongZHANG, LiuZHAO, ZhengquanZHANG(**China  
Mainland**)
- P.14 Design and Optimization of a Coaxial Bragg Resonator for a 350 GHz Cyclotron  
Autoresonance Maser (CARM) Oscillator  
qixin, ShiChangZhang(**China Mainland**)
- P.15 Analysis and Solution of Errors in Feedback Path of a Complex Gain Baseband Predistorter  
ZhangChen, KunheChen, DeruiFan(**China Mainland**)
- P.16 Parameter Extraction of SOILD MOS based on the HISIM-HV model  
TianleMiao, WenJunLi, HuangWang, XudanShentu, JunLiu, linglingSun(**China Mainland**)
- P.17 On-line Monitoring Technology for High-power Amplifier  
SenWang, EnLi, Gao-FengGuo, YangZhou(**China Mainland**)
- P.18 Design of the 4-element rectangle Radial Line Helical Array Antenna  
zhangjianqiong, LiuQingxiang, LiXiangqiang, ZhaoLiu(**China Mainland**)

**Monolithic Integrated Circuits**

- P.19 A 5.25GHz GaAs PHEMT Power Amplifier for 802.11a Application  
YanjunPeng, K.F.Tsang, LingSun, HuaxiangLu, YanjinLi, WeipingJing(**China Mainland**)

**Passive Devices and Circuits**

- P.20 An improved method for TRL calibration  
YuLiu, YuTian, BoGao, LingTong(**China Mainland**)

- P.21 An Substrate Integrated Waveguide Filter with Source-Load Coupling  
RongqiangLi, XiaohongTang, FeiXiao(**China Mainland**)
- P.22 A Novel Broadband Transition of Rectangular Waveguide-to-Coplanar Waveguide without Dielectric Substrate  
jianqindeng(**China Mainland**)
- P.23 A Frequency-Independent Equivalent Circuit Model for Planar Symmetric Balun in CMOS RFICs  
JiajuWei, ZhigongWang(**China Mainland**)
- P.24 Design of a Compact Ultra-Wideband Bandpass Filter with Two Notched Bands  
FengWei, lichen(**China Mainland**)
- P.25 Design and Performance of a W-Band Microstrip Rat-Race Balanced Mixer  
WeiZhao, YongZhang, MingzhouZhan(**China Mainland**)
- P.26 A Compact Folded Interdigital Bandpass Filter Using LTCC Technology  
YeTian, ShuipingZhou, BoYan(**China Mainland**)
- P.27 A Novel Spiral Inductor Model with a New Parameter-Extraction Approach  
LiangChen, ZhiqunLi, QinLi, LiZhang, WeiLi(**China Mainland**)
- P.28 Calculations and Design of A Third Harmonic Cavity for Increasing the Beam Lifetime  
GuangchaoLiu, Cong-FengWu(**China Mainland**)
- P.29 Ultra-Wideband Bandpass Filter Using Novel CMRC with Improved Out-Of-Band Performances  
ZhongLi(**China Mainland**)
- P.30 A Novel Compact Size Microstrip Equalizer Based on Spiral Resonators  
ShengTang, YongZhang, JingZhang(**China Mainland**)
- P.31 Analysis and Design of Spiral Inductor Based on the Particle Swarm Optimization Algorithm  
YantaoGuo, QunshengCao(**China Mainland**)
- P.32 Design of a wideband transition from double-ridge waveguide to microstrip line  
YangZhou, Hong-xiuLiu, EnLi, Gao-FengGuo, TaoYang(**China Mainland**)
- P.33 A Novel Microstrip Triple-Mode Wideband Bandpass Filter Using Radial-Line Stubs  
LongZhang, ZhiYuanYu, LongGuo(**China Mainland**)
- P.34 Compact, Broadband Waveguide-to-Microstrip Transition Using Slotline Antenna  
Mao-huiYang, JunXu, QingZhao, Gui-PingLi, LinPeng(**China Mainland**)
- P.35 Design of a Novel Harmonic-Suppressed Wideband Microstrip Bandstop Filter  
jifu, HaoquanHu(**China Mainland**)
- P.36 Design of a Novel Compact Wideband Bandpass Filter with Shunt Open-circuited Stubs  
jifu, HaoquanHu, JunXu, MaohuiYang(**China Mainland**)
- P.37 A Compact Broadband Multi-Layer In-Phase Power Divider  
QiaoLi, Jin-GangGong, Xiao-weiShi, Xin-HuaiWang, FengWei(**China Mainland**)
- P.38 A Compact Microstrip Wideband Bandpass Filter with Excellent Out-band Performance  
Yan-liangWU, ChengLiao, Xiang-zhengXIONG, Yan-minDuan, qunyang, Xiao-yongXIA(**China Mainland**)
- P.39 A LTCC Cross-Coupled Bandpass Filter for Millimeter-Wave Integrated Module  
YinqiaoLi, JianhuaJi, ShaHUAN, YuanchunFei, JianmingZhou(**China Mainland**)
- P.40 Design of Broadband Orthomode Transducer Based on Double Ridged Waveguide  
Tian-LingZhang, Ze-HongYan, LeiChen, Fang-FangFan(**China Mainland**)
- P.41 Novel Dielectric Wedge Phase Shifter for 3G Mobile Basestation Antennas  
ShaohuaKan, YonghuiTao, GangWang(**China Mainland**)
- P.42 Design of Microstrip Tapped-Hairpin Dual-Band Pass Filter for Ku-Band Application  
qunyang, Xiang-zhengXIONG, Yan-liangWU, Li-pingWANG, Hua-qingXIAO(**China Mainland**)
- P.43 Scattering Parameters Analysis of the Vertical Interconnected Via in Microwave Multilayer Circuits  
YuTian, BoGao, LingTong(**China Mainland**)
- Computational Electromagnetics**
- P.44 New Study on Arbitrarily V-shaped Groove Guide  
YinqinCheng, GuojianLi, FuyongXu(**China Mainland**)
- P.45 Grid-Cell Combination in 3D-FDTD Modeling of ELF Propagation of the Earth  
HangangXia, YiWang, QunshengCao(**China Mainland**)
- P.46 Parallelized ADI-FDTD Algorithm for Attenuation Constant Extraction by Using OpenMP Library  
Ke-DiZhang, WeiShao, Bing-ZhongWang(**China Mainland**)



- P.47 A Modified NPML Scheme for Truncating Anisotropic Dispersive Medium  
WangYijun, YangLixia, LiangQing, WangGang(**China Mainland**)
- P.48 Analysis of Substrate Integrated Waveguide Based on Two Dimensional Multi-Port Method  
ElnazAbaei, EsfandiarMehrshahi, HamidrezaSadreazami(**Iran**)
- P.49 Analysis of H-shaped patch antenna by Wave concept iterative procedure (WCIP)  
Wu-shengJi, Quan-zhenLuo, FanYang(**China Mainland**)
- P.50 A Weakly Conditionally Stable Finite-Difference Time-Domain Method for Simulation of Resonant Cavity  
ShuaiNiu, yangyang, RushanChen, ShaobinLiu(**China Mainland**)
- P.51 Breakdown Characteristics of Ultra-wideband High-power Microwave Transmission through the Lower Atmosphere  
TaoTang, ChengLiao, PengchengZhao, QingminGao, YanliangWu(**China Mainland**)
- P.52 Stability Analysis of Difference Scheme for High Power Microwave Atmosphere Propagation Model  
QingminGao, WenbinLin, TaoTang, PengchengZhao, ChengLiao(**China Mainland**)
- P.53 A Novel High-order Scheme for Time Domain Maxwell's Equations  
jianyingwang, jianyanguo, kezhang, kunwang, yunlianglong(**China Mainland**)
- P.54 The Simulation and Experiment Research on Radiation of Dipole antenna in GTEM Cell  
Shu-guangXING, JiLI, Shu-fangLI, Wen-jianWANG(**China Mainland**)
- P.55 Monostatic Microwave Imaging of 2D Conductor Based on Time-Domain Finite Element  
KunLiu, guoHongDu, ChengLiao(**China Mainland**)
- P.56 Analysis of Wide-Band Aperture-Coupled Microstrip Antenna Array by CN-FDTD  
YuNai, RuinaXing, DanSun(**China Mainland**)
- P.57 Static-Field Problems Solved by RBF-MLM with Natural Conformal Node Distribution  
ShengjianLai, BingzhongWang, YongDuan(**China Mainland**)
- P.58 Volume Scattering of 3-D Discrete Scatterers by Using UV Multilevel Partitioning Method  
YunhuaTan, BochengZhu, LezhuZhou(**China Mainland**)
- P.59 The Application of Aggressive Space Mapping Algorithm in Microstrip Patch Antenna Design  
FengChen, ZhiweiShi, XiDeng, JingpingSong, YunlinLiu(**China Mainland**)
- P.60 GPU-Based Accelerated FDTD Simulations for Double Negative (DNG) Materials Applications  
shenchen(**China Mainland**)
- P.61 An Efficient Splitting the Plane-wave FDTD Method  
WangHui, HuangZhiXiang, WuXianLiang, LiuXiaoYong(**China Mainland**)
- P.62 Acceleration of Time-Domain Finite-Element Method in Electromagnetic Analysis with OpenMP  
BenSun, LanlanPing, xiaoxianghe(**China Mainland**)
- P.63 Analysis on resonant characteristic of HE<sub>111</sub> mode  
BinzhaoCao, XiaoxiaoLi, JingzhongCui, ZhongleiMei(**China Mainland**)

**2010-05-10 PM**  
Room 1

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**ORAL Session: C1 (11 presentations)**

**Passive Devices and Circuits**

Session Chair: Shunyou Qin, Yunqiu Wu

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- 13:30 - 13:50 An Ultra Wide Band Power Divider/combiner Based on Y-structure Waveguide  
chenhuilin(**China Mainland**)
- 13:50 - 14:10 Novel Dual-Band Hybrid Coupler Using Improved Simplified CRLH Transmission Line Stubs  
Jian-qiangGong, Chang-HongLiang(**China Mainland**)
- 14:10 - 14:30 A Compact Quasi-Lumped LTCC Diplexer for Radar Application  
zhengweiwang(**China Mainland**)
- 14:30 - 14:50 Study of L-band Miniature Lumped Element LTCC Band-pass Filter  
zhengweiwang(**China Mainland**)
- 14:50 - 15:10 Design of improved quad-ridged orthomode transducers  
ZhongZhuang, BinLi, QingyuanFan(**China Mainland**)
- 15:10 - 15:30 Wideband Antenna and Wideband Bandpass Filter for Wearable Systems  
ShanshanGao, ShaoqiuXiao, BingZhongWang, XinheXu(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 A Ku Band Waveguide Bandpass Filter with E-Plane Metallic Diaphragm  
GuoqiangZhao, ZhuoZhang, XinLv, HoujunSun(**China Mainland**)
- 16:10 - 16:30 Design of Unbalanced and Balanced Radio Frequency Bulk Acoustic Wave Filters for TD-SCDMA  
HaoZhang, WeiPang, WeikaiChen, ChongZhou(**China Mainland**)
- 16:30 - 16:50 Design of Compact Microstrip Dual-mode Filter with Source-Load Coupling  
jiani, jianpengwang, yong-xinguo, wenwu(**China Mainland**)
- 16:50 - 17:10 Accumulation-Mode MOS Varactor Modeling for RF Applications Valid up to 40GHz  
JiaweiHu, ZhiqunLi, QinLi, WeiLi, LiZhang(**China Mainland**)
- 17:10 - 17:30 A Novel Compact Ultra-wideband Bandpass Filter Using Dumbbell Stubs  
lichen, FengWei, XiaoWeiShi, YaDongWu, XinHuaiWang(**China Mainland**)

