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- The Electromagnetics Academy

PIERS 2014 GUANGZHOU EXHIBITORS

THE ELECTROMAGNETICS ACADEMY

The Progress in Electromagnetics Research Symposium (PIERS) is sponsored by The Electromagnetics Academy. The Electromagnetics Academy is devoted to academic excellence and the advancement of research and relevant applications of the electromagnetic theory and to promoting educational objectives of the electromagnetics profession. PIERS provides an international forum for reporting progress and advances in the modern development of electromagnetic theory and its new and exciting applications.

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Jin Au Kong, MIT, USA

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Professor Sailing He, Royal Institute of Technology, Sweden
SYMPOSIUM VENUE

The 2014 Progress in Electromagnetics Research Symposium will be held in Guangzhou during August 25–28, 2014, in the Langham Place.

REGISTRATION

The PIERS technical sessions will begin at 8:00 on Monday, August 25, 2014. You’re encouraged to register during 10:00-18:00, Sunday, August 24, 2014, at the registration desk/room located in the Langham Place. Registration is also possible in the Langham Place from 08:00 to 18:00 during the Symposium, August 25–28, 2014.

The on-site registration fee is USD 680, and the reduced registration fee for a student is USD 400 (a valid student ID is required). If you have pre-registered and paid, your name badge and symposium program will be ready for you to pick up at the registration desk during the symposium. Please wear your name badge throughout the meeting. Access to the coffee break, interactive areas, and technical sessions will be prohibited if a name badge is not visible.

SPECIAL EVENTS

Symposium Reception

On Sunday evening, August 24, 2014, all conference participants are invited to a welcome reception at the conference hotel. The tickets are free and handed out on a first-come-first-served basis. Please make reservation in advance for the reception by August 10.

Symposium Banquet

On Wednesday evening, August 27, 2014, symposium banquet is planned for PIERS participants and their guests. A limited number of banquet tickets will be available. For all participants, the price is USD 80/RMB 480 per person. Please make reservation and pay by credit card (USD) in advance for the banquet by August 10.

PIERS ONLINE

Information on PIERS 2014 Guangzhou and future PIERS is posted at www.piers.org.
GUIDELINE FOR PRESENTER

Oral Presentations

- **Load and TEST presentation files in advance:**
  Presenting authors should upload and test presentation files in the PIERS OFFICE no later than 12 hours before the scheduled talk. Presenters are not allowed to detach the session computer and attach their own notebook/laptop to the LCD projector in session rooms.

- **Presentation files format:**
  PDFs and Powerpoint files are recommended. Movies or animations in MPEG, Windows Media, etc, should be tested in PIERS computer in PIERS OFFICE no later than half day before the session. Presentation files in USB disk, CD-ROM, DVD are acceptable by PIERS Computer.

- **Report to Session Chair:**
  Presenters are required to report to their session chairs at least 10 minutes prior to the start of their session.

- **Length of your talk:**
  In a regular session, the time length for each talk is 20 minutes. In a focus session, the presentation time limit is 30 minutes for a keynote talk, 20 minutes for an invited talk, and 15 minutes for a contributed talk.

- **DO NOT change presentation sequence:**
  A session Chair should be present in the session room at least 15 minutes before the start of the session and must strictly observe the starting time and time limit of each talk and refrain from changing paper presentation sequence.

Poster Presentations

Presenters should indicate time slots of their presence on the panel and be present for interactive questions within the posted time slots. Each poster can be posted at 9:00–12:00 and 14:00–17:00, and all presenters are suggested to be present at least during 10:00–10:20 and 15:00-15:20.

One panel (about 1(W) x 2(H) m) will be available for each poster.

All presenters are required to put their papers on the poster panels one hour before their sessions start and remove them at the end of their sessions.
GENERAL INFORMATION

LANGUAGE

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

CURRENCY AND CREDIT CARDS

Chinese currency is CNY with its monetary unit CNY (Yuan). The exchange rate is 1 USD for about 6.2 CNY. Credit cards and cash are acceptable for payments. International credit cards are acceptable in almost all shops, restaurants, taxis etc..

TAX AND TIP

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 persons who provides regular service. Take back any change that is rightfully yours. All advertised prices include tax. Bargaining is quite common on buying merchandise especially from Street Markets.

TAXI

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

BUSINESS OPENING HOURS

- **Bank and Post Office**
  Opening hours: 9:00 – 17:00, from Monday to Sunday.

- **Government Office**
  Opening hours: 8:00 – 17:00, from Monday to Friday.

- **Store**
  Opening hours: usually 10:00 to 21:00, but the large shopping center serves till 22:00, from Monday to Sunday.

ELECTRICITY

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

MORE INFORMATION

http://www.jorcep.org/piers2014/
LIST OF SHORT COURSE

• SC001: Transformation Electromagnetics, Cloaking and Metamaterials
  (by Prof. Raj Mittra, The Pennsylvania State University, USA)
  Date: August 24, afternoon (3 hours), Tuition Fee: USD 150/RMB 900

• SC002: The Progress of Organic Solar Cells
  (by Dr. Wallace C. H. Choy, The University of Hong Kong, Hong Kong)
  Date: August 24, afternoon (3.5 hours), Tuition Fee: USD 150/RMB 900

• SC003: Luminescence of Inorganic Compounds, Fundamentals and Applications
  (by Prof. Cees Ronda, Philips Group Innovation-Research, Eindhoven, the Netherlands)
  Date: August 24, afternoon (4 hours), Tuition Fee: USD 150/RMB 900

• SC004: Optical Sensors
  (by Prof. Wei Jin, The Hong Kong Polytechnic University, Hong Kong)
  Date: August 26, Evening (3 hours), Tuition Fee: USD 150/RMB 900

• SC005: Glass-free 3D Display
  (by Prof. Jianying Zhou, Sun Yat-Sen University, Guangzhou 510275, China)
  Date: August 24, afternoon (3.5 hours), Tuition Fee: USD 150/RMB 900

To register for short course, please download the short course form from www.piers.org and email to PIERS OFFICE.
PIERS 2014 GUANGZHOU TECHNICAL PROGRAM

Session 1A1
Plenary Session
Monday AM, August 25, 2014
Room AB

00:00 Low-energy Integrated Photonics for Information Processing
David A. B. Miller (Stanford University, USA);

00:00 Flat Optics Based on Metasurfaces: Molding Wavefronts and Surface Waves
Federico Capasso (Harvard University, USA);

00:00 Statistical Electromagnetic Theories Applied to Imaging in Geophysical and Biological Random Media
Akira Ishimaru (University of Washington, USA);

