

Program for EMN Meeting on Terahertz 2017

Saturday April 1

14:00-18:00 **Onsite registration & Sign up**

Sunday April 2

Room Ilima

08:20-08:30 **Opening Ceremony**

Session: Terahertz Measurements and Imaging I Chair: Ning Yang

08:30-08:55

01: Terahertz single pixel imaging using a novel spatial light modulator

Matt Reid
University of Northern, USA

08:55-09:20

02: Terahertz Continuous Waves Technology for Volume Applications

Janez Trontelj
University of Ljubljana, Slovenia

09:20-09:45

03: Novel Technique for Image Restoration from Near-Infrared to Terahertz Domain

Pengda Hong
Onyx Optics, Inc., USA

09:45-10:00

Session Break

Session: Terahertz Emitters and Detectors I Chair: Pengda Hong

10:00-10:25

04: Enhanced coherent terahertz signal from a photoconductive antenna and standoff applications

Dong Ho Wu
Naval Research Laboratory, USA

10:25-10:50

05: Development Activity of 0.1/0.3 THz Power Module

Norio Masuda
NEC Network and Sensor Systems, Japan

10:50-11:15

06: Power Amplification and Coherent Combination for Terahertz Quantum Cascade Lasers

Ning Yang
Institute of Applied Physics and Computational Mathematics, China

11:15-11:40

07: Low-noise terahertz-wave detection by Fermi-level managed barrier diode

Hiroshi Ito
Kitasato University, Japan

12:00

Lunch Break

Session: Terahertz Materials and Devices I Chair: Sergio Carbajo

13:30-13:55	08: Simulation of Plasma Instabilities in FETs based on the Boltzmann Transport Equation	Christoph Jungemann RWTH Aachen University, Germany
13:55-14:20	09: Liquid phase growth of stoichiometry controlled GaSe and its application for the highly efficient frequency tunable THz light source	Yutaka Oyama Tohoku University, Japan
14:20-14:45	10: Development and evaluation of electro-optic polymers for applications to THz-wave generation and detection	Toshiki Yamada National Institute of Information and Communications Technology, Japan
14:45-15:10	11: Scanning voltage microscopy for Terahertz quantum devices	Rudra Sankar Dhar Department of Electronics & Communication Engineering NIT Mizoram, India
15:10-15:30	Session Break	
Session: General I Chair: Yutaka Oyama		
15:30-15:55	12: Efficient narrowband terahertz generation in periodically poled lithium niobate	Sergio Carbajo Stanford University, USA
15:55-16:20	13: Current status and future perspectives of room temperature, high power, widely tunable THz DFG QCL sources	Manijeh Razeghi Northwestern University, USA
16:20-16:45	14: Microfabricated structures and devices for terahertz beam steering	Sharath Sriram RMIT University, Australia
16:45-17:10	15: Acoustic THz graphene plasmons revealed by photocurrent nanoscopy	Pablo Alonso González University of Oviedo, Spain
17:30	Dinner Social	

Monday April 3

Room Ilima

Session: Terahertz Metamaterials I

Chair: Natsuki Kanda

08:30-08:55	16: Active graphene metadevices for THz applications	Bumki Min Korea Advanced Institute of Science and Technology (KAIST), Korea
08:55-09:20	17: High-Q Fano-Like Resonance Based on a Symmetric Dimer Structure and Its Terahertz Sensing Application	Liang-Hui Du Institute of Fluid Physics, China Academy of Engineering Physics, China
09:20-09:45	18: Steering resonance properties in terahertz metamaterials	Chunmei Ouyang Tianjin University, China
09:45-10:10	19: Natural metamaterial behavior across the phase transition for $W_xV_{1-x}O_2$ films revealed by THz spectroscopy	Nicolas Émond INRS-EMT, Canada
10:10-10:20	Session Break	
Session: Terahertz Measurements and Imaging II		Chair: Liang-Hui Du
10:20-10:45	20: Electro-optic detection for intense terahertz pulses	Shixiang Xu Shenzhen University, China
10:45-11:10	21: Terahertz radar and imaging technologies enabled by photonics	Atsushi Kanno National Institute of Information and Communications Technology, Japan
11:10-11:35	22: Spectroscopic imaging with a high-sensitivity uncooled terahertz camera	Natsuki Kanda RIKEN Center for Advanced Photonics (RAP), Japan
11:35-12:00	23: For investigation in THz band it is need super wide band universal apparatus based on Josephson junction	Alexander Denisov Harbin Institute of Technology, China
12:00	Lunch Break	