2010-05-10 PM  
Room 2

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**ORAL Session: C2 (11 presentations)**  
**Computer Aided Design, Instrumentation and Measurement Techniques,  
Electromagnetic Field Theory**  
Session Chair: Xiaodong Chen, Min Gu

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- 13:30 - 13:50 Optimization Based on Genetic Algorithm and HFSS and Its Application to the Semiautomatic Design of Antenna  
SiyangSun, YinghuaLv, JinlingZhang, ZhidongZhao, FangmingRuan(**China Mainland**)
- 13:50 - 14:10 Calculation of the characteristic impedance of TEM horn antenna using support vector machine  
mingu, fengyang(**China Mainland**)
- 14:10 - 14:30 Error Analysis and Uncertainty Evaluation in Microwave High Power Measurement  
HaoZhao(**China Mainland**)
- 14:30 - 14:50 Linearity Analysis of Direct Digital Chirp Synthesizer in the Presence of Amplitude Quantization  
YuanYao, JianfengZheng, ZhengheFeng(**China Mainland**)
- 14:50 - 15:10 Study on modern signal process and analysis for radiated EMI noise mechanism diagnosis  
Xiao-huiQiu, Yun-juanPin, YangZhao, WeiYan, Yong-chaoLuo, RongRong, FengWen(**China Mainland**)
- 15:10 - 15:30 A Practical Noise Parameter Measurement Method of Packaged Low Noise Transistor  
DiLiu, WeiZhou, YudongWang, JunFu, GaoqingLi, JieCui(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 A Fast-measuring Method on Total Isotropic Sensitivity Based on Data Predication  
HonglongCao(**China Mainland**)
- 16:10 - 16:30 A Portable Antenna VSWR Meter Based on Integrated Detector and Its Calibration Method  
jisongyang, lipengzhou(**China Mainland**)
- 16:30 - 16:50 New Design of Double-core QCM System  
HaifengJiang, YumingBo(**China Mainland**)
- 16:50 - 17:10 A Novel High-Order Finite-Difference  
jinzhao(**China Mainland**)
- 17:10 - 17:30 Huygens Subgrid Technique for FDTD Analysis of Plasma Problems  
JiaoXie, YangYang, LiuShaoBin(**China Mainland**)

2010-05-10 PM  
Room 3

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**ORAL Session: C3 (11 presentations)**

**Microwave Antennas**

Session Chair: Xiaoxin Yin, Minghua Zhao

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- 13:30 - 13:50 MMIC Compatibility Study of SIW H-plane Horn Antenna  
Chin-IYeh, Dong-HuaYang, Tsung-HanLiu, JeffreyS.Fu, Kuo-ShengChin, Jui-ChingCheng, Hsien-ChinChiu, Chih-PinKao(**Taiwan**)
- 13:50 - 14:10 Application of Parallel Integer Coded Differential Evolution Strategy on Ultra-Wide Band TEM Horn Antenna  
LeiChang, ChengLiao, XuanZheng, Ling-LuChen, GangSu(**China Mainland**)
- 14:10 - 14:30 Integrated Design of Wide-Band Wide-Scan Phased Array Antenna and Couple Line  
changningwan, hongchaowu, chenhaixia(**China Mainland**)
- 14:30 - 14:50 Antenna with Omnidirectional E-plane Radiation Pattern Based on TE<sub>01</sub> Mode Circular Waveguide For Ka Band Applications  
Han-QingMA, TaoFENG, YuanFU(**China Mainland**)
- 14:50 - 15:10 Substrate Integrated waveguide Feeding Antipodal Linearly Tapered Slot Antenna with Reduced Mutual Coupling  
Han-QingMA, JiaochengZHAO, BinLi(**China Mainland**)
- 15:10 - 15:30 Design and Simulation of Ultra-wideband Double-Ridged Horn Antenna  
HengfeiXu, YangZhou, EnLi, HongxiuLiu, QingWang, ZimingZhong(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 Design of Triple-Band CPW-Fed Planar Monopole Antenna Using FDTD Method  
zengruili, huanbinjiang, huizhang, limeiluo, qingxinguo, junhongwang(**China Mainland**)
- 16:10 - 16:30 A Microstrip Wide Slot Antenna with Band Notching Property for Ultra-Wideband Application  
zengruili, dongyuxie, huizhang, qingxinguo, junhongwang(**China Mainland**)
- 16:30 - 16:50 A Novel Wide Beam UWB Antenna  
JiadiWang, LingyunZhou, WeidongChen(**China Mainland**)
- 16:50 - 17:10 The Propagation Wavenumber for Microstrip Line in the First Higher-Order Mode  
JuhuaLiu, DavidR.Jackson, PengLiu, JianyingWang, yunlianglong(**China Mainland**)
- 17:10 - 17:30 Miniature Omni-directional Ultra-wideband Antenna  
cunshunyang, QinggongGuo, KamaHuang(**China Mainland**)

**ORAL Session: C4 (11 presentations)**

**Microwave and Millimeter Wave Systems**

Session Chair: Le-Wei Li, Changwei Chen

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- 13:30 - 13:50 A Millimeter-Wave Frequency Synthesizer Architecture with High Agility and High Resolution Performance  
YangYuanwang, CaiJingye, LiuLianfu(**China Mainland**)
- 13:50 - 14:10 A Compact Highpass Filter with Broad Passband  
DesenLu, QingyuanWang, AoLiao, XianrongZhang(**China Mainland**)
- 14:10 - 14:30 A Transceiver for Ku Band Digital Monopulse Radar System  
ZhuoZhang, GuoqiangZhao, XingyaoZeng, HoujunSun, XinLv(**China Mainland**)
- 14:30 - 14:50 Measurement and Performance of Digital Monopulse Radar Array Antenna  
ZhuoZhang, GuoqiangZhao, XingyaoZeng, HoujunSun, XinLv(**China Mainland**)
- 14:50 - 15:10 An Improved High-Frequency-Raised Inversion Algorithm for Radar Imaging  
LinfengHe, QingxiaLi, YiLeng, JianDong, GuopingHu(**China Mainland**)
- 15:10 - 15:30 Millimeter Wave Beam Tilting Array for Radar System  
borenzheng, ZhiqinZhao, DakuiWu(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 Design of a KU-band PLL Frequency Synthesizer  
guanglei(**China Mainland**)
- 16:10 - 16:30 The Research of Broadband Millimeter-Wave Vivaldi Array Antenna Using SIW Technique  
LiBin, DongLiang(**China Mainland**)
- 16:30 - 16:50 A Ka-band T/R Front-end for Phased Array Radar  
guipingli(**China Mainland**)
- 16:50 - 17:10 Illumination Method for Millimeter Wave Imaging Indoors  
xiangshi(**China Mainland**)
- 17:10 - 17:30 Improving coal mine wireless-communications performance based on MIMO technology  
Zong-jiuZHU, Shan-huaYAO(**China Mainland**)

2010-05-10 PM  
Room 5

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**ORAL Session: C5 (11 presentations)**

**Microwave Antennas**

Session Chair: Chen Xing, Feng Zhao

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- 13:30 - 13:50 Design and Analysis of Ultra Wideband Parasitic Annular Slot Antenna with Matching Network for Wireless Applications  
YasserM.Madany(**Egypt**)
- 13:50 - 14:10 Design and Analysis of Multiband Enhancement Rectangular Microstrip Antenna Using a Via and Photonic Band-Gap Structures  
YasserM.Madany(**Egypt**)
- 14:10 - 14:30 A Wideband Pattern Reconfigurable Antenna With Compact Switchable Feed Structure  
YueLi, ZhijunZhang, ZhengheFeng, MagdyIskander, RuihongLi(**China Mainland**)
- 14:30 - 14:50 A Meander Annular-Ring Slot Antenna for Circularly Polarized Radiation  
MengJi, ZhijunZhang, ZhengheFeng, RuihongLi(**China Mainland**)
- 14:50 - 15:10 Parabolic Curved Reflector Antenna for Spatial Power Combining  
ShangshuXiong, ZeMingXie, QingxinChu(**China Mainland**)
- 15:10 - 15:30 Compact annular patch monopole antenna for WLAN application  
JiweiHan, WeipingDing, FeiChen(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 Shared-Aperture Ku/Ka Bands Microstrip Array Feeds for Parabolic Cylindrical Reflector  
GuomingGao, YumeiZhang, AngLi, JimingZhao, HangCheng(**China Mainland**)
- 16:10 - 16:30 Design of a Dual-Feed Orthogonal Polarized Patch Antenna Array  
QianYe, DanpingWang, MinWang, wenwu, JianzhongZhao(**China Mainland**)
- 16:30 - 16:50 A Broadband Microstrip Dipole Antenna Loaded with Shorted Pin  
WenquanCao, BangningZhang, HongbinLi, TongbinYu, AijunLiu(**China Mainland**)
- 16:50 - 17:10 A Novel Kind of Bluetooth and UWB Antenna  
KaizhongZhan, QinggongQuo, KamaHuang(**China Mainland**)
- 17:10 - 17:30 X-Band Linear Polarized Aperture-Coupled DRA Reflectarray  
Abd-ElhadyMahmoudAbd-Elhady, S.H.Zainud-Deen, A.A.Mitkees, A.A.Kishk(**China Mainland**)

**Monolithic Integrated Circuits**

- P.1 Design of a 4-12GHz Frequency Doubler MMIC based on InGaP/GaAs HBT Process  
YonghuiWu, XingChen, HongjiangWu, BinLiao(**China Mainland**)  
**Packaging, Interconnects, and MCMs**
- P.2 Research on Si-based MEMS Process in Development 3D Millimeter-Wave Multi-Chip Module Package  
LiangWu, HuajiangWang, JiajieTang, QianRong, yangHou, WeiWang, HaoSun, LingyunLi, XiaoweiSun, LeLuo(**China Mainland**)
- P.3 Design and Implementation of a LTCC-Based receiver front-end module  
Zhong-yunLi, Geng-huaZeng, PengChen, Jian-yuYang(**China Mainland**)  
**Computer Aided Design**
- P.4 Linear Array Thinning Based on Orthogonal Genetic Algorithm  
LiZhang, YongChangJiao, FuShunZhang, HongLi(**China Mainland**)
- P.5 Design and analysis of a dielectric radiator for microwave chemical reactor  
lihu, feimiao, weihua, kamahuang(**China Mainland**)
- P.6 Modeling Approach for Distributed RF MEMS Phase Shifter based on IA-BP Neural Network  
GuohuiYang, QunWu, JiahuiFu, FanyiMeng(**China Mainland**)
- P.7 Frequency dependent transmission characteristics of microstrip line on the finite width ground  
BoGao, TongLing, XunGong(**China Mainland**)
- P.8 Design of a Modified Monopole Antenna Using PSO Based on FEKO for Wireless Communications  
chenlin(**China Mainland**)