00:00 Metamaterials
John B. Pendry (Imperial College London, UK);

00:00 Photoacoustic Tomography: Ultrasonically Beating Optical Diffusion and Diffraction
Li Hong V. Wang (Washington University, USA);

Session 1P0
Poster Session 1
Monday PM, August 25, 2014
14:00 PM - 17:00 PM
Room FOYER

00:00 A Real Time 3D Multi Target Data Fusion for Multistatic Radar Network Tracking
El-Sayed Abdoul Moaty El-Badawy (Alexandria University, Egypt); Tarek Reda Abd-ElShahid (Alexandria University, Egypt); Alaa El-Din Sayed Hafez (Alexandria University, Egypt);

00:00 A New FPGA Prototype for Synchro to Digital Converter Using CORDIC Algorithm
Mohamed R. M. Rizk (Alexandria University, Egypt); Ahmed Hossin (Alexandria University, Egypt); Alaa El-Din Sayed Hafez (Alexandria University, Egypt);

00:00 Improved Design of Ku Band High Power Rectangular Waveguide Directional Coupler
Chao Wang (University of Electronic Science and Technology of China, China); Gaofeng Guo (University of Electronic Science and Technology of China, China); En Li (University of Electronic Science and Technology of China, China);

00:00 Magnetic Field Controlled Diffraction Grating
Guojing Huang (South China Normal University, China); Henghe Jiang (South China Normal University, China); Bin Zhou (South China Normal University, China); Zhuo Chen (South China Normal University, China);

00:00 Analysis of Immunity by RF Wireless Communication Signals
Hongsik Keum (ElectroMagnetic Wave Technology Institute, Korea); Jungyu Yang (Radio Research Agency, Korea); Heung-Gyoon Ryu (Chungbuk National University, Korea);

00:00 Resonant Properties of HE_{111} Mode of a Complicated Microwave Cavity for a New Type of Rubidium Clock
Xiaoxiao Li (Lanzhou University of Technology, China); Shang-Lin Hou (Lanzhou University of Technology, China); Yanjun Liu (Lanzhou University of Technology, China); Jingli Lei (Lanzhou University of Technology, China);
00:00 Dielectric Properties of Rice Husk/Carbon Nanotubes Composites in Ku-band
Yeng Seng Lee (University of Malaysia Perlis (UniMAP), Malaysia); Mohd Fareq Bin Abdul Malek (University of Malaysia Perlis (UniMAP), Malaysia); Ec Meng Cheng (University of Malaysia Perlis (UniMAP), Malaysia); Wei Wen Lu (University of Malaysia Perlis (UniMAP), Malaysia); Fwen Hoon Wee (University of Malaysia Perlis (UniMAP), Malaysia); Muhammad Shafiq Bin Mezan (University of Malaysia Perlis (UniMAP), Malaysia); Farah Salwani Abdullah (University of Malaysia Perlis (UniMAP), Malaysia); Mardianaliza Othman (University of Malaysia Perlis (UniMAP), Malaysia);

00:00 Contribution of Evanescent Waves to Vortex Vector Field with Inhomogeneous Polarization in Near Field
Yin-Long Feng (Zhejiang A & F University, China); Rui Pin Chen (Zhejiang A & F University, China);

00:00 VEMC Computing System for Electromagnetic Compatibility of Integrated Circuits
Boyuan Zhu (Griffith University, Australia); Hengwei Li (Griffith University, Australia); Jianwei Lu (Griffith University, Australia); Haiguan Sun (Nantong University, China); Linglei Yang (Nantong University, China);

00:00 Wide-angle Polarization-independent Planar Magnetic Metamaterials Based on Dielectric Resonators
Jiafu Wang (Air Force Engineering University, China); Shaobo Qu (Air Force Engineering University, China); Zhuo Xu (Xi'an Jiaotong University, China); Hua Ma (Air Force Engineering University, China); Hongliang Du (Air Force Engineering University, China); Jun Wang (Air Force Engineering University, China); Hongyu Chen (Air Force Engineering University, China);

00:00 High-efficiency Anomalous Reflection Characteristics of an Ultra-thin Gradient Meta-surface Based on SRRs
Hongyu Chen (Air Force Engineering University, China); Jiafu Wang (Air Force Engineering University, China); Hua Ma (Air Force Engineering University, China); Shaobo Qu (Air Force Engineering University, China); Jiegui Zhang (Air Force Engineering University, China); Yongfeng Li (Air Force Engineering University, China); Mingbao Yan (Air Force Engineering University, China); Yongqiang Pang (Air Force Engineering University, China);

00:00 Microwave Plasma Reactor Based on Microwave Oven
Rungroj Pongsophon (Thammasat University, Thailand); T. Chim-Oye (Thammasat University, Thailand); Manu Fuangfoong (Thammasat University, Thailand);

00:00 An Experimental Investigation of the Concentration of KCl in Liquid Electrode of Atmospheric Pressure DBD
Fuangfoong Manu (Thammasat University, Thailand); F. Pollawat (Thammasat University, Thailand); F. Wasana (Thammasat University, Thailand);

00:00 The Metamaterial Technology Applied to Electromagnetic Devices
E. F. Guelber (Universidade Federal de S˜ao Jo˜ao Del Rei — UFSJ, Brazil); A. V. Cardoso (Universidade Federal de S˜ao Jo˜ao Del Rei — UFSJ, Brazil); C. E. Capovilla (Universidade Federal do ABC — UFABC, Brazil); Humberto Xavier De Araujo (Universidade Federal de S˜ao Jo˜ao Del Rei — UFSJ, Brazil);

00:00 Study on Permittivity and Optimal Design of Metamaterial
Zihao Fu (Communication University of China, China); Yanfang Li (South China Normal University, China); Guizhen Lu (Communication University of China, China);

00:00 Independently Tunable Multichannel Terahertz Filtering in a Defect Resonator Embedded with Graphene Sheets
Fenghua Shi (South China Normal University, China); Yihang Chen (South China Normal University, China);

00:00 Electrical Characterization of GaN
Nazir A. Naz (Federal Urdu University of Arts, Science and Technology Islamabad, Pakistan); M. Saleman (Riphah International University, Pakistan); Akbar Ali (Quaid-i-Azam University, Pakistan);

