

TimeTable

The 3rd Conference on

Millimeter Wave & Terahertz Technologies

30 DEC 2014 - 1 JAN 2015

Amirkabir University of Technology, Tehran, Iran

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The 3rdConference on
**MillimeterWave&
TerahertzTechnologies**



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Dr. Mohammad Hassan Neshati

Dr. Mehdi Ahmadi-Boroujeni

- **WORKSHOP I**
Substrate Integrated Circuits (SICs) – A Paradigm for Future GHz and THz Electronic and Photonic System
Ke Wu, Professor, École Polytechnique de Montréal, Canada
Thursday 10:00– 12:00

- **WORKSHOP II**
Millimeter-wave and Terahertz CMOS Design
Minoru Fujishima, Professor, Hiroshima University, Japan
Tuesday 10:30 – 12:30

- **WORKSHOP III**
Basics of Microwave, Millimeter-wave and Terahertz Front-end and Chip design
Mohammad Madihian, Adjunct Professor, Drexel University
Tuesday 8:30 – 10:30



- **WORKSHOP IV**

- **60 GHz CMOS Power Amplifiers**

- Kambiz Moez, Associate Professor, University of Alberta, Canada

- Tuesday 14:00 – 16:00***

- **WORKSHOP V**

- **Instrumentation and Measurement Techniques in Terahertz Frequency Range**

- Mohammad Neshat, Assistant Professor, University of Tehran

- Tuesday 8:30 – 10:30***

- **WORKSHOP VI**

- **Analysis and characterization of quasicrystalline arrays of metallic nano particles in plasmonic applications**

- Farhad Azadi Namin, Assistant Professor, Amirkabir University of Technology

- Tuesday 16:00 – 18:00***



- OPENING
8:00– 10:30
- BREAK
10:30–11:00
- KEYNOTE I – PROF. KE WU
11:00–12:00
- LUNCH BREAK
12:00–14:00
- SESSION1 : TERAHERTZ GENERATION
14:00– 16:00
- BREAK
16:00–16:30
- SESSION2 : PLASMONICS
16:30– 18:30



- KEYNOTE II - PROF. MINORU FUJISHIMA
8:30– 9:30
- BREAK
9:30–10:00
- SESSION3 : MILLIMETER WAVES
10:00– 12:00
- LUNCH BREAK
12:00–14:00
- SESSION4 : TERAHERTZ TECHNOLOGIES
14:00– 15:40
- SESSION5 : TERAHERTZ APPLICATIONS
14:00– 15:40
- BREAK
15:40–16:00
- CLOSING
16:00– 17:00



SESSION CHAIRS

Dr.Granpayeh

Prof. Vahid Ahmadi

Dr. Neshat

PAPERS

- 1. MMWaTT-1091 Investigation of Radiation Mechanism in THz Generation based on Laser-Induced Plasma in Air**
A. Yousef-Zamanian, M. Neshat
14:00–14:20
- 2. MMWaTT-1122 Modeling and Design of an Optimum Transmission Metallic Grating for Efficient Excitation ...**
M. T. Mazraehno, M. Shahabadi, J. Rashed-Mohassel
14:20 – 14:40
- 3. MMWaTT-1059 Accurate Calculation of Excited Photocurrent in Terahertz Photoconductive Antennas by Using Energy Balance ...**
R. Emadi, N. Barani, A. Amirhosseini, R. Safian
14:40–15:00
- 4. MMWaTT-1113 Impact of Absorption Depth on the Characteristics of Pulses Generated by a Ti:Sapphire ...**
M. Rezvani, M. Shahabadi
15:00–15:20
- 5. MMWaTT-1076 Modeling and Designing an Unbiased CW Terahertz Photomixer Emitters**
M. J. Mohammad-Zamani, M.K. Moravvej-Farshi, M. Neshat
15:20–15:40
- 6. MMWaTT-1121 Modeling of a Frequency Comb Source for Terahertz Generation**
M.H. Bahramimanesh, A.S. Nooramin, M. Shahabadi
15:40–16:00



SESSION CHAIRS

Prof. Rashed Mohassel

Prof. Moravvej Farshi

Dr. Azadi Namin

PAPERS

- 1. MMWaTT-1119 Subwavelength Plasmonic Band-Pass Filter Based on Metal-Insulator-Metal Structure with Elliptic Res...**
A. Dolatabady, N. Granpayeh
16:30–16:50
- 2. MMWaTT-1117A Matrix Model Based on the Optical Theorem for Analyzing the Scattering of Nanoparticles**
F. Armin, M.M. Mirsalehi
16:50–17:10
- 3. MMWaTT-1123 Modeling of Bend Discontinuity in Plasmonic and Spoof Plasmonic Waveguides**
Y. Rahbarihagh, J. Rashed-Mohassel, M. Shahabadi
17:10–17:30
- 4. MMWaTT-1079 Sensitivity analysis of high group index corrugated slow light waveguide for using in optical applications**
S. Hosseini, K. Jamshidi
17:30–17:50
- 5. MMWaTT-1074 Switchable Hyperbolic Optical Metamaterial based on Kerr Nonlinear Effect**
M. Shoaeei, M.K. Moravvej-Farshi
17:50–18:10
- 6. MMWaTT-1105 Optical Beam-Steering Using a Hybrid Plasmonic Rotman Lens**
B. Ashrafi Nia, L. Yousefi, M. Shahabadi
18:10–18:30