**Instrumentation and Measurement Techniques**

- P.9 A New Method of Measuring Insertion Loss for Antenna Feed Network  
Shunyou QinWen-jing ZhangBiao Du(**China Mainland**)
- P.10 Methods of Weak Signal Detection in Microwave Power Measurement and the Implementations  
HaoZhao(**China Mainland**)
- P.11 Study of nonlinear modeling for microwave diode based measurement  
anhuiLiang(**China Mainland**)
- P.12 Measurement and Prediction of Dielectric for Liquids Based Artificial Nerve Network  
MingLuo, KamaHuang, TianlePu, BoWang, LijunYang(**China Mainland**)
- P.13 The Study of Nonlinear Scattering Functions and X-parameters  
GuoquanSun(**China Mainland**)
- P.14 The Method of Microwave Power Amplifier Model Parameter Test Based on the Larger-signal Scattering Function  
ZhangChao, NianFuShun, LiangShengLi, CaoZhiYing(**China Mainland**)
- P.15 Extracting the conductivity of ferromagnetic thin films by using support vector regression  
YunqiuWu, ZongxiTang, YuehangXu, BiaoZhang(**China Mainland**)
- P.16 Comprehensive Measurements on Body Channel Characteristics of Human Body Communication  
XinzhuoLiu, XianqingYang, YuanWang, LeiWang(**China Mainland**)

**Electromagnetic Field Theory**

- P.17 The Mutual Effect Of The Microstrip Discontinuities  
MengZhang(**China Mainland**)
- P.18 Scattering Fields of shaped beam incidence on a conducting infinite cylinder with dielectric coating  
MingJunWang(**China Mainland**)

**Microwave Antennas**

- P.19 Band-Notched UWB Planar Monopole Antenna Using a Novel Segmented Circular Patch  
ZhangKe, ZhangChaoqun, WangJianying, LongYunliang(**China Mainland**)

- P.20 Wide-Band and Low Cross Polarization Conformal Array with Microstrip Parasitic-Dipole Antenna  
BaiYan-Ying(**China Mainland**)
- P.21 A Novel Frequency Scanning Monopulse Microstrip Antenna Array  
HaoWang, JingNi, WeizhaoSun, XiaofengMa, WeixingSheng(**China Mainland**)
- P.22 Design of a Wideband Quasi-Yagi Microstrip Antenna with Bowtie Active Elements  
KeJiang(**China Mainland**)
- P.23 Performance Analysis of Horizontal Dipole Antennas above a Wall  
ChaomanTan, GuanghuaLu, LingyunZhou, QinlongLu(**China Mainland**)
- P.24 Bandwidth-enhanced of a planar switched parasitic array antenna  
zhaokainan(**China Mainland**)
- Smart Antennas, Phased and Active**
- P.25 A Novel Batwing Microstrip Array Antenna  
yunhonghe(**China Mainland**)
- P.26 Development and Investigation of Reconfigurable Plasma Antennas  
ZhaoyangDai, ShaobinLiu, YUChen, NanGao(**China Mainland**)
- P.27 Comprehensive Performance Analysis of Power-Inversion Algorithm Used in GPS Adaptive Arrays  
JianminXu, NaXu, JunHua, ChunyunSong(**China Mainland**)
- P.28 Design of Low Cost 4 Ports Microstrip Line Phase Shifter  
tingtingliu(**China Mainland**)
- P.29 A Novel Ring Antenna with Pattern and Frequency Reconfigurability  
hanglan, anguoWang, nanliu(**China Mainland**)
- P.30 Smart Antenna Design for GPS\_GLONASS Anti-jamming Using Adaptive Beamforming  
Xin-HuaiWang, Xiao-WeiShi, PingLi, Yan-FuBai, BoLiu, RuiLi, Hao-JiaLin(**China Mainland**)
- Scattering and Propagation**
- P.31 Scattering Characteristic from a Cylindrical Salisbury Screen with Irad  
ChongHuaFang, HuiTan, QiZhang, DaGangXie(**China Mainland**)
- P.32 Analysis of Scattering Characteristics for Strip Grating Sandwiched between Multi-Dielectric Layers under Oblique Incidence and Its Applications in Circular Polarizers  
WeihaiFang, FengNian, LiZhang(**China Mainland**)
- P.33 Using time reversal technique to restore source image  
ShuaiDing, BingzhongWang, Guang-DingGe, GangZheng, XiaofeiLiu(**China Mainland**)
- P.34 Analysis of Time Reversed Electromagnetic Wave Propagation with FDTD Method  
WeiShao, xiaofeilu, Bing-ZhongWang(**China Mainland**)
- P.35 Spatial Correlation of MIMO Channel in the Indoor Environment  
ZhouranSong, ZhengweiDu(**China Mainland**)
- P.36 Hollow copper waveguides for THz wave  
QiongzhouChen, HongSu, HangZhou, ShuangchenRuan(**China Mainland**)
- P.37 Multiple Time-Domain Diffraction of Plane Waves by an Array of Perfectly Conducting Wedges for UWB signals  
PengLiu, YanJianGuo, HuajuLiu, YingJianWang, LiangYunLong(**China Mainland**)
- P.38 Surveillance and Inversion of Regional Atmospheric Duct From Multiple Radar Stations  
Jin-PengZhang, Zhen-senWu, Rong-XuHu, CuiDong(**China Mainland**)
- P.39 Absorption Properties of Electromagnetic Waves in Multi-layered Collisional Plasma  
LinZhao, HuiXie, LongGenZheng(**China Mainland**)
- P.40 An Improved Method of Extracting Permittivity Combined SVM and Waveguide Theory  
xiaohuaibao, LuGuizhen, ZhangLi, Lixiaoru(**China Mainland**)
- P.41 A Statistical MIMO Channel Model with Space-polarization Diversity  
LinHai, Ye-rongZhang(**China Mainland**)
- P.42 A Refined Composite Surface Model for Numerical Investigation of Backscattering from Wind-driven Sea Surface  
DingNie, MinZhang, Xiang-YangZhang(**China Mainland**)
- P.43 Scattering-Based I/Q Signal Simulation of Sea Clutter Returns  
HuiChen, MinZhang, Hong-ChengYin(**China Mainland**)
- P.44 An Efficient Technique for Extracting Singularity Arising in RCS Computation of Cylindrical Antenna  
JingLi, YufaSun(**China Mainland**)
- P.45 Fast Two-Dimensional Imaging of Scattering Centers Using the Nonuniform FFT  
ShiyongLi(**China Mainland**)



- P.46 Research on the One-Dimensional Randomly Gradient Index Coating  
XinmiYang, QiangCheng, Tie JunCui(**China Mainland**)  
**Microwave Remote Sensing and Sensors**
- P.47 Application of the Differential Evolution Algorithm to the Optimization of Two-Dimensional Synthetic Aperture Microwave Radiometer Circle Array  
kunchao, ZhenweiZhao, ZhensenWu, RuiLang(**China Mainland**)
- P.48 Ionospheric Anomalies Detected by GPS TEC Measurements during the 15 August 2007 Peru Earthquake  
YuhuaZou, TaoZhao(**China Mainland**)
- P.49 A General Signal-level Simulator for Aperture Synthesis Radiometers  
LiangbingChen, QingxiaLi, FeiHu, ZubiaoXiong, WeiNi, JianDong, FangminHe, RongJin, YaotingZhu(**China Mainland**)
- P.50 The Requirement of Range Sidelobe for Dual-frequency Precipitation Radar on FengYun-3 Precipitation Measurement Satellite  
HonggangYin, XiaolongDong(**China Mainland**)
- P.51 Predesign of the Wind Field Measuring Radar for FengYun-3E Meteorological Satellite  
HonggangYin, XiaolongDong(**China Mainland**)
- P.52 Bistatic Synthetic Aperture Radar Imagery Simulation of Sea surface  
Yan-WeiZhao, MinZhang, HuiChen, PingZhou(**China Mainland**)  
**Microwave and Millimeter Wave Systems**
- P.53 A 20 W W-Band Pulse Solid-State Transmitter Using Injection-Locked Compact Cascaded Power Combining Networks  
yongliu, xiaohongtang, zhoucao(**China Mainland**)
- P.54 A Compact LTCC Transmit Receive Module at Ku-band  
JianhuaJi(**China Mainland**)
- P.55 Effects of Shorting pin on the Substrate Integrated Cylindrical Cavity  
xiu-zhenluan(**China Mainland**)
- P.56 A LTCC Band Pass Filter Based on Half-Mode SICC Structure  
JianGu, YongFan, DakuiWu(**China Mainland**)  
**Communication Systems**
- P.57 Joint Blind Equalization and Detection of QAM and PAM transmissions  
WeiRao(**China Mainland**)
- P.58 An Optimised of High-Efficiency Vehicular Loop Antenna for NVIS Applications  
TianWei(**China Mainland**)
- P.59 Multi-mode/Multi-band Receiver for Onboard Ultra Broadband Communication System  
yanweiWang, jianyiZhou, taoJin, WeiHong(**China Mainland**)
- P.60 BER Analysis of OFDM with Improved ICI Self-Cancellation Scheme  
FarzanaPrianka, MohammadMatin, Abu ZafarMohammadSaleh, MOHD ALAUDDINMOHD ALI(**Bangladesh**)
- P.61 An algorithm for Jamming Recognition Based on Inspecting Spectrum of Satellite Communication  
haowu, YongChen, TaoLiang, shengHangZhao(**China Mainland**)
- P.62 An Iterative MLD Scheme for MIMO-STBC System with Directional Interference  
JieWang, XiaoxuChen, TaoLiu, YuehuanGong(**China Mainland**)
- P.63 Design and performance analysis of frequency hopping sequences with given minimum gap  
Huaqingzhang(**China Mainland**)
- P.64 Method of Empirical Mode Decompositions in Radio Frequency Fingerprint  
xujinyong, ZHAOHangsheng, LiangTao(**China Mainland**)  
**Submillimeter Wave Techniques**
- P.65 Optimization and Design of a Suspended 215-235-GHz Subharmonically Pumped Mixer for Space-borne Radiometers  
BoZhang, YongFan, XiaofanYang, FuqunZhong, ZheChen, XianqiLin, MinghuaZhao(**China Mainland**)
- P.66 Quasi-Optical Duplexer in 220GHz  
JiechenChen, XuettianWang, YinqiaoLi(**China Mainland**)

2010-05-11 AM  
Room 1

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**ORAL Session: D1 (10 presentations)**