00:00 Study of p-type Porous Silicon
Nazir A. Naz (Federal Urdu University of Arts, Science and Technology Islamabad, Pakistan); M. Jamil (Federal Urdu University of Arts, Science and Technology, Pakistan); Akbar Ali (Quaid-i-Azam University, Pakistan);
00:00 Concentration Measurements of Atmospheric CH$_4$, N$_2$O and H$_2$O Vapor Using a Quantum Cascade Laser-based QEPAS Sensor
Hongming Yi (Universite du Littoral Cote d’Opale, France); Olivier Laurent (Laboratoire des Sciences du Climat et de l’Environnement, France); Wei Dong Chen (University of the Littoral Opal Coast, France); Michel Ramonet (Laboratoire des Sciences du Climat et de l’Environnement, France); Rabih Maamary (Universite du Littoral Cote d’Opale, France); Eric Fертein (Universite du Littoral Cote d’Opale, France); Xiaoming Gao (Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China);

00:00 Nitrous Acid Detection with Quartz-enhanced Photoacoustic Spectroscopy Using an External Cavity Quantum Cascade Laser
Hongming Yi (Universite du Littoral Cote d’Opale, France); Rabih Maamary (Universite du Littoral Cote d’Opale, France); Xiaoming Gao (Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China); Markus W. Sigrist (ETH Zurich, Switzerland); Wei Dong Chen (University of the Littoral Opal Coast, France);

00:00 A Side Information Free PTS-PAPR Reduction in Coherent Optical OFDM Systems Using Superimposed Training
Haipeng Liu (South China Normal University, China); Han Zhang (South China Normal University, China); Changjian Guo (South China Normal University, China);

00:00 Photoelectrochemical Solar Cells Based on Micro/Nano-structured Silicon
Kangkang Dang (South China Normal University, China); Wenbin Huang (South China Normal University, China); Yali Xue (South China Normal University, China); Xugue Wang (South China Normal University, China); Yang Yang (South China Normal University, China); Xianya Ao (South China Normal University, China);

00:00 Dual-polarized FSS with Wide Frequency Tunability and Simple Bias Network
Hang Zhou (Air Force Engineering University, China); Xin-Hua Wang (Air Force Engineering University, China); Shaobo Qu (Air Force Engineering University, China); Lin Zheng (Air Force Engineering University, China); Hangying Yuan (Air Force Engineering University, China); Mingbao Yan (Air Force Engineering University, China); Yongfeng Li (Air Force University of Engineering, China); Jiafu Wang (Air Force Engineering University, China); Zhuo Xu (Xi’an Jiaotong University, China);

00:00 Study and Design of the Novel Shunt Liner Active Power Filter for a Superconducting Magnet Power Supply
Jinglin Wu (University of Science and Technology of China, China); Xiaoming Liu (University of Science and Technology of China, China);

00:00 Design of Ku-band Dielectric Resonator Filter for Satellite Applications
Segi Stephen Olokede (Universiti Sains Malaysia, Malaysia); Nor Muzlifah Mahyuddin (Universiti Sains Malaysia, Malaysia); Majid Rafiee (Universiti Sains Malaysia (USM), Malaysia); Enoch Adama Jiya (Universiti Sains Malaysia, Malaysia);

00:00 Deriving the Geometry of Frequency Selective Surfaces (FSS) and Metamaterials (MTM) Elements from Transmission Lines by Using Surrogate Metamodeling Techniques
Fabrizia Ghezzo (Kuang-Chi Institute of Advanced Technology, China); Loris Serafino (Kuang-Chi Institute of Advanced Technology, China); Chunlin Ji (Kuang-Chi Institute of Advanced Technology, China); Xigeng Mao (Kuang-Chi Institute of Advanced Technology, China); Ruopeng Liu (Kuang-Chi Institute of Advanced Technology, China);

00:00 Analysis and Design of Ku Band Coaxial-waveguide Transition
Chao Wang (University of Electronic Science and Technology of China, China); Gaofeng Guo (University of Electronic Science and Technology of China, China); Junhu Wang (Aerospace Research Institute of Materials and Processing Technology, China); En Li (University of Electronic Science and Technology of China, China);
00:00 A Novel Monopulse Microstrip Antenna Array with Compound Feed Network
Feng-Wei Yao (Shanghai Key Laboratory of Electromagnetic Environment Effects for Aerospace Vehicle, China); Xiao-Qing Tian (Shanghai Key Laboratory of Electromagnetic Environment Effects for Aerospace Vehicle, China); Li-Li Zhu (Shanghai Key Laboratory of Electromagnetic Effect for Aerospace Vehicles, China); Yuan-Bo Shang (Shanghai Key Laboratory of Electromagnetic Environment Effects for Aerospace Vehicle, China); Xing-Zuo Dai (Shanghai Key Laboratory of Electromagnetic Environment Effects for Aerospace Vehicle, China);

00:00 Development of Narrowband Filter Based on S-shaped Resonators for Terahertz Frequency Range
Egor Alexandroswitch Sedgkh (ITMO University, Russia); A. V. Vedeneev (ITMO University, Russia); M. K. Khodzitsky (ITMO University, Russia);

00:00 IME-HF Instrument on Board TARANIS Satellite Dedicated to the Measurement of the EM Thunderstorm Lightning and TLEs Signatures
Jean Louis Rauch (Centre National de la Recherche Scientifique, CNRS, France); O. Santolik (Institute of Atmospheric Physics AS CR, Czech Republic); I. Kolmasova (Institute of Atmospheric Physics AS CR, Czech Republic); A. Millet (Centre National de la Recherche Scientifique, CNRS, France); M. Chabassiere (Centre National de la Recherche Scientifique, CNRS, France); R. Lan (Institute of Atmospheric Physics AS CR, Czech Republic); L. Uhlír (Institute of Atmospheric Physics AS CR, Czech Republic);

00:00 Design of Signal Source without External Reference for Fiber Optical Comb System
Changqi Yang (Xi’an Shiyou University, China);

00:00 RF Shielded Hat for Protecting Cameraman from EMF Exposure
Nurbaizatul Badrul Hisham (Universiti Malaysia Perlis, Malaysia); Hasliza A. Rahim (Universiti Malaysia Perlis (UniMAP), Malaysia); Mohd Farq Bin Abdul Malek (Universiti Malaysia Perlis (UniMAP), Malaysia); Muzammal Jusoh (Universiti Malaysia Perlis, Malaysia); F. A. A. Fuad (Universiti Malaysia Perlis, Malaysia); Farah Salwani Abdullah (Universiti Malaysia Perlis (UniMAP), Malaysia); Muhammad Shafiq Bin Mezan (Universiti Malaysia Perlis (UniMAP), Malaysia);