SESSION CHAIRS

Prof. Reza Faraji-Dana

Prof. Oraizi

Dr. Moradi

PAPERS

- 1. MMWaTT-1086 Indoor Ultrawideband Propagation Modelling Using Chebyshev Interpolation in 60 GHz Band Based on Ray ...**
M. Boozari, A.A. Shishegar
10:00–10:20
- 2. MMWaTT-1092 Closed Form Representation for Millimeter Wave Propagation in a Rectangular Room**
M.H. Sadrearhami, A.A. Shishegar
10:20–10:40
- 3. MMWaTT-1103 Design, Construction and Measurement of a millimeter-wave filter with 40-60 GHz pass-band**
V.R. Bagheri, K. M.-Aghdam., M. Mansouree, R. Faraji-Dana
10:40–11:00
- 4. MMWaTT-1071 Millimeterwave Micro-coax Development Using Simplified 3D Fabrication Process**
N. Vahabisani, M. Daneshmand
11:00–11:20
- 5. MMWaTT-1106 New wideband fixed phase shifter with Air holes integrated in substrate**
B. khorasani, F. Geran
11:20–11:40
- 6. MMWaTT-1100 Scattering Analyze of Human Body Modeled by NURBS Surfaces in MM-wave Band**
F. Mokhtari-Koushyar, A.A. Shishegar
11:40–12:00



SESSION CHAIRS

Prof. Tavakoli

Dr. Shishegar

Dr. Ahmadi-Boroujeni

PAPERS

- 1. MMWaTT-1067 Field Modeling and Analysis of Terahertz Transistors**
A. Afshani, A. Abdipour, R. Mirzavand
14:00–14:20
- 2. MMWaTT-1118 Nonlinear Transmission-Line Model of an FET Terahertz Detector for Arbitrary Gate Voltage**
E. Javadi, N. Masoumi, M. Neshat, M. Shahabadi
14:20–14:40
- 3. MMWaTT-1054 RF Modeling of p-n-p-n Double-Gate Tunneling Field-Effect Transistors**
S. Marjani, S.E. Hosseini
14:40–15:00
- 4. MMWaTT-1120 Microfluidic Terahertz Sensor Based on an Array of Parallel-Plate Resonators**
H. Neshasteh, A. Mataji-Kojouri, A. Soltani, M Shahabadi
15:00–15:20
- 5. MMWaTT-1101 Analysis and Design of a Microprobe for Near-field Scanning Terahertz Microscopy**
A. Mohebbi-Kolvanagh, M. Neshat
15:20–15:40



SESSION CHAIRS

Prof. Kamarei

Prof. Forouraghi

Dr. Neshati

PAPERS

- 1. MMWaTT-1073 A Switchable THz Perfect Absorber Using Graphene-Based Metamaterials**
M. Faraji, M.K. Moravvej-Farshi, L. Yousefi
14:00–14:20
- 2. MMWaTT-1057 Graphene-Based Archimedean Spiral THz Antenna**
F. Zangeneh-Nejad, R. Safian
14:20–14:40
- 3. MMWaTT-1066 Compact Low power geraphene-based Y-branch THz switch**
M. Yarahmadi, M.K. Moravvej-Farshi, L. Yousefi
14:40–15:00
- 4. MMWaTT-1090 Low Profile Modified H-Plane SIW Horn Antenna with Improved Directivity**
E. Rahimi, M.H. Neshati
15:00–15:20
- 5. MMWaTT-1083 Optical Chirality Enhancement in Twisted Metamaterials**
A.N. Askarpour, Y. Zhao, Andrea Alù
15:20–15:40



Conference Sessions Matrix

The 3rd Conference on
MillimeterWave&
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	8:30 9:30	B.	10:00 12:00	L. B.	14:00 16:00	B.	16:00:18:30
	Opening		Keynote I <i>Prof. Ke Wu</i>		Session 1		Session 2
Wed.			Keynote II <i>Prof. M. Fujishima</i>		Session 3		
Thu.					Session 4		
					Session 5		



Workshops Matrix

The 3rd Conference on
**MillimeterWave&
 TerahertzTechnologies**

	8:30	10:30	10:30	12:30	14:00	16:00	16:00	18:30
	Workshop III		Workshop II		Workshop IV		Workshop VI	
	Microwave, MM-wave and THz Front-end <i>Prof. M. Mathian</i>		MM-wave and THz CMOS Design <i>Prof. M. Fujishima</i>		60 GHz CMOS Power Amp <i>Dr. K. Moez</i>		Analysis and characterization of quasicrystalline arrays of metallic nano particles in plasmonic applications <i>Dr. F. Azadi Namin</i>	
Tue.	Instrumentation and Measurement Tech. in THz <i>Dr. M. Neshat</i>							
	Workshop V		Workshop I					
			10:00	12:00				
Thu.			Substrate Integrated Circuits <i>Prof. Ke Wu</i>					