**Passive Devices and Circuits**

Session Chair: Kama Huang, Yong Zhang

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- 8:20 - 8:40 Design of Dual-Band Substrate Integrated Waveguide Filter Using Frequency Transformation Method  
JIACHEN, BianWU, Li-weiJIANG, Chang-HongLiang(**China Mainland**)
- 8:40 - 9:00 A Novel 4:1 Unequal Dual-Frequency Wilkinson Power divider  
linachen, huanhuanxie, yongchangjiao, fushunzhang(**China Mainland**)
- 9:00 - 9:20 Research on the Distributed Circuit Parameters of the Chamfered Bent Microstrip Line  
huizhang, zengruili, junhongwang(**China Mainland**)
- 9:20 - 9:40 Dual-Mode Filter with Asymmetric Response Using Square Loop Resonator DGS  
BianWU, XinLAI, JiaCHEN, Xue-FengLI, Chang-HongLiang(**China Mainland**)
- 9:40 - 10:00 A Novel Approach to the Design of In-Phase/Out-of-Phase Dual-Band Power Divider  
ZheLin, Qing-XinChu(**China Mainland**)
- 10:00 - 10:20 (Tea Break)
- 10:20 - 10:40 Compact Dual-Band Bandpass Filter With Controllable Bandwidths  
Xiao-HuWu, Qing-XinChu, LiFan(**China Mainland**)
- 10:40 - 11:00 Novel Equal and Unequal Power Divider Using Offset Parallel-Strip Lines  
Jian-XinChen, Zhi-HuaBao, Li-HengZhou, HuiTang(**China Mainland**)
- 11:00 - 11:20 Modified CMOS Monolithic Stacked Coupled Stripline Balun for Millimeter-wave Applications  
JunXia, ZhigongWang, YanjinLi, HuaxiangLu(**China Mainland**)
- 11:20 - 11:40 Design of Integrated Antenna-Coupled Detector for MMW and Sub-MMW Imaging  
YongYuan, Jin-ChaoMou, DaboLi, XinLv(**China Mainland**)
- 11:40 - 12:00 Miniaturized Hybrid Ring Coupler Using Fan-Shaped Apertures On The Ground Plane  
PengChen, Zhong-yunLi(**China Mainland**)

2010-05-11 AM  
Room 2

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**ORAL Session: D2 (10 presentations)**

**Computational Electromagnetics**

Session Chair: Lixin Guo, Pengfei Mu

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- 8:20 - 8:40 LOD-FDTD Method for Physical Simulation of Semiconductor Devices  
RashidMirzavand, AbdolaliAbdipour, WilSchilders, GholamrezaMoradi, MasoudMovahhedi  
(Iran)
- 8:40 - 9:00 A Spectral Multiresolution Preconditioner Combined with Sparse-Matrix/Canonical Grid  
Method for Analysis of Microstrip Circuits  
DazhiDing, JianjunDing, RushanChen, MengmengLi(China Mainland)
- 9:00 - 9:20 PMCHW-AMCBFM for analysis of Electromagnetic scattering by 3-D homogenous dielectric  
objects  
GuodongHan(China Mainland)
- 9:20 - 9:40 Calculation of the thin line electromagnetic effects in a cavity  
Jin-shiXiao, Wen-huaLiu, Shi-yingZhang(China Mainland)
- 9:40 - 10:00 Parallel Computation of Electromagnetic Scattering  
xiaofeixu, xiangyucao, xuyao, qunyang(China Mainland)
- 10:00 - 10:20 (Tea Break)
- 10:20 - 10:40 Parallel MoM on PC Clusters for Analyzing Radiation Characteristics of Vehicular multiple  
Antennas  
xiaofeixu, xiangyucao, qunyang, panpanwang(China Mainland)
- 10:40 - 11:00 An MoM/FDTD Hybrid Technique for Modeling HF Antennas Located on Ground  
BoZhou(China Mainland)
- 11:00 - 11:20 Numerical Research of Bowtie Sierpinski Fractal Patch Antenna in RFID  
QinWang, JinquanHuang(China Mainland)
- 11:20 - 11:40 Adaptive Focusing Techniques By Time Reversal Using a Single Antenna  
zhongxuanming(China Mainland)
- 11:40 - 12:00 A Parallel Multilevel Fast Multipole Algorithm Based On OpenMP  
Wei-ChaoPi, Xiao-Minpan, Xin-Qingsheng(China Mainland)

2010-05-11 AM  
Room 3

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**ORAL Session: D3 (10 presentations)**

**Smart Antennas, Phased and Active, High Speed Digital Circuits and SI**

Session Chair: Weixing Sheng, Wael Abd Ellatif Ali

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- 8:20 - 8:40 Space Time Adaptive Processing (STAP) using Uniformly Spaced Real Elements Based on Direct Data Domain Least Squares (D3LS) Approach.  
HassanELkamchouchi, DarwishMohamed, WaelAbd EllatifAli, MohammadOmar(**Egypt**)
- 8:40 - 9:00 Direct Data Domain Least Squares (D3LS) STAP Approach on Signals from Nonuniformly, Semicircular and Sinusoidal Spaced Arrays of Real Elements  
HassanELkamchouchi, DarwishMohamed, WaelAbd EllatifAli(**Egypt**)
- 9:00 - 9:20 A Method of Over Cosine Square-beam Shaping with Sharp Cut off  
YAOXu, CAOxiangyu, XUxiaofei, YANGQun(**China Mainland**)
- 9:20 - 9:40 Performance of LMS Algorithm in Smart Antenna  
qunyang, yuxiangcao, XuYAO, feixiaoXu(**China Mainland**)
- 9:40 - 10:00 Pattern Synthesis for Adaptive Antenna Array with Compensation of Effects on Mutual Coupling  
XuYAO, yuxiangcao, qunyang, panpanWang(**China Mainland**)
- 10:00 - 10:20 (Tea Break)
- 10:20 - 10:40 Design of a Ka-band Active Phase Array Antenna  
YunSun(**China Mainland**)
- 10:40 - 11:00 Performance Analysis for Angle Measurement of Monopulse Radar with Non-consistent Amplitude-Phase Features  
LiangChen, WeixingSheng(**China Mainland**)
- 11:00 - 11:20 Quantum Particle Swarm Optimization for Integer Programming of Phased Array Feeds  
WeiShi, QuanshengZhang, HuiDu(**China Mainland**)
- 11:20 - 11:40 The Non-Circular MUSIC Method for Uniform Rectangular Arrays  
RuiLi, xiaoweiShi, leichen, PingLi, lexu(**China Mainland**)
- 11:40 - 12:00 Modeling of power-plane segmentation with cavity and planar-lumped models  
GangChen, MinTang, JunfaMao(**China Mainland**)

2010-05-11 AM  
Room 4

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**ORAL Session: D4 (10 presentations)**  
**Scattering and Propagation, Wide Band Gap Semiconductor Devices**  
Session Chair: Qunsheng Cao, Runxi Zhang

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- 8:20 - 8:40 Anisotropic Scattering for A Magnetized Cold Plasma Sphere  
LiYingle(**China Mainland**)
- 8:40 - 9:00 Scattering of Hermite-Gaussian Beam by Plasma Sphere  
HaiyingLi, ZhensenWu, ShichunMao, LuBai, ChaojunHuang(**China Mainland**)
- 9:00 - 9:20 The Impact of Antenna Arrays on the Indoor Radio Estimation Using the SAGE Algorithm  
PengWang, JianfengZheng, YufeiShen, WenhuaChen, ZhengheFeng(**China Mainland**)
- 9:20 - 9:40 Analysis of ELF attenuation rate using the geodesic FDTD algorithm  
Wangyi, XiaHangang, CaoQunsheng(**China Mainland**)
- 9:40 - 10:00 Predicting Environmental Effect on Approach Landing Systems Using Hybrid Model  
HuaxinWu, XiubinZhao, ChuanjinDai(**China Mainland**)
- 10:00 - 10:20 (Tea Break)
- 10:20 - 10:40 An approach research to segmentation of the SAR image based on the Markov Random field  
LINGWANG, GuiZhenLu(**China Mainland**)
- 10:40 - 11:00 Performance Analysis of Time-Reversed Ultra-wideband Indoor Channel by Simulation  
DouJun-hua, YangXue-song, ChenJian, WangBing-zhong(**China Mainland**)
- 11:00 - 11:20 A Novel Channel Model for Relay MIMO Cooperative Communication Based on the Geometrical two-ring  
JieChen, DongyaShen, YanniCui, MeiZhang, XiupuZhang, KeWu(**China Mainland**)
- 11:20 - 11:40 A Channel Model of Wideband MIMO Mobile-to-Mobile Systems  
DongyaShen, JieChen, MeiZhang, YanniCui, KeWu(**China Mainland**)
- 11:40 - 12:00 Simulation of Polarization Pinning Effect in PZT/AlGaIn/GaN MFS Heterostructure  
YuechanKong(**China Mainland**)

2010-05-11 AM  
Room 5

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**ORAL Session: D5 (10 presentations)**

**Wireless RF Components and Systems, Microwave and Millimeter Wave Systems**

Session Chair: Zhenhai Shao, Jia-Lin Li

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- 8:20 - 8:40 PSO-based Output Matching Network for Concurrent Dual-Band LNA  
KunalDatta, RohitDatta, AshudebDutta, TarunKantiBhattacharyya(**India**)
- 8:40 - 9:00 Research of LTCC Millimeter-wave T/R Module  
KeweiQian(**China Mainland**)
- 9:00 - 9:20 Wiener-Saleh Modeling of Nonlinear RF Power Amplifiers Considering Memory Effects  
Ping-huiLi, PengWang(**China Mainland**)
- 9:20 - 9:40 An Improved RF Front-end of UHF RFID  
LeiLiu, BinYou, XuanWen(**China Mainland**)
- 9:40 - 10:00 Several Key Issues in Single-Chip UHF RFID Reader Design  
RunxiZhang, ChunqiShi, YihaoChen, WeiHe, PingXu, ShuaiXu, ZongshenLai(**China Mainland**)
- 10:00 - 10:20 (Tea Break)
- 10:20 - 10:40 An Antenna Switch Module for GSM Application Using LTCC Technology  
XiaochuanHong, Hong- LiPeng, Jun- FaMao(**China Mainland**)
- 10:40 - 11:00 Analysis and Suppression for Radiated EMI Noises Generated by Radio Frequency Identification (RFID) Based-systems  
YangZhao, WeiYan, Yong-chaoLuo, RongRong, FengWen(**China Mainland**)
- 11:00 - 11:20 Study and Simulation of RF Power Amplifier Behavioral Model Based on RBF Neural Network  
JiuchaoLi, JingchangNan, JingmeiZhao(**China Mainland**)
- 11:20 - 11:40 An Optimized  $\Delta\Sigma$  Modulator in Fractional-N Frequency Synthesizer for UHF RFID Reader  
ChunqiShi, RunxiZhang, LeiChen, ZongshengLai(**China Mainland**)
- 11:40 - 12:00 A UWB Downconvert Circuit and Measurement  
bohan, mengmengliu, ningge(**China Mainland**)

**Solid State Device and Circuits**

- P.1 InGaP/GaAs/InGaAs Doped-Channel Field-Effect Transistor Using Camel-Like Gate Structure  
Jung-HuiTsai, Der-FengGuo, Yuan-HongLee, Ying-FengDai, Wen-ShiungLour(**Taiwan**)
- P.2 InGaP/GaAs Superlattice-Emitter Bipolar Transistor with InGaAs/GaAs Superlattice-Base Structure  
Jung-HuiTsai, Der-FengGuo, Yuan-HongLee, Ning-FengDale, Wen-ShiungLour(**Taiwan**)

**Passive Devices and Circuits**

- P.3 Design of Dual-Mode Folded Substrate Integrated Waveguide (FSIW) Filters with LTCC Technology  
RunqiZhang, ZhigangWang, BoYan(**China Mainland**)
- P.4 A waveguide-to-microstrip transition at W-band  
WangZ.X., SuP.G., ShangL.(**China Mainland**)
- P.5 Dual-band Stepped-Impedance Resonant Filter with Dual-band Admittance Inverter  
wei-pingLiu, yu-weiTung(**Taiwan**)
- P.6 The Influence of Film Uniformity on the Performance of Coaxial Airline  
NingYueMin, JiangWanshun, DengJianqin(**China Mainland**)
- P.7 Notched band UWB filter with enhanced lower out-band characteristic  
WeiyuZong, XiaoweiZhu, ChangjiangYou, JingqiWang(**China Mainland**)