00:00 Reflection Loss Performance and Performance Assessment of Pyramidal Microwave Absorber Using Agriculture Waste
Muhammad Shafiq Bin Mezan (University Malaysia Perlis (UniMAP), Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia); Muhammad Shahar Jusoh (Universiti Malaysia Perlis, Malaysia); Farah Salwani Abdullah (Universiti Malaysia Perlis (UniMAP), Malaysia);

00:00 Grounding Microstrip Lines with Via Holes and General Reformulation of the Iterative Method F.W.C.I.P
Sameh Toumi Sahli (Engineers’ National School of Tunis, Tunisia); Fethi Mejri (Ecole Nationale d’Ingenieurs de Tunis, Tunisia); Taoufik Aquili (Engineers’ National School of Tunis, Tunisia);

00:00 Tunable Single Bandpass Filter Based on Fluid-filled PCFs
Shengnan Wu (Zhejiang University, China); Chengliang Wang (Zhejiang University, China);

00:00 Beam Forming Antenna for WLAN
Ho-Jun Lee (Korea Electronics Technology Institute, Korea); Min-Ki Woo (Innonet Co., Ltd., South Korea); Nae-In Lee (Innonet Co., Ltd., South Korea); Gene Yoo (Innonet Co., Ltd., South Korea);

00:00 Wireless Power Transfer and NFC System Using Loop Antenna
Ho-Jun Lee (Korea Electronics Technology Institute, Korea); Sek-Byoung Chae (Cenotech Co., Ltd., South Korea);

00:00 Criss-Cross Metamaterial Based Radiating Structures for C-band Applications
Kirti Inamdar (ECED, India); Yogesh P. Kosta (Marwadi Education Foundation’s Group of Institutions, India); Suprava Patnaik (St. Xavier’s Institute of Engineering, India);

00:00 Microstrip Patch Antenna Design with Criss-Cross Metamaterial Based Radome Cover
Kirti Inamdar (ECED, India); Yogesh P. Kosta (Marwadi Education Foundation’s Group of Institutions, India); Suprava Patnaik (St. Xavier’s Institute of Engineering, India);
00:00 A Multi-channel Digital Temperature Acquisition System Based on SOPC
W. He (Southwest Jiaotong University, China); Quanyuan Feng (Southwest Jiaotong University, China); Ding-Hong Jia (Southwest Jiaotong University, China);

00:00 A High Precision and Externally Synchronous CMOS Relaxation Oscillator
Y.-Y. Deng (Southwest Jiaotong University, China); Quanyuan Feng (Southwest Jiaotong University, China); Ding-Hong Jia (Southwest Jiaotong University, China);

00:00 A Novel Algorithm of Landmine Detection
Xin-Yun Wang (National University of Defense Technology, China); Qian Song (National University of Defense Technology, China); Hanhua Zhang (National University of Defense Technology, China); Zhi-Min Zhou (National University of Defense Technology, China);

00:00 TDLAS Based Early-stage Forest Fire Detection System
Jiawei Zhang (Northeast Forestry University, China); Mingbao Li (Northeast Forestry University, China); Wei Li (Northeast Forestry University, China); Hongli Zhang (Northeast Forestry University, China);

00:00 N(h)-profiles of the Ionosphere and Values of the Total Electron Content
Olga A. Maltseva (Southern Federal University, Russia); G. Zhbankov (Southern Federal University, Russia); Guanyi Ma (National Astronomical Observatories, Chinese Academy of Sciences, China);

00:00 Forced Solitary Wave in Water Wave Basin under the Earth’s Gravity Field
Shigehisa Nakamura (Kyoto University, Japan);

00:00 Parameterized Dynamic Range Reduction for UWB SAR Image
Chao Li (National University of Defense Technology, China); Yuch Li (National University of Defense Technology, China);

00:00 Solar Heating Rate Can Be Used as an Index for Evaluating Coral Heat Stress in Sanya Bay, Hainan, China
Dingtian Yang (South China Sea Institute of Oceanology, Chinese Academy of Sciences, China); Xiujuan Shan (Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, China); Sumin Liu (South China Sea Institute of Oceanology, Chinese Academy of Sciences, China);

00:00 The Mikaelian’s Magnetic Lens for Static Magnetic Field Enhancement
Fei Sun (Zhejiang University, China); Sailing He (Zhejiang University, China);

00:00 Skin Color Measurements: Usefulness of the Metric Hue Angle of Uniform Color Spaces for Dermatological Treatment
Makio Akimoto (Kanto Gakuen University, Japan); Yurika Koskiishi (Tokyo University of Technology, Japan); Hikari Ikeda (Tokyo University of Technology, Japan); Kazuhisa Maeda (Tokyo University of Technology, Japan); Mieko Hata (Takano Medical Clinic, Japan);

00:00 New Method for Automated Disk Diffusion Test
Pavel Krepek (Brno University of Technology, Czech Republic); Robert Kadlec (Vyzkumný Ustav Mlekarne s.r.o, Czech Republic); Karel Bartusek (Institute of Scientific Instruments of the ASCR, Czech Republic); Martin Jakube (Vyzkumný Ustav Mlekarne s.r.o, Czech Republic);

00:00 The Study of the Growth of Tissue Cultures under a Layer of Nanotextiles
Michaela Pokladova (Brno University of Technology, Czech Republic); Pavel Krepek (Brno University of Technology, Czech Republic);

00:00 Plasmonic Focusing of Metallic Probe Patterned with Periodic Structure
Qinbai Qian (Fudan University, China); Fuchan Xi (Fudan University, China); Peng Gou (Fudan University, China); Jie Xu (Fudan University, China); Zhenghua An (Fudan University, China);

00:00 Mutual Inductance for Circular Coils of Rectangular Cross Section and Parallel Axes Shielded by two Parallel Screens of High Permeability
Yao Luo (Wuhan University, China);

00:00 Characterization of Ultrashort Pulse Laser by Using KNbO3 Nanoneedles Based Frequency-resolved Optical Gating (FROG)
Jiaxin Yu (Lund University and Zhejiang University, China); Fuhong Cai (Lund University and Zhejiang University, China);

00:00 The Concept of Development Other Quantum Mechanics
Isaev Anatoly (P. N. Lebedev Physical Institute, Russia);

00:00 The Self-organised Analog Quantum Calculator
Isaev Anatoly (P. N. Lebedev Physical Institute, Russia);

00:00 Quantum Gravimeter
Isaev Anatoly (P. N. Lebedev Physical Institute, Russia);
00:00 Electromagnetic Waves in Anisotropic Media
Vladimir K. Ignatovich (Joint Institute for Nuclear Research, Russia); F. V. Ignatovich (Joint Institute for Nuclear Research, Russia);