Session: Terahertz Metamaterials II

Chair: Manfred Faehnle

14:00-14:25	24: Active THz Metamaterial Devices for Amplitude and Polarization Control	Jae Hyung Jang Gwangju Institute of Science and Technology, South Korea
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14:25-14:50	25: Plasmon-induced transparency via symmetric and asymmetric deformation in meta-molecules	Zhenyu Zhao Shanghai Normal University, China
14:50-15:15	26: Hybrid Goubau Line/Metasurface Chips for Confined Terahertz Surface Waves	Marco Rahm University of Kaiserslautern, Germany
15:15-15:35	Poster Session	
Session: General II		Chair: Zhenyu Zhao
15:35-16:00	27: Output response of terahertz quantum cascade lasers to the injection of near-infrared optical pulses	Yohei Sakasegawa National Institute of Information and Communications Technology, Japan
16:00-16:20	28: Tera-Hertz emission and detection with semiconductor microcavities	Jerome Tignon Ecole Normale Superieure, France
16:20-16:50	29: The effect of terahertz electromagnetic waves on ultrafast magnetization dynamics	Manfred Faehle Max Planck Institute for Intelligent Systems, Germany
16:50-17:15	30: THz Chirped Pulse and Frequency Comb Spectroscopy	David Plusquellic National Institute of Standards and Technology, Boulder, USA
17:15-17:40	31: Enhanced THz emission from nanostructured Ge wafers	Chul Sik Kee Advanced Photonics Research Institute, Korea
18:00	Dinner Social	

Tuesday April 4

Room Ilima

Session: Terahertz Sources I

Chair: Rainer Eichberger

08:30-08:55	32: Progress on the THz FET simulation and modeling	Jin He Peking University, China
08:55-09:20	33: Gyrotron Oscillators for THz Applications	Kevin Felch Communications and Power Industries, USA
09:20-09:45	34: High-brightness sub-terahertz wave generation by parametric wavelength conversion	Shin'ichiro Hayashi National Institute of Information and Communications Technology (NICT), Japan

09:45-09:55

Session Break

Session: Terahertz Spectroscopy I

Chair: Kevin Felch

09:55-10:20	35: An Effective Application of Terahertz Spectroscopy for Identifying Fablic Fibers	Toru Kurabayashi Akita University, Japan
10:20-10:45	36: Terahertz Spectroscopy of Energy Materials	Rainer Eichberger Helmholtz-Zentrum Berlin, Germany
10:45-11:10	37: Ultrafast control of macroscopic magnetization using by terahertz magnetic pulses	Makoto Nakajima Osaka University, Japan
11:10-11:35	38: Time-Resolved Single Shot Terahertz Time Domain Spectroscopy	Zhaohui Zhai Institute of Fluid Physics, China Academy of Engineering Physics, China
11:35-12:00	39: Multiple aspects of macromolecule hydration elucidated by terahertz spectroscopy	Toshiaki Hattori University of Tsukuba, Japan

12:00

Lunch Break

Session: Terahertz Sources II

Chair: Qiaoliang BAO

14:00-14:25	40: External electric field control on THz generation from femtosecond laser filamentation	Tie-Jun Wang Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China
14:25-14:50	41: Burst of Ultraintense Terahertz Waves from Laser-Plasma Interactions	Min Sup Hur UNIST, Korea

14:50-15:15	42: Generation of 0.19-mJ THz pulses in LiNbO3 driven by 800-nm femtosecond laser	Sen-Cheng Zhong Institute of Fluid Physics, China Academy of Engineering Physics, China
15:15-15:40	43: High power broadband terahertz wave generation from GaP pumped by femtosecond photonic crystal fiber amplifier	Jiang Li Institute of Fluid Physics, China Academy of Engineering Physics, China
15:40-16:00	Session Break	
Session: General III		Chair: Sen-Cheng Zhong
16:00-16:25	44: Quantum-Mechanical Effects Induced in Coherent Phonon Generation	Ken-ichi Hino University of Tsukuba, Japan
16:25-16:50	45 ; Terahertz plasmons in multiple dimensional graphene and its heterostructure	Qiaoliang BAO Monash University, Australia
16:50-17:15	46: Discrimination of Myelin Deficit Brain using Terahertz Time-Domain Spectroscopy	Yi Zou Institute of Fluid Physics, China Academy of Engineering Physics, China
17:15-17:40	47: Magneto-infrared Spectroscopy of Massive Dirac Fermions in ZrTe5 Thin Flakes	Zhigang Jiang Georgia Institute of Technology, USA
18:00	Dinner Social	

Monday April 3	
15:15-15:35	
Poster Session	
P1: Electron acceleration in a linearly-polarized ultra-short tightly-focused THz pulse	Yousef I. Salamin American University of Sharjah, United Arab Emirates

April 5
One day Academic exchange & Excursion