**Microwave-Optical Design**

- P.8 Thermal Circuit Model of MQW VCSEL Laser  
ChangQI(**China Mainland**)
- P.9 Design and analysis of double negative binary diffractive lens  
WangZ.X., YouL.Z.(**China Mainland**)
- P.10 Bessel-Gauss Resonator  
yanzhongyu, WenbinDou(**China Mainland**)
- P.11 A Novel High-gain Wideband Patch Antenna Fed by Twin-L-probe  
LiangZhu, YongCheng(**China Mainland**)
- P.12 A Design of Stripline-Coaxial Transition Vertically With Ultra-Broadband  
RongShen, DewuKong, DanSun(**China Mainland**)

**Instrumentation and Measurement Techniques**

- P.13 Solution of Measuring the Impedance of Encapsulated RFID Chip  
YangZheng, XiupingLi(**China Mainland**)
- P.14 Research on Antenna Phase Center Anechoic Chamber Calibration Method  
Yong HuZhang, LiZhou(**China Mainland**)
- P.15 Design of a Microwave Cavity for Compact Hydrogen Maser  
nuanrangwang, tiezhongzhou, lianshangao, kemingfeng(**China Mainland**)

**Electromagnetic Field Theory**

- P.16 High Frequency Electromagnetic Ray Transmission Based on Variational Representation  
KBTan(**China Mainland**)

**Computational Electromagnetics**

- P.17 Full Wave Analysis of Arbitrary Shape CCMA Fed by Microstripline  
MengzhongHu, ChengyouYin, ZhengSong, ShaoboZhou(**China Mainland**)
- P.18 Overcoming the GPU Memory Limitation on FDTD Through the Use of Overlapping Subgrids  
leonardomattes, SergioKofuji(**Brazil**)

**Microwave Antennas**

- P.19 Implementation and Investigation of Monopole Antenna with Dual Plate-Loads  
TaoHong, ShunxiGong, YingLiu, WenJiang(**China Mainland**)
- P.20 Circular Array of Microstrip Circular Patches Printed on LiTiMg Ferrite Substrate  
NaveenKr.Saxena(**India**)

- P.21 Inductively Coupled RFID Tag Antenna Design and Measurement  
YangZheng, XiupingLi(**China Mainland**)  
**Smart Antennas, Phased and Active**
- P.22 Implementation and investigation of a dual-frequency antenna  
WenJiang, ShuxiGong, QiGong, TaoHong(**China Mainland**)  
**Microwave Remote Sensing and Sensors**
- P.23 Prelaunch Calibration of Chang'E-2 Lunar Microwave Radiometer  
ZhenzhanWang, YunLi, DehaiZhang, JingshanJiang(**China Mainland**)  
**High Speed Digital Circuits and SI**
- P.24 A Compact Passive Model of Transmission Lines with Frequency-Dependent Parameters  
MinTang, JunfaMao(**China Mainland**)  
**Submillimeter Wave Techniques**
- P.25 Efficient THz generation via Stimulated Raman adiabatic passage  
HuafengShi, LeiJin, YuanfuLu, XiaojingGong, YandongZhang, HanCui(**China Mainland**)  
**EMI and EMC**
- P.26 Study on Measurement Model for Radar Electromagnetic compatibility Analysis  
LiGui-yuan, ZhangHou, YinXiong, TianHailin(**China Mainland**)
- P.27 Research on the Directivity Test of RFID Tag in GTEM Cell  
JiLI, Shu-fangLI, Zhong-liangZUO, Jian-xiongLI(**China Mainland**)  
**Photonics and Optics**
- P.28 Hybrid Particle Swarm Algorithm in the Application of Optical Fiber Sensor with ZnO Coating  
lizhou, qiliu(**China Mainland**)
- P.29 Numerical Simulation of Band-Gap-Overlap Separation and Residual-Side-Lobe Elimination in a Coaxial Bragg Structure Operating at 100 GHz  
YuZhang, Shi-ChangZhang(**China Mainland**)
- P.30 Influence of Air-hole Rings on Dispersion of Microstructured Fibers  
Yanjunliu, shanglinhou, jiaweihan, chunlianhu, suopingli, jingliLei, zhongyiwang(**China Mainland**)
- P.31 Analog Performance of an All-optical Frequency Upconverter utilizing an Electro-absorption Modulator for Radio-over-Fiber applications  
Hyoung-JunKim, Jong-InSong(**South Korea**)  
**Wireless RF Components and Systems**
- P.32 A Miniaturized LTCC Low-pass Filter Based on the Lumped Circuit Model  
YongShengDai, WenKanZhou(**China Mainland**)
- P.33 A Series-parallel Microstrip Array Antenna  
XiaoliZhao(**China Mainland**)
- P.34 Design and Implementation of an Miniaturized LTCC Filter with High Stopband Rejection  
YongShengDai, WenKanZhou(**China Mainland**)
- P.35 A Miniaturized Dual-Frequency Wilkinson Power Divider Using Planar Artificial Transmission Lines  
fangshangbin, guohuiping, liuxueguan, maolingfeng(**China Mainland**)
- P.36 The Portable Wireless Aerial Image Transmission System Based on DSP  
lizhang, ChengxiangLiu, GongbinQian(**China Mainland**)
- P.37 A Compact Dual-mode BPF Base on Interdigital Structure  
FengliuXu, XueguanLiu, HuipingGuo, YingWang(**China Mainland**)
- P.38 Fully Integrated CMOS UWB Transmitter for Application in China  
FeihuaChen, shuiyanglin, LingyunLi, XinzhongDuo, XiaoweiSun(**China Mainland**)  
**Wide Band Gap Semiconductor Devices**
- P.39 Improved SiC MESFET Small-signal Equivalent Circuit and Optimizing Method  
YingLiu, YongboChen, YunchuanGuo, RuiminXu(**China Mainland**)
- P.40 Characterization of High-frequency Noise Performance of GaN Double Heterojunction HEMT  
YuehangXu(**China Mainland**)  
**Radar & Broadband Communication Systems**
- P.41 FM Interference Suppression for PRC-CW Radar based on STFT and Median Filtering  
ZhengyuCai, WenwuChen, RushanChen(**China Mainland**)
- P.42 Optimizing Polyphase Signals for Orthogonal Netted Radar  
WenwuChen, ZhengyuCai, RushanChen, ZhaoZhao(**China Mainland**)
- P.43 Oblique Projection Polarization Filtering and Its Performance in High Frequency Surface Wave Radar  
LiuAijun, MaoXingpeng, DengWeibo(**China Mainland**)



- P.44 Angle Estimation for Two Unresolved Swerling I Targets in Monopulse Radar  
ZhouLanFeng, ZhangMin, ZhaoYiNan(**China Mainland**)
- P.45 Self-adaptive Frequency Estimation Algorithm of Improving Liquid Level Measurement Precision of LFMCW Radar  
Leizhu, liangdong, shu-dongliu, dao-lisun(**China Mainland**)
- P.46 Radar Anti-Jamming Application of Solid-State Noise Source  
ruihailiang, yongyang, xiaofazhang, naichangyuan(**China Mainland**)
- P.47 Time Reversal Based Channel Self-Adaptive OFDM in Complex Environment  
XiaofeiLiu, BingzhongWang, GangZheng, Guang-DingGe, ShuaiDing(**China Mainland**)
- P.48 Design of Velocity Radar for Railway  
BoLv(**China Mainland**)
- P.49 Optimum Design of Jamming Reconnaissance Receiver  
ruihailiang, YuanTan, xiaofazhang, naichangyuan(**China Mainland**)
- P.50 A Target Polarization Recognition Method for Radar Echoes  
XiLi, LianshanLin, XianheShao(**China Mainland**)
- P.51 A Novel Analytical Method and Error Criterion of the Synthetic Range Profile  
WeiPeng, XuegangWang, BinTang, HongangWu(**China Mainland**)
- MEMS**
- P.52 Design and Fabrication of 2-bit Loaded-line MEMS Phase Shifter  
JianzhongLou(**China Mainland**)
- PBG and Metamaterials**
- P.53 Ultra-wide Stopband Low-pass Filter with Bowtie Defected Ground Structure  
Huan-HuanXie, Yong-ChangJiao, Jing-XiuHuang, LiZhang(**China Mainland**)
- P.54 Compact Design of Branch-line Coupler Based on CRLH TL Combined With Fractal Shaped Geometry  
He-xiuXU(**China Mainland**)
- P.55 Narrow pass-band and narrow transmission-angle filter by photonic heterostructures containing negative-index materials  
MiLin, JunXu(**China Mainland**)
- P.56 Ellipsoidal cloak for inhomogeneous medium  
TianchengHan, XiaohongTang, FeiXiao(**China Mainland**)
- P.57 Surface modes of the sandwich structure containing indefinite metamaterials  
LiweiZhang(**China Mainland**)
- P.58 Experimental verification of negative refractive index materials using yttrium iron garnet  
Tian-QianLi(**China Mainland**)
- P.59 Effects of EBG Reflection Phase Profiles on the Driving-point Impedance of Dipole Antennas  
TaoLiu, XiangyuCao(**China Mainland**)
- P.60 Analysis on the Characteristics of Electric Resonant Structure and Its Application in Frequency Selective Surface Design  
Xian QiLin, XingLiu, PengSu, BoZhang, YongFan(**China Mainland**)
- P.61 New Two-Dimensional PBG Structures for THz Transmission Line and Antenna Integrated Design Based on MEMS Technology  
YongLiu(**China Mainland**)
- P.62 Simulations for the Advanced Photonic Band Gap Accelerating Structure  
FanHao, WuCong-Feng, LiuGuangchao(**China Mainland**)
- P.63 A Novel Substrate Integrated Waveguide Circular Cavity BandPass Filter Loaded with Complementary Split Ring Resonator  
XiaoYanZhang(**China Mainland**)
- Other relevant topics**
- P.64 A Novel Bandpass Filter Based on Comb Microstrip Structure  
yunhonghe(**China Mainland**)
- P.65 Analysis on the Refraction Stealth Characteristic of Cylinder Plasma Envelopes  
LaixuanMa, HouZhang, LiZhu, Xiang-junGao(**China Mainland**)
- P.66 Study the Dielectric and Optic Properties of Ti<sub>2</sub>X (X=In, Sn, Al, Cd and Pb) by Density Function Theory  
LiJunYang(**China Mainland**)
- P.67 A calibration algorithm of millimeter-wave sparse array based on simulated annealing  
YongYang, YuanTan, ruihailiang, QuanWang, naichangyuan(**China Mainland**)

2010-05-11 PM  
Room 1

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**ORAL Session: E1 (11 presentations)**

**Microwave Remote Sensing and Sensors, Microwave and Millimeter Wave Systems, Submillimeter Wave Techniques, Low-Noise Devices and Techniques**