00:00 Microwave Induced Preparation of Corn Starch-Neusilin UFL2 Conjugates: Formulation and Evaluation of Fast Disintegrating Tablets
Inderbir Singh (Chitkara University, India); Prateek Juneja (Chitkara University, India); Sandeep Arora (Chitkara University, India);

00:00 Electrical Engineering Aspects of Radiotherapy Accelerators
Razbeh Hematalizadeh (Islamic Azad University, Iran); Dariush Sardari (Islamic Azad University, Iran); Nushafarin Razi (Astara Azad University, Iran);

00:00 Pump-assisted Subliminal and Superluminal Propagation Based on Dy$^{3+}$-doped Fiber Bragg Grating
Zhong Chang Zhuo (Jilin University, China); Xue Mei Su (Jilin University, China);

00:00 Research, Development and Implementation of a Fundamentally Different Way to Convert Solar Radiation into Electrical Energy
Isaev Anatoly (P. N. Lebedev Physical Institute, Russia);

00:00 A Cantor Fractal Based Printed Slot Antenna for Dual-band Wireless Applications
Jawad K. Ali (University of Technology, Iraq); Seevan F. Abdulkareem (University of Technology, Iraq); Ali I. Hammoodi (University of Technology, Iraq); Ali J. Salim (University of Technology, Iraq); Mahmoud T. Yassen (University of Technology, Iraq); Mohammed R. Hussan (University of Technology, Iraq);

00:00 Highly Directional Planar Six Element Microstrip C-band Yagi-Uda Antenna
Mahesh Kumar Agahwariya (Madhav Institute of Technology and Science, India); Ragini Sharma (Madhav Institute of Technology and Science, India); Abhisar Kholkar (MITS, India);

00:00 GPR Signal Processing by Wavelet Transform
Sunjay (Banaras Hindu University, India); Manas Banerjee (Banaras Hindu University, India);

00:00 Planar U-type Wideband Monopole Antenna for WLAN Applications
Cheng-Hsing Hsu (National United University, Taiwan); Po-Hao Chang (National United University, Taiwan); Hung-Yi Liu (National United University, Taiwan); Ching-Fang Tseng (National United University, Taiwan); Wen-Shiush Chen (National United University, Taiwan); Chun-Hung Lai (National United University, Taiwan); Jenn-Sen Lin (National United University, Taiwan);

00:00 FDTD-based CAD Simulator for Coaxial Applicator — Biomedical Application
Chia Wui Lee (Universiti Teknologi Malaysia, Malaysia); Kok Yeow You (Universiti Teknologi Malaysia, Malaysia); Chia Yew Lee (Universiti Teknologi Malaysia, Malaysia);

00:00 Matching Techniques for Tapered MILO
Smriti Dwivedi (Banaras Hindu University, India); P. K. Jain (Banaras Hindu University, India);

00:00 A Novel Compact Dual-band Dual-polarized Dielectric Resonator Antenna
Jwo-Shiun Sun (National Taipei University of Technology, Taiwan, R.O.C.); Hung-Wen Liu (National Taipei University of Technology, Taiwan); Tsung-Lin Li (National Taipei University of Technology, Taiwan); Guan-Pu Pan (National Taipei University of Technology, Taiwan);

00:00 A Metallic Metamaterial High Power Microwave Mode Converter
Fen Qin (Graduate School, China Academy of Engineering Physics, China); Dong Wang (Institute of Applied Electronics, China Academy of Engineering Physics, China); Sha Xu (Graduate School, China Academy of Engineering Physics, China); Zhikai Fan (Institute of Applied Electronics, China Academy of Engineering Physics, China);

00:00 To Elaborate the Low Observable Characteristic of Stealth Aircrafts
Faran Awaais Butt (University of Management and Technology, Pakistan); Ijaz Haider Naqvi (Syed Babar Ali School of Science and Engineering (SSE), Pakistan); Ali Imran Najam (Advanced Engineering and Research Organization, Pakistan);

00:00 Sidelobe Blanking in Phased Array Radar System for Countering Radar Jamming
Faran Awaais Butt (University of Management and Technology, Pakistan); Madiha Jahl (University of Management and Technology, Pakistan);
00:00 Shielding and Mutual Coupling Effect of Ground Penetrating Radar Antenna
Mohd Nazri A. Karim (Universiti Malaysia Perlis (UniMAP), Malaysia); Mohd Fareq Abd Malek (Universiti Malaysia Perlis (UniMAP), Malaysia); Mohd Faizal Jamlos (Universiti Malaysia Perlis (UniMAP), Malaysia); Farah Salwani Abdullah (Universiti Malaysia Perlis (UniMAP), Malaysia); Hana Abdul Halim (Universiti Malaysia Perlis (UniMAP), Malaysia); Hassan Nornikman (Universiti Malaysia Perlis, Malaysia);

00:00 Adaptive Optimal Polarization Detection of Target in Clutter Background Based on Generalized Rayleigh Quotient
Shiwen Lei (University of Electronic Science and Technology of China, China); Zhiqin Zhao (University of Electronic Science and Technology of China, China); Zai-Ping Nie (University of Electronic Science and Technology of China, China); Qing Huo Liu (Duke University, USA);

00:00 Scattering of a Partially Coherent Pulse on a Deterministic Sphere with Semisoft Boundaries
Haizia Wang (Luoyang Normal University, China); Chaokang Ding (Luoyang Normal University, China); Liuzhan Pan (Luoyang Normal University, China);

00:00 Parameter Identification of an AIN Based Ladder BAW Filter
Mohamed Ali Boujema (Innov’COMM, Sup’COM, Tunisia); Mohamed Mabrouk (Institut Supérieur des Etudes Technologiques en Communications de Tunisie, Tunisia); Fethi Choubeni (University of Carthage Tunisie, Tunisia);

00:00 Detection of Low-level Electromagnetic Signal of Partial Discharge by Means of Disturbed Acquisition Discrimination
Petr Drexler (Brno University of Technology, Czech Republic); Martin Cap (Brno University of Technology, Czech Republic); Pavel Fiala (Brno University of Technology, Czech Republic); Miloslav Steimbauder (Brno University of Technology, Czech Republic); Milos Kaska (TES, Czech Republic); Lubomir Kocis (EGU HV Laboratory, Czech Republic);

00:00 Digital Multi-channel High Resolution Phase Locked Loop under Influence of Potential System Uncertainties
Mohamed R. M. Rizk (Alexandria University, Egypt); Shauky Shaaban (Alexandria University, Egypt); Usama M. Aboul-Nadar (Alexandria University, Egypt); Alaa El-Din Sayed Hafez (Alexandria University, Egypt);

00:00 Localization in One-dimensional Structures with Power-law Correlated Heterogeneity
Sepideh S. Zakeri (Università di Firenze, Italy); Stefano Lepri (Istituto dei Sistemi Complessi, Italy); Diederik S. Wiersma (University of Florence, Italy);

00:00 TM Wave Mode Analysis of Circular Dielectric Resonator with Anisotropic Permittivity
Hepi Ludiyati (Institut Teknologi Bandung, Indonesia); Andriyan Bayu Sukmono (Institut Teknologi Bandung, Indonesia); Achmad Munir (Institut Teknologi Bandung, Indonesia);

00:00 Electromagnetic Field-focusing EBG Lens
G. A. Balykov (Lomonosov Moscow State University, Russia); Vadim A. Kaloshin (Kotel’nikov Institute of Radio Engineering and Electronics of Russian Academy of Science, Russia); A. N. Semenov (Lomonosov Moscow State University, Russia); Aleksander P. Smirnov (Lomonosov Moscow State University, Russia);

00:00 Performance Analysis of Parallel FDTD Algorithm on IBM BlueGene Supercomputer Series
Aleksander P. Smirnov (Lomonosov Moscow State University, Russia); A. N. Semenov (Lomonosov Moscow State University, Russia); A. V. Pozdneev (IBM East Europe/Asia Ltd., Russia);

00:00 Electromagnetic Force Correction and Their Application in High Energy Physics
Ji Luo (Dalian University, China);

00:00 Description of Key Features of Boundary Charge Density Field
Ji Luo (Dalian University, China);
00:00 Dynamics of Radiative Heat Exchange between Parallel Plates of Silicon Carbide: The Role of Near Field 
S. A. Dyakov (Royal Institute of Technology, Sweden); J. Dai (Royal Institute of Technology, Sweden); Min Yan (Royal Institute of Technology, Sweden); Min Qiu (Zhejiang University, China);

00:00 A Novel Design of Ku Band Coaxial-waveguide Directional Coupler Used for the Measurement of the Short-circuited Line Method 
Qijia Liu (University of Electronic Science and Technology of China, China); Chao Wang (University of Electronic Science and Technology of China, China); Binjie Tao (University of Electronic Science and Technology of China, China); En Li (University of Electronic Science and Technology of China, China);

00:00 Propagation of Electromagnetic Waves along a Non-linear Inhomogeneous Cylindrical Waveguide 
Yury G. Smirnov (Penza State University, Russia); Dmitry V. Valovik (Penza State University, Russia);

00:00 Propagation Loss Analysis of As-grown and Quantum Well Intermixed GaAs/AlGaAs Superlattice Waveguides 
Abdullah Nafis Khan (National University of Sciences and Technology, Pakistan); Usman Younis (National University of Sciences and Technology, Pakistan);

00:00 Ponds Served as the Alternative Supplement for Regional Water Resources in Taoyuan, Taiwan 
Yue-An Liu (National Central University, Taiwan); Tai-Sheng Wang (National Central University, Taiwan); Hai-Po Chan (National Central University, Taiwan);

00:00 Rain-induced Sea Surface Fresh Effects on L-band Radiation 
Wen Tao Ma (Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China); Xiao Feng Yang (Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China); Yang Yu (Beijing, China); Guishong Liu (Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China); Ziwei Li (Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China);

00:00 Modeling Oil Slick Effects on the Microwave Backscattering from the Ocean Using ENVISAT ASAR Data 
Guihong Liu (Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China); Xiao Feng Yang (Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China);

00:00 Subsurface Detection of Interfaces in Layered Media Using SFMCW Radar 
Filippo Micheletti (Institute for Applied Physics-National Research Council (IFAC-CNR), Italy); Roberto Olmi (Institute for Applied Physics-National Research Council (IFAC-CNR), Italy); S. Beni (Institute for Applied Physics-National Research Council (IFAC-CNR), Italy); C. Riminesi (Institute for Applied Physics-National Research Council (IFAC-CNR), Italy);

00:00 Overview of Super-resolution Algorithms for Improved Spectral Estimation 
Filippo Micheletti (Institute for Applied Physics-National Research Council (IFAC-CNR), Italy); Roberto Olmi (Institute for Applied Physics-National Research Council (IFAC-CNR), Italy); S. Beni (Institute for Applied Physics-National Research Council (IFAC-CNR), Italy); C. Riminesi (Institute for Applied Physics-National Research Council (IFAC-CNR), Italy);

00:00 Nanoporous Gold/aptamer Hybrid Optical Sensor for Ultrasensitive Detection of Heavy Metal Ions 
Ling Zhang (University of Shanghai for Science and Technology, China); Mingwei Chen (Tohoku University, Japan);

00:00 Backward Angular Distribution of Air Lasing Induced by Femtosecond Laser Filamentation 
T. Zeng (Nankai University, China); J. Y. Zhao (Nankai University, China); Weixue Liu (Nankai University, China); See Leang Chin (Universite Laval, Canada);

00:00 Air Filamentation into the Quantum and Classical World 
See Leang Chin (Universite Laval, Canada);
Session 1P1
1. FocusSession.SC1: Casimir Effect and Heat Transfer

Monday PM, August 25, 2014
Room A
Organized by Mauro Antezza, Brahim Guizal
Chaired by Mauro Antezza, Brahim Guizal

13:10 Casimir Forces between Monolithic Silicon Structures with Nonconventional Shapes
Ho Bun Chan (The Hong Kong University of Science and Technology, China); J. Zou (University of Florida, USA); Z. Marcat (The Hong Kong University of Science and Technology, China); Alejandro W. Rodriguez (Massachusetts Institute of Technology, USA); M. T. Homer Reid (Massachusetts Institute of Technology, USA); Alexander P. McCauley (Massachusetts Institute of Technology, USA); I. I. Kravchenko (Oak Ridge National Laboratory, USA); T. Lu (The Hong Kong University of Science and Technology, China); Y. Bao (University of Florida, USA); S. G. Johnson (Massachusetts Institute of Technology, USA);

13:40 Electromagnetic Diffraction from Nanostructured Objects: Numerical Challenges
Brahim Guizal (Université de Montpellier 2, France); A. Noto (University Montpellier 2, France); R. Messina (University of Montpellier 2, France); Mauro Antezza (Université Montpellier 2, France);