Session Chair: Falin Liu, Xi-Yu Xu

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- 13:30 - 13:50 Design and Analysis of Injection-locked Frequency Divider by Order 3  
HoseinZargar, MahmoodKamarei(**Iran**)
- 13:50 - 14:10 The Microwave Noise Characteristics of InAlN/GaN HEMTs  
ChenYongbo, GuoYunchuan, HuangWen, XuRuimin(**China Mainland**)
- 14:10 - 14:30 Analysis of Two-dimensional Circle-Array Synthetic Aperture Microwave Radiometer Channel Errors  
houcaichen, KunChao, ZhenweiZhao, RuiLang, yanbojin(**China Mainland**)
- 14:30 - 14:50 Engineering Design of the Rain Mode on an Ocean-dedicating Radar Altimeter  
Xi-YuXu, He-GuangLiu, PengLiu(**China Mainland**)
- 14:50 - 15:10 A Solar Calibration Method for Microwave Aperture Synthesis Radiometers  
RongJin, QingxiaLi, JianDong, LiangBingChen, LinFengHe, KeChen(**China Mainland**)
- 15:10 - 15:30 Two-dimensional Imaging of Three-dimensional Scatterer by Using Linear Sampling Method  
GuanghuaLi, XiangZhao, KamaHuang(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 A New Hybrid-frequency Radar System Based on Compressed Sensing Theory  
ZhipingYin, HaoXu, WeidongChen(**China Mainland**)
- 16:10 - 16:30 Brightness Temperature of the Global Moon: Comparison between Simulation and Theoretical Observation by Chang'E-1 Lunar Orbiter  
Guo-pingHu, Qing-XiaLi, Yong-ChunZheng, Xiong-YaoLi, LiangLang, Guang-YaoShen, YiLiao, Quan-LiangHuang, PingChen, Liang-QiGui(**China Mainland**)
- 16:30 - 16:50 Equivalent Optical Design of The Bifocal Lens Antenna in Passive Millimeter Imaging System  
zhewang, JianhuaDeng, BingZhongWang(**China Mainland**)
- 16:50 - 17:10 A Ka-Band Direct Frequency Source  
XinHu, MengxiaYu(**China Mainland**)
- 17:10 - 17:30 Design and Fabrication of Planar GaAs Schottky Barrier Diodes for Submillimeter-wave Applications  
JinchaoMou, YongYuan, XinLv, WeihuaYu, DaweiHe, JinghuiWang, GuohuaXiao(**China Mainland**)

2010-05-11 PM  
Room 2

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**ORAL Session: E2 (11 presentations)**

**Radar & Broadband Communication Systems, MEMS, PBG and  
Metamaterials**

Session Chair: Chinchun Meng, Jingfu Bao

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- 13:30 - 13:50 Detection of Human Targets using Ultra-wide Band Through-the-wall Radar  
FengHe, GuofuZhu, XiaotaoHuang, ZhiminZhou(**China Mainland**)
- 13:50 - 14:10 Variable Structure Multiple Model Particle Filter for Maneuvering Radar Target Tracking  
minzhang, WeidongChen(**China Mainland**)
- 14:10 - 14:30 The design of cancellation unit against radiofrequency interference in life-detection Radar  
ChongyuWei, ChenLiu(**China Mainland**)
- 14:30 - 14:50 Azimuth Variant Bistatic SAR Imaging Algorithm Based on Physical Optics Method  
Z. W.Yang, S.Shang, J. Q.Chen, Z. W.Liu, RushanChen(**China Mainland**)
- 14:50 - 15:10 An Improved Design Method for Asymmetric RF MEMS Tunable Filter Utilizing Admittance  
Matrix  
ChengTu, JingfuBao, YijiaDu, WenchangWu(**China Mainland**)
- 15:10 - 15:30 Modeling and Design of 5-bit X-band RF MEMS Distributed Phase Shifter  
YijiaDU, JingfuBao, WenchangWu, ChengTu, pengfeiMu(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 Preparation of VO<sub>2</sub> microbolometer for CO<sub>2</sub> gas detection  
LixiaWang, Xing-AoLi(**China Mainland**)
- 16:10 - 16:30 Study and Design of Dual-band Quarter-wave Open-circuit Stub Based on Koch-fractal-shaped  
Geometry of CSRRs  
He-xiuXU(**China Mainland**)
- 16:30 - 16:50 A Multi-band THz Regime Metamaterial Design Using a Paired Metallic Circular-strip  
Structure  
xudongcui, HonggangLiu, WeidongWu, YongjianTang(**China Mainland**)
- 16:50 - 17:10 New types of left-handed materials based on the Z-shaped metal structure  
HaiXiaWang(**China Mainland**)
- 17:10 - 17:30 An Improved Method to Retrieve the Effective Parameters of Metamaterials  
ZhenyanHu, LezhuZhou(**China Mainland**)

**ORAL Session: E3 (11 presentations)**

**Communication Systems, EMI and EMC**

Session Chair: Xueguan Liu, Yunxin (Jeff) Li

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- 13:30 - 13:50 Blind SNR estimation of OFDM signals  
Yunxin (Jeff)Li(**Australia**)
- 13:50 - 14:10 Multi-Gbps Wireless Link by UWB:Chipset in CMOS from 6 GHz to 60 GHz  
FujiangLin, LuHuang, WeidongWang(**Singapore**)
- 14:10 - 14:30 A Variable Step Size Blind Equalization Algorithm for QAM Signals  
weixue, xiaoniuyang, zhaoyangzhang(**China Mainland**)
- 14:30 - 14:50 Measurement on 2.3GHz Wideband Indoor MIMO Channel Based on Dual Polarization Antennas  
XiaoyuWang, YangGuo, XinWang, JiawenSun, WenhuaChen, YufeiShen, ZhengheFeng (**China Mainland**)
- 14:50 - 15:10 Array Mutual Coupling Effect on the Adaptive Space-Time Transmit Schemes  
MinLin, Wei-ZhongLi, JunYang(**China Mainland**)
- 15:10 - 15:30 A transmit power allocation of MIMO system in coal mine tunnels  
Shan-huaYAO, Zong-jiuZHU(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 Computation of Shielding Effectiveness of a Rectangular Case with MLFMM between 0-5GHz  
ChongHuaFang, QiZhang, HuiTan, DingEWen(**China Mainland**)
- 16:10 - 16:30 Analysis of Airborne Antennas Isolation Based on Accurate Modeling in AIE  
LiuYang, DonglinSu, KeLiu, XiaojieChen, YanjunZhang(**China Mainland**)
- 16:30 - 16:50 Spark Discharge and Simulation of Its Electromagnetic Radiation  
WenleiSun, XinmingQian, PingHuang(**China Mainland**)
- 16:50 - 17:10 Development of Low Cost Radiated Emission Measurement System  
ZIHONGHUANG, WenhuaChen, ZhengheFeng, KOJITOYAMA, KAZUNORITESHIMA (**China Mainland**)
- 17:10 - 17:30 Interaction between Differential lines and Power/Ground Plane  
BoLiu, Xin-HuaiWang, Xiao-weiShi, XinLi, Chang-JiaGao(**China Mainland**)

2010-05-11 PM  
Room 4

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**ORAL Session: E4 (11 presentations)**

**EMI and EMC, Biological Effects and Medical applications, Passive  
Devices and Circuits, Solid State Device and Circuits**

Session Chair: Chunlan Lu, Wenquan Che

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- 13:30 - 13:50 Analysis on the Shielding Effect by Metallic Pipe Line against Electromagnetic Induced Voltage  
SangmuLee, ChangsooEun, Pyung-DongCho(**South Korea**)
- 13:50 - 14:10 A Ku-Band Eight-Way Solid-State Spatial Power-Combining Amplifier  
JiandongLang, YongFan(**China Mainland**)
- 14:10 - 14:30 The Miniaturization of Rectangular Waveguide  
ZhiyuanYu(**China Mainland**)
- 14:30 - 14:50 A Dual-Band Bandpass Filter Using Parallel Doubly Coupled Structure with Loading Capacitance  
NaHan, Yu-LiangDong, Mao-YanWang(**China Mainland**)
- 14:50 - 15:10 Investigations on Three Theoretical Models of Permittivity Measurement for Biological Tissues  
LixueZhou, YumeiChang, WenquanChe, K. F.Man(**China Mainland**)
- 15:10 - 15:30 The Impact of Pulse Duration on Cell Membranes and Equivalent Circuit  
tanyafang, wuminghe, yanghongchun, xujun(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 Influence of Source Offset on Breast Tumor Hyperthermia with  $\pi$ -Shaped LHM Lens Applicator  
YonghuiTao, GangWang(**China Mainland**)
- 16:10 - 16:30 Study on Relationship between Cavity Electromagnetic Effect and Dimensions of Cavity  
QiZhang, Ding-eWEN, Dong-yunHOU, Chong-huaFANG(**China Mainland**)
- 16:30 - 16:50 Simulation of high power EMP effects on a cylinder object with openings using FDTD method  
Jin-shiXiao, Wen-huaLiu, Shi-yingZhang, Jin-huaZhang(**China Mainland**)
- 16:50 - 17:10 Near-Field Corrections to Antenna Factor of Dipole Antennas calibrated in very narrow OATS  
DonglinMeng, XiaoLi, XiaoxunGao(**China Mainland**)
- 17:10 - 17:30 Reduction of Mutual Coupling between Closely-Packed Antenna Elements with Split Ring Resonator (SRR)  
LihaoHuang(**China Mainland**)

**ORAL Session: E5 (11 presentations)**

**Microwave Antennas**

Session Chair: Wenbin Lin, Fei You

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- 13:30 - 13:50 Theoretical Analysis of Microstrip Antennas Loaded with Small-Columned Loads  
WenquanCao, BangningZhang, TongbinYu, AijunLiu, HongbinLi(**China Mainland**)
- 13:50 - 14:10 A Efficient Ring-focus Antenna for Forming an Elliptic Beam  
ZhiyongLu(**China Mainland**)
- 14:10 - 14:30 Implementation of CPW-feed Patch/Slot Antennas for 60GHz System Applications  
hengrongcui, TingZhang, YunSun, LingyunLi, RongQian, XiaoweiSun(**China Mainland**)
- 14:30 - 14:50 The Simulation of the Multi-band Triangle Fractal Nesting Printed Monopole Antenna  
shulin, zhongdawu, wandongmao, chengliu, runnancai(**China Mainland**)
- 14:50 - 15:10 A Low-Profile Broadband RFID Tag Antenna for Metallic Objects  
MingYinLai, RongLinLi(**China Mainland**)
- 15:10 - 15:30 Folded Arrowhead-shaped Wideband Patch Antenna  
TianweiDeng, ShaoqiuXiao, MingchunTang, BingzhongWang(**China Mainland**)
- 15:30 - 15:50 (Tea Break)
- 15:50 - 16:10 A Broadband Antenna for Multi-Standard UHF RFID Tag Applications  
Rui-HuaZeng, Qing-XinChu(**China Mainland**)
- 16:10 - 16:30 Planar Disc Super Wide Band Antennas with C-like Slots  
Wen-JianLiu, Qing-XinChu(**China Mainland**)
- 16:30 - 16:50 Small ZOR Antenna with High Efficiency Based on Epsilon Negative Transmission Line  
Jian-QuanHuang, Qing-XinChu(**China Mainland**)
- 16:50 - 17:10 A Low Loss Frequency Scanning Planar Array Using Hybrid Coupling  
HaoWang, PingGe, DagangFang, XiaofengMa, WeixingSheng(**China Mainland**)
- 17:10 - 17:30 A Novel Wide Beam UWB Antenna Design for Through-the-Wall Radar  
QinlongLu, LingyunZhou, ChaomanTan, GuanghuaLu(**China Mainland**)

**Solid State Device and Circuits**

- P.1 Design of an X-band High Power Solid State Power Amplifier Based on GaN HEMT  
fengni, jianhongfang, haofeng, chaoyangwang, jianweiliu(**China Mainland**)
- P.2 The Analysis of Double Doping Polysilicon Gate Lightly-Doped-Drain (LDD) MOSFET  
ZhengChangYong(**China Mainland**)
- P.3 Study of size effect on the conductivity of nano-silver colloids  
WenZhao, LuhaiLi, LuobuDanzeng(**China Mainland**)

**Low-Noise Devices and Techniques**

- P.4 4.2-4.8 GHz CMOS Variable Gain LNA for Chinese UWB Application  
FeihuaChen, shuiyanglin, LingyunLi, XiaoweiSun(**China Mainland**)

**High-Power Devices and Techniques**

- P.5 Design Variations of HVVFETTM Transistors for High-Efficiency Class-AB L-Band Power Amplifiers  
WillZCai, DaveRice, BishnuPGogoi, PhuongLe, RobertDDavies, DaveLutz, marcusSucro  
(**United States**)
- P.6 Designing Broadband Input Coupler and Output Window for a Ka-band Gyro-TWT  
Chao-HaiDu(**China Mainland**)
- P.7 An analysis of self-heating and collector-current collapse on RF power transistor  
PengfeiMu, JingfuBao(**China Mainland**)
- P.8 Focusing High-current sheet electron beam with elliptical solenoid  
zhanliangwang(**China Mainland**)

**Monolithic Integrated Circuits**

- P.9 A 5.5-GHz Multi-Modulus Frequency Divider in 0.35 $\mu$ m SiGe BiCMOS Technology for Delta-Sigma Fractional-N Frequency Synthesizers  
WenguanLi, HonglinChen, RuoheYao(**China Mainland**)
- P.10 Quadrature Regenerative Frequency Dividers Using HEMT Technology  
Jen-YiSu, ChinchunMeng, Kuan-ChangTsong, Guo-WeiHuang(**Taiwan**)

**Passive Devices and Circuits**

- P.11 A Novel Millimeter-wave Wideband BPF Based On Three-line Stripline Structure with LTCC Technology  
BotaoZhao, ZhigangWang, RuiminXu, BoYan, JunXie(**China Mainland**)
- P.12 Design of a Substrate Integrated Waveguide Bandpass Filter Using in Microwave Communication Systems  
YingWang, QianLiu, WeiShiDong(**China Mainland**)
- P.13 A Method to Generate High-Frequency Magnetic Field for GMI Effects  
JiacaiHong(**China Mainland**)
- P.14 Design of High Power Capacity Phase Shifter with Composite Right/Left-Handed Transmission Line  
QiZhu, ChenGong, HaoXin(**China Mainland**)

**Packaging, Interconnects, and MCMs**

- P.15 Integrated Millimeter-wave Passive Devices Based on Silicon Substrate for SoP Application  
HuajiangWang, LiangWu, JiajieTang, RongQian, yangHou, WeiWang, LingyunLi, XiaoweiSun, LeLuo(**China Mainland**)

**Ferrite and SAW Components**

- P.16 Minimized Ku Band Microstrip Circulator Design  
KeyanTian, LizhiYou, HuaLiu(**China Mainland**)

**Electromagnetic Field Theory**

- P.17 Mode Matching Analysis of Metallic Plates in Radial Waveguide  
xiangqiangLI, QingxiangLIU, JianqiongZHANG, LiuZHAO(**China Mainland**)

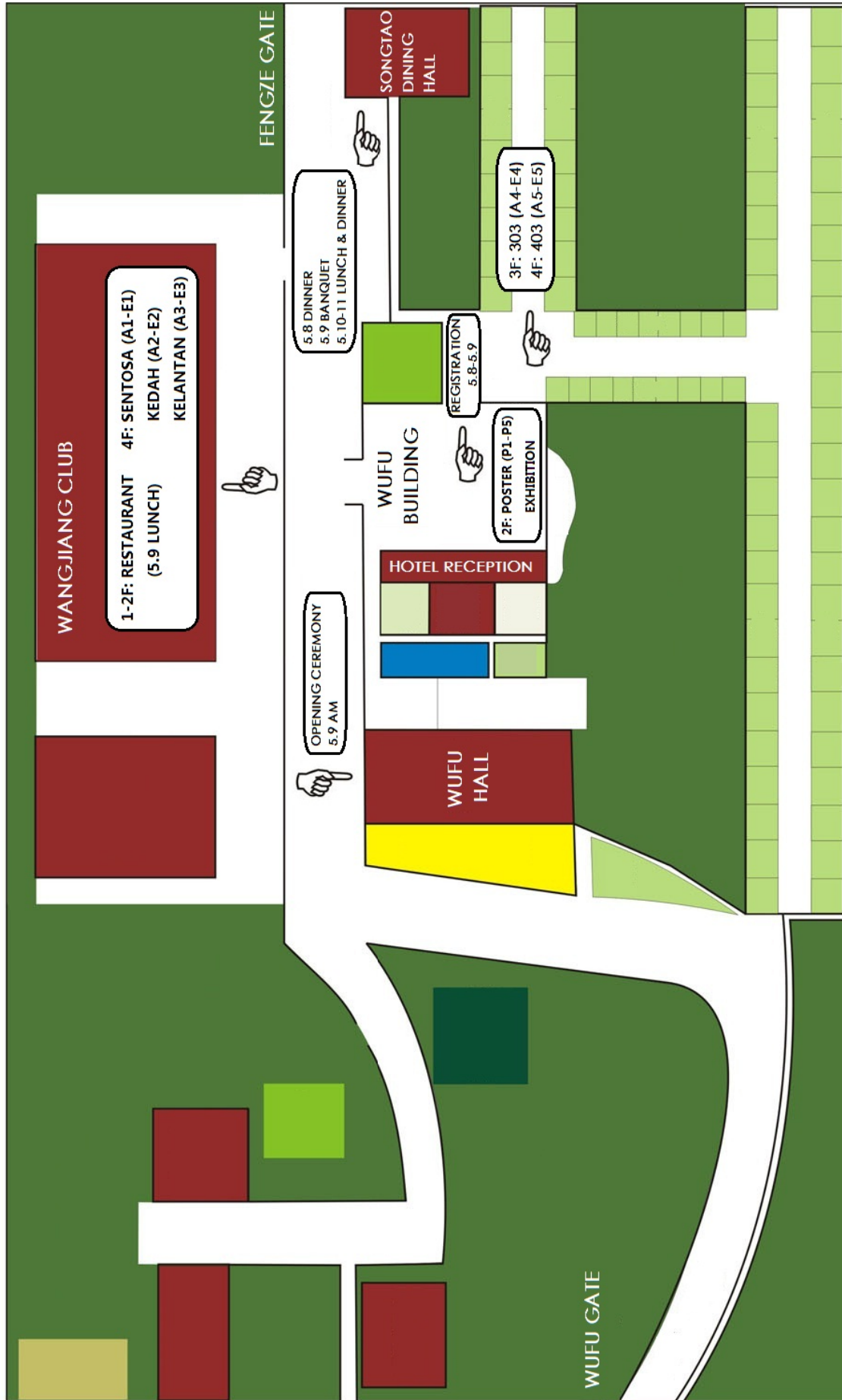
**Computational Electromagnetics**

- P.18 Tests of HFCS-I on Calculation of Attenuation Characteristics of High-Frequency Circuits  
XiaoFangZhu, ZhongHaiYang, BinLi, JianQingLi, LiXu, TaoHuang, XiaoLinJin, QuanHu, YuLuHu, JunJianMa(**China Mainland**)
- P.19 Research of Different Hexagonal Microstrip Antennas Based on PMCHW Formulation  
ShaoboZhou, ZhengSong, YuanboWang, MengzhongHu(**China Mainland**)
- P.20 Hybrid of Moment Method and Mode Matching Technique to Study Substrate Integrated Waveguide  
RezaRezaiesarлак, EsfandiarMehrshahi, HamidrezaSadreazami(**Iran**)
- P.21 An Enhanced Interpolation Method for the Multilevel Fast Multipole Algorithm  
Dao-PuXiang, Dong-MingZhou(**China Mainland**)  
**Microwave Antennas**
- P.22 Compact Planar Antenna for UWB Applications  
RezaulAzim, AhmedToahaMobashsher, MohammadTariqulIslam, NorbahiahMisran(**Malaysia**)
- P.23 A Novel Printed Slot Array Antenna with Omni-directional Pattern  
XingChen, JunquanChen(**China Mainland**)
- P.24 A Novel Microstrip Patch Antenna with Spur-Line for Harmonic Suppression  
HaiwenLiu, LiShen, ChuanyunWang, MinghuaGao, XuehuiGuan(**China Mainland**)
- P.25 A Band Notched Ultra-wideband Antenna Using Complementary Split Ring Resonator  
BinggangXiao(**China Mainland**)
- P.26 Meander-line Antenna for RFID Tag  
xiao zhenglai, yun liangliu(**China Mainland**)
- P.27 A Ka-Band Cavity-Backed Patch Antenna with Parasitic Strips Using LTCC Multilayer Technology  
JinhongWang, WeiQuan, ZhigangWang, BoYan, RuiminXu(**China Mainland**)  
**Smart Antennas, Phased and Active**
- P.28 A Study of ESPAR antenna  
NoorsalizaAbdullah(**Malaysia**)
- P.29 Research on Phased Array Antenna Multi-step Mixed feed  
huixu(**China Mainland**)  
**Scattering and Propagation**
- P.30 Scattering Characteristic of Soot Aggregation Particles Randomly distributed  
Zheng-JunLi, Zhen-senWu, HuanLi, Qiong-KunYuan(**China Mainland**)
- P.31 Faraday Chiral Mediums Reflector for Polarization  
QunWu, FanyiMeng, QunWu(**China Mainland**)
- P.32 Research on Scattering Effect of Sea Surface to HEMP  
MingjuanCai(**China Mainland**)  
**Microwave Remote Sensing and Sensors**
- P.33 A Ka-band High Sensibility Wideband Millimeter Wave receiver used for Imaging Application  
fuhongguan(**China Mainland**)  
**Microwave and Millimeter Wave Systems**
- P.34 A Review of Synthetic Aperture Radar Seeker  
WeiguoWang, YinanZhao, FengcongLi(**China Mainland**)
- P.35 Substrate Integrated Waveguide Filters with Stopband Performance Improvement  
EsfandiarMehrshahi, MehdiSalehi, RezaRezaiesarлак(**Iran**)  
**High Speed Digital Circuits and SI**
- P.36 NLA-16QAM and NLA-16SQAM High-speed Modulation systems  
ZhaoHui, Yanxiaofang(**China Mainland**)  
**EMI and EMC**
- P.37 A Modified EMI Noise Source Impedance Modeling by Employing Two Resistances Calibration and Levenberg-Marquardt's Method  
WeiYan, YangZhao, Xiao-quanLu, Ying-huaDong, FengWen(**China Mainland**)
- P.38 Compensation for Current Probe Measurement Applied in Conductive Electromagnetic Interference (EMI) Noise Soft Separation  
Xiao-huiQiu, JuanDu, YangZhao, Xiao-quanLu, Ying-huaDong, WeiYan, FengWen(**China Mainland**)
- P.39 EMI Noise Diagnosis and Suppression for Single Chip Micryoco Based on Electronic System  
YinghuaDong, YangZhao, XiaoquanLu, YongchaoLuo, WeiYan(**China Mainland**)
- P.40 Generating Field Strength Measurement Standard in GTEM Cell by Using Transfer Standard  
DaboLi(**China Mainland**)  
**Photonics and Optics**