14:00 Three-body Radiative Heat Transfer and Casimir-Lifshitz Force Out of Thermal Equilibrium for Arbitrary Bodies
Riccardo Messina (University of Montpellier 2, France); Mauro Antezza (Université Montpellier 2, France);

14:20 On the Quantitative Measurement of Heat Transfer at Nanoscale by Means of the Near Field Scanning Thermal Microscope
Achim Kittel (University of Oldenburg, Germany); D. Hellmann (University of Oldenburg, Germany); K. Kloppstech (University of Oldenburg, Germany); N. Konne (University of Oldenburg, Germany); L. Worbes (University of Oldenburg, Germany);

14:40 Near-field Thermal Radiation Transistor Based on Phase Change Materials
Swend-Age Biehs (Carl von Ossietzky Universität, Germany); Philippe Ben-Abdallah (Institut d’Optique, CNRS, Université Paris-Sud 11, France);

15:00 Effective Thermal Conductivity of Metal/Organic Semiconductor Nanocomposites
Xinya Wang (The University of Hong Kong, China); Paddy K. L. Chan (The University of Hong Kong, China);

15:20 Coffee Break

15:40 A Tutorial on Casimir Interactions between Nanostructured Materials
Diego A. R. Dalvit (Los Alamos National Laboratory, USA);

16:10 QED Effects Involving Non-reciprocal Media
J. Klatt (University of Freiburg, Germany); Stefan Yoshi Buhmann (University of Freiburg, Germany);

16:30 Transformation Optics Makes van der Waals Force Calculation Easier
Rongkuo Zhao (Imperial College London, UK);

16:50 Dispersion Interaction of Highly Excited Systems
Stefan Schel (University of Rostock, Germany);

17:10 How Does Casimir Energy Fall?
Kimball A. Milton (Univ. Oklahoma, USA); K. V. Shajesh (Southern Illinois University, USA); S. A. Fulling (Texas A&M University, USA); Prachi Parashar (University of Oklahoma, USA);
13:40 Recent Progress in Silicon Nitride Waveguide-based Integrated Microwave Photonics
Leimeng Zhuang (University of Twente, The Netherlands); Caterina Taddei (University of Twente, The Netherlands); Marcel Hoekman (LioniX BV, The Netherlands); Raud M. Oldenbeuving (SATRAX BV, The Netherlands); Klaus-Jochen Boller (Laser Physics and Nonlinear Optics Group, The Netherlands); Chris G. H. Roeloffzen (University of Twente, The Netherlands);

14:00 Ultrafast Photonic Differentiator and Integrator Employing Integrated Silicon Microring or MZI
Jianji Dong (Huazhong University of Science and Technology, China); Shasha Liao (Huazhong University of Science and Technology, China); Aoling Zheng (Huazhong University of Science and Technology, China); Ting Yang (Huazhong University of Science and Technology, China);

14:20 Photonic Crystal Structures for Integrated Coherent FIR Microwave Filter
Jerome Bourderionnet (Thales Research & Technology, France); Sylvain Combie (Thales Research & Technology, France); Z. Han (Université Paris-Sud 11, France); X. Checoury (Université Paris-Sud 11, France); A. De Rossi (Thales Research & Technology, France);

14:40 Waveguide Bragg Gratings for Integrated Microwave Photonics Signal Processing
Maurizio Burla (Institut National de la Recherche Scientifique — Energie, Matériaux et Télécommunications (INRS-EMT), Canada);

15:00 Wireless Millimeter-wave to Lightwave Signal Converters Using Simple Planar Antennas on LiNbO$_3$ Optical Crystal
Yusuf Nur Wijayanto (National Institute of Information and Communication Technology (NICT), Japan); Atsushi Kanno (National Institute of Information and Communications Technology, Japan); Tetsuya Kawanishi (National Institute of Information and Communications Technology, Japan); Hiroshi Murata (Osaka University, Japan); Yasuyuki Okamura (Osaka University, Japan);

15:20 Coffee Break

15:40 Generation of 90-GHz Millimeter Wave Using Quantum Dot Two-mode Laser
Konichi Akahane (National Institute of Information and Communications Technology, Japan); Naokatsu Yamamoto (National Institute of Information and Communications Technology, Japan); Atsushi Kanno (National Institute of Information and Communications Technology, Japan); Keizo Inagaki (National Institute of Information and Communications Technology, Japan); Toshimasa Umezawa (National Institute of Information and Communications Technology, Japan); Tetsuya Kawanishi (National Institute of Information and Communications Technology, Japan);

16:00 Applications of FWM in Millimeter-wave Signal Generation — Integration Perspectives
Borja Vidal (Universitat Politècnica de Valencia, Spain);
16:20 Nonlinear Integrated Microwave Photonics
David Marpaung (University of Sydney, Australia);

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**Session 1P2b**
**SC3: Solid-state Quantum Photonics**

**Monday PM, August 25, 2014**

**Room B**
Organized by Serkan Ates, Xuewen Chen
Chaired by Xuewen Chen

00:00 The Photonic Nanowire: An Emerging Platform for a Highly Efficient Quantum Light Source
Niels Gregersen (Technical University of Denmark, Denmark); Julien Claudon (CEA/INAC/SP2M, France); M. Munsch (CEA/INAC/SP2M, France); J. Bleuse (CEA/INAC/SP2M, France); A. Delga (CEA/INAC/SP2M, France); J. Mork (Technical University of Denmark, Denmark); Jean-Michel Gerard (CEA/INAC/SP2M, France);

00:00 Numerical Study on Single Crystalline Diamond Waveguide-based Single Photon Emitter
Yunxiao Li (Sun Yat-sen University, China); Yanfeng Zhang (Sun Yat-sen University, China); Yujie Chen (Sun Yat-sen University, China); Hui Chen (Sun Yat-sen University, China); Siyuan Yu (Sun Yat-sen University, China);

00:00 Controlling On-chip Microwave Photons for Quantum Information Processing
Haohua Wang (Zhejiang University, China);

00:00 Linear and Nonlinear Response of Superconducting Flux Quantum Circuits
Yu-Xi Liu (Tsinghua University, China);

00:00 Single Organic Dye Molecules as Single Photon Sources and Large Optical Nonlinearities on a Photonic Chip
Jaesuk Hwang (Imperial College London, UK);

00:00 Towards Deterministic Generation of Bright Stream of Single Photons
Xuewen Chen (Huazhong University of Science and Technology, China);

00:00 Self-assembled Low Density Quantum Dot and Quantum Dot-in-nanowire Structures for Quantum Photonics
Guo-Wei Zha (Institute of Semiconductors, Chinese Academy of Sciences, China); Zhichuan Niu (Institute of Semiconductors, Chinese Academy of Sciences, China); Ying Yu (Institute of Semiconductors, Chinese Academy of Sciences, China); Xiangjun Shang (Institute of Semiconductors, Chinese Academy of Sciences, China); Jian-Xing Xu (Institute of Semiconductors, Chinese Academy of Sciences, China); Si-Hang Wei (Institute of Semiconductors, Chinese Academy of Sciences, China); Li-Juan Wang (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Bright Single-photon Emission by Solid-state Sources in Engineered Nanophotonic Devices
L. Sapienza (NIST, USA); Marcelo Davanco (NIST, USA); S. Ates (NIST, USA); K. C. Balram (NIST, USA); A. Badolato (University of Rochester, USA); Kartik Srinivasan (NIST, USA);

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**Session 1P3a**
**MS-1.1&MS-1.8: Inorganic & Semiconductor Photovoltaics**

**Monday PM, August 25, 2014**

**Room C**
Organized by Mario Dagenais, Jinwei Gao

00:00 III-V Compound Semiconductor Quantum Dot and Nanowire Solar Cells
Chennupati Jagadish (The Australian National University, Australia);

00:00 Challenges to the Realization of Intermediate Band Solar Cells Using InAs/GaAs Quantum Dots
Tian Li (University of Maryland, USA); Mario Dagenais (University of Maryland, USA);
00:00 Development of Quantum Wire Intermediate Band Solar Cells
V. P. Kunets (University of Arkansas, USA); C. Furrow (University of Arkansas, USA); M. Ware (University of Arkansas, USA); Y. Hirono (University of Arkansas, USA); M. Benamara (University of Arkansas, USA); V. Dorogan (University of Arkansas, USA); Y. Mazur (University of Arkansas, USA); M. Mortazavi (University of Arkansas, USA); N. Al Saqri (University of Nottingham, UK); D. Jameel (University of Nottingham, UK); D. Taylor (University of Nottingham, UK); M. Henini (University of Nottingham, UK); Gregory J. Salamo (University of Arkansas, USA);

00:00 Solar Cell Application of Type-II Quantum Dots
Ara Kechiantz (The George Washington University, USA); A. Afanasev (The George Washington University, USA);

00:00 Prospects and Requirements for 30% Efficient Thin-film on Silicon Tandem Cells
Thomas P. White (Australian National University, Australia); Niraj N. Lal (Australian National University, Australia); Kylie R. Catchpole (Australian National University, Australia);

00:00 Fully Automated Development Process for High Efficiency CIGS Solar Cells
Seen Lindstrom (Midsummer AB, Sweden);

00:00 Surface Morphology-dependent Photoelectrochemical Responses of Silicon Nanowire Arrays Prepared by Chemical Etching
Shaolong Wu (Soochow University, China); Xiaofeng Li (Soochow University, China); Yaohui Zhan (Soochow University, China); Rui-Ting Zheng (Beijing Normal University, China); Guo-An Cheng (Beijing Normal University, China);

00:00 Barrier Confined Quasi-quantum Well Structure for Photovoltaics: The Case of ZnSe/CdSe/ZnSe
Keyou Yan (South China Normal University, China);

00:00 Solution-processed Silver Mesh as Transparent Conductive Electrode for Application in Solar Cell
Yuanlin Huang (South China Normal University, China); Han Bing (South China Normal University, China); Krzysztof Kempa (Boston College, USA); Jinwei Gao (South China Normal University, China);

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Session 1P3b
MS-1.2: Graphene Photovoltaics
Monday PM, August 25, 2014
Room C
Organized by Hongwei Zhu, Dan Xie

00:00 Graphene-Silicon Heterojunction Photovoltaic Device
Xinning Li (National Center for Nanoscience and Technology, China);

00:00 Low Temperature Reduction of Free-standing Graphene Oxide Films by Metal Iodide Acidic Aqueous Solutions
Songping Luo (Tsinghua University, China); Chengyang Liu (Tsinghua University, China); Hong Lin (Tsinghua University, China);

00:00 New Scaling of Electron Thermionic Emission from Single-layer Graphene
Shi-Jun Liang (Singapore University of Technology and Design, Singapore); Ricky L. K. Ang (Singapore University of Technology and Design, Singapore); Gang Chen (Massachusetts Institute of Technology, USA);

00:00 Reduced Graphene Oxide/n-Si Schottky Junction Photodetector
Miao Zhu (Tsinghua University, China); Hongwei Zhu (Tsinghua University, China);

00:00 Photo-detecting Behaviors of MoS$_2$ Transistors
Xiaowen Zhang (Tsinghua University, China); Dan Xie (Tsinghua University, China); Jianlong Xu (Tsinghua University, China); Tingting Feng (Tsinghua University, China); Yuanfan Zhao (Tsinghua University, China); Tianling Ren (Tsinghua University, China); Miao Zhu (Tsinghua University, China); Hongwei Zhu (Tsinghua University, China);

00:00 PEDOT:PSS/planar-Si Hybrid Solar Cells with 12.70% Efficiency
Yuanfan Zhao (Tsinghua University, China); Dan Xie (Tsinghua University, China); Jianlong Xu (Tsinghua University, China); Tingting Feng (Tsinghua University, China); Xiaowen Zhang (Tsinghua University, China); Tianling Ren (Tsinghua University, China); Miao Zhu (Tsinghua University, China); Hongwei Zhu (Tsinghua University, China);
Session 1P4a
SC2: Plasmonic Nanophotonics 1 - Experiment, Measurement and Fabrication

Monday PM, August 25, 2014
Room D
Organized by Din Ping Tsai, Yung-Chiang Lan
Chaired by Din Ping Tsai, Hai-Pang Chiang

13:00 UV and Visible Plasmonics of Topological Insulator
Jun-Yu Ou (University of Southampton, UK); Jin-Kyu So (University of Southampton, UK); Zi-long Wang (Nanyang Technological University, Singapore); Jun Yin (University of Southampton, UK); Giorgio Adano (Nanyang Technological University, Singapore); Azat Sulace (Nanyang Technological University, Singapore); Cesare Soci (Nanyang Technological University, Singapore); Lan Wang (Nanyang Technological University, Singapore); Nikolay I. Zhelev (University of Southampton, UK);
13:20 THz Sensor Based on the Principle of