- P.41 Application of AMC on Mini Ultra-near Radar Detecting System  
yuantan, yongyang, ruihailiang, naichangyuan(**China Mainland**)  
**Wireless RF Components and Systems**
- P.42 2.4GHz High Linearity Down-Conversion Mixer  
WenyuanLI, JiChen, ZhigongWang(**China Mainland**)
- P.43 Design 2.4 GHz Wide Bandpass Filter Using the Closed Loop Ring Resonator with the Compound Stub  
majidshakeri, majidbavafa(**Iran**)
- P.44 A Novel MIMO Receiver Using Antenna Selection and Time-Multiplexed Single RF Technique  
MohammadLari, AbbasMohammadi, AliAbdipour(**Iran**)  
**Wide Band Gap Semiconductor Devices**
- P.45 4H-SiC Bipolar Junction Transistors for UHF and L-Band Long-Pulse Radar Applications  
FengZhao, TangaliS.Sudarshan, TiefengShi(**United States**)
- P.46 InAlN-AlN-GaN HEMTs on Sapphire Substrate  
HaiqiLiu, JianJunZhou, XunDong, TangShengChen, ChenChen(**China Mainland**)  
**Radar & Broadband Communication Systems**
- P.47 A Design of Ku-Band Slow-Wave Bandpass Filter  
jingjingSHI, MingshengCHEN, XianliangWU(**China Mainland**)
- P.48 CLASSIFICATION OF RADAR SIGNALS USING TIME-FREQUENCY TRANSFORMS AND FUZZY CLUSTERING  
MingqiuRen, JinyanCai, YuanqingZhu(**China Mainland**)
- P.49 A Wideband Doppler Filter Bank Architecture for Synthetic Range Profile  
WeiPeng, XuegangWang, HonggangWu, BinTang(**China Mainland**)  
**MEMS**
- P.50 Analysis and implementation of MEMS coplanar waveguide on silicon substrate  
guiwang, RushanChen, WanchunTang(**China Mainland**)  
**PBG and Metamaterials**
- P.51 Metamaterial transmission lines based on split-ring resonators (SRRs) and complementary split-ring resonators (CSRRs)  
zhangyanan, Denglingling(**China Mainland**)
- P.52 Study of Three-Dimensional Optical-Transformation Devices Based on Analytical Field-Transformation Theory  
QiangCheng(**China Mainland**)
- P.53 Design of a Novel Artificial Magnetic Conductor Plane and Its Application for Low-Profile Dipole  
Mingtangxie(**China Mainland**)  
**Other relevant topics**
- P.54 Power Window Effect in Microwave Heating  
KamaHuang, YangYang(**China Mainland**)
- P.55 Etching process of a-C:H film with ECR plasma  
chaoSUN, WolfgangJacob(**China Mainland**)

# MAP OF ICMMT 2010



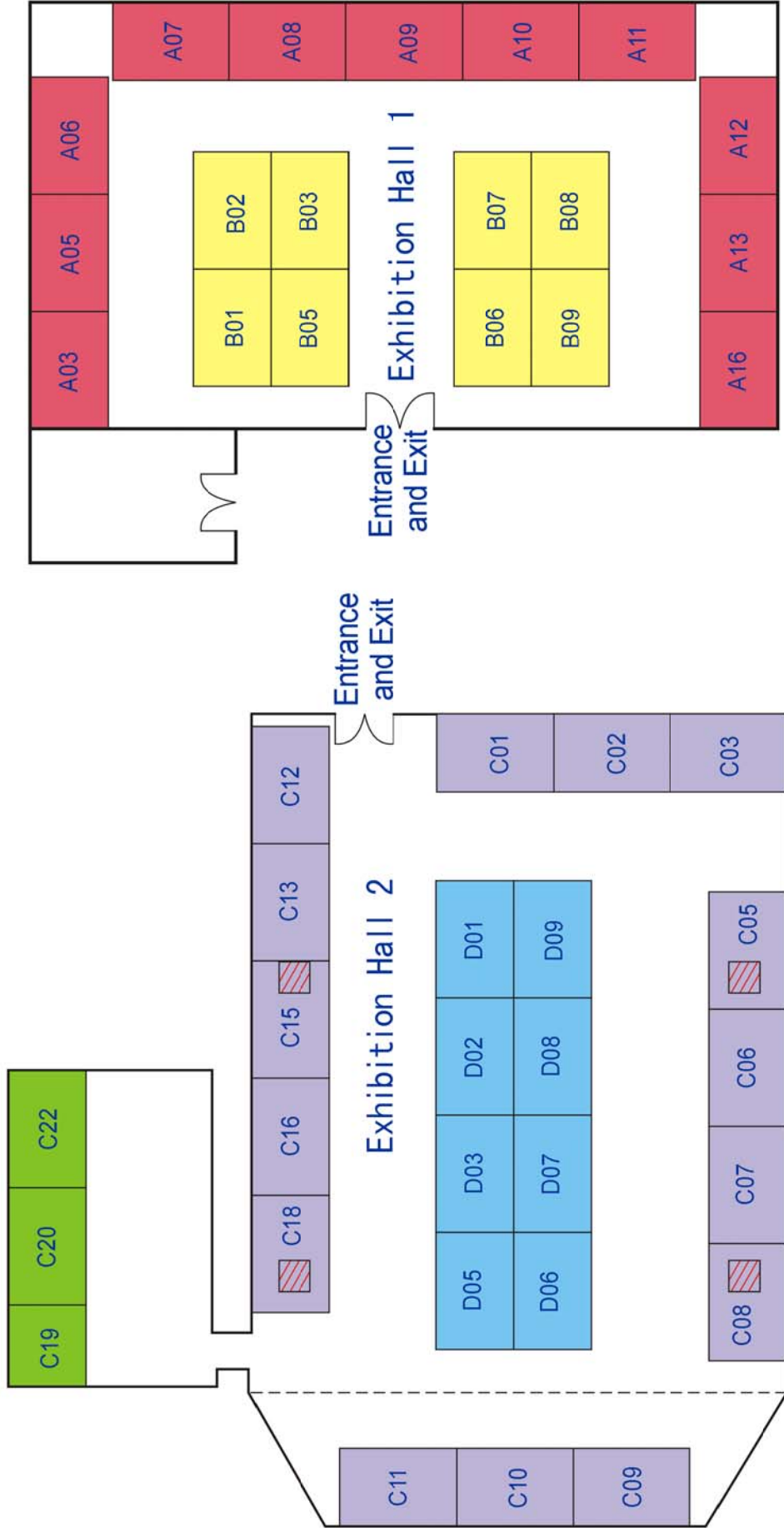
# ICMMT2010 Exhibition Layout



2010 Microwave Industry Exhibition In China - Layout

Date: May 8-11, 2010

Venue: Chengdu Wangjiang Hotel P.R. China



**Notices:**

1. The distance between Exhibition Hall 1 and Exhibition Hall 2 is about 30m; the corridor between the two exhibition sites is Report District.
2. In Exhibition Hall 2, the floor on the left of the dotted line is 0.25m higher than that on the right; the distance between the dotted line and the left exhibition booths is 1.3m.
3. The size of C19 is 2m×2m, and the size of all the other booths is 2m×3m.

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Web: www.cnmmw.org

## ICMMT2010 Exhibition List

41st Institute of China Electronics Technology Group Corporation	<a href="http://www.ei41.com">www.ei41.com</a>
Xi'an HengDa Microwave Technology Development Company	<a href="http://www.hdmicrowave.com">www.hdmicrowave.com</a>
Beijing Xibao Electronic Technology Co., Ltd.	<a href="http://www.xbdz.net">www.xbdz.net</a>
Cst China Ltd.	<a href="http://www.cst-china.cn">www.cst-china.cn</a>
Beijing Allwave instruments Co.,Ltd	<a href="http://www.allwaveinstruments.com">www.allwaveinstruments.com</a>
Agilent Technologies (China) Co., Ltd.	<a href="http://www.agilent.com.cn">www.agilent.com.cn</a>
Bowei Integrated Circuits Co., Ltd.	<a href="http://www.cn-bowei.com">www.cn-bowei.com</a>
Ansoft Corp.	<a href="http://www.ansoft.com.cn">www.ansoft.com.cn</a>
Dalian Dalicap Co., Ltd.	<a href="http://www.dalicap.com">www.dalicap.com</a>
Planet Technology Ltd.	<a href="http://www.planetec.com">www.planetec.com</a>
Wai Tat Electronics Ltd.	<a href="http://www.wtel.com.hk">www.wtel.com.hk</a>
Well Genius Technology (Shanghai) Ltd.	<a href="http://www.wellgenius.com">www.wellgenius.com</a>
Mitron Inc.	<a href="http://www.mitron.cn">www.mitron.cn</a>
Summit Microelectronics Co., Ltd.	<a href="http://www.gzsmc.com.cn">www.gzsmc.com.cn</a>
Beijing Dahua Electronic Group	<a href="http://www.dhelec.com.cn">www.dhelec.com.cn</a>
Zhangjiagang Free Trade Zone Caiqin Technology Co., Ltd.	<a href="http://www.cai-qin.com.cn">www.cai-qin.com.cn</a>
Suncity Microwave Technology Inc.	<a href="http://www.suncityinc.com.cn">www.suncityinc.com.cn</a>
Allwin Technology Inc.	<a href="http://www.allwintek.com">www.allwintek.com</a>
Win Semiconductors Corp.	<a href="http://www.winfoundry.com">www.winfoundry.com</a>
Shenzhen Hwadar Microwave Science & Technology Co., Ltd	<a href="http://www.szhdmw.com">www.szhdmw.com</a>
Sim-wave microwave technology Co.,Ltd	<a href="http://www.sim-wave.com">www.sim-wave.com</a>
Chengdu Tiger Micro-Electronics Institute Co., Ltd	<a href="http://www.tiger-mw.com">www.tiger-mw.com</a>
Chengdu A-INFO Inc.	<a href="http://www.ainfoinc.com">www.ainfoinc.com</a>
Chain Logic (Shanghai) International Corp.	<a href="http://www.clipi.com.cn">www.clipi.com.cn</a>
Junkosha Atc Inc.	
798 Microwave Ltd.	<a href="http://www.798microwave.com">www.798microwave.com</a>
Chengdu Euler Microwave Devices Co., Ltd.	<a href="http://www.euler.cn">www.euler.cn</a>
Shanghai Fairfield Electronic Technology Co., Ltd.	<a href="http://www.fairfield.com.cn">www.fairfield.com.cn</a>
Corad Technology Limited	<a href="http://www.tnm-corad.com.cn">www.tnm-corad.com.cn</a>
Alignment Company Limited	<a href="http://www.alignment-china.com">www.alignment-china.com</a>
Coining Inc.	<a href="http://www.coininginc.com">www.coininginc.com</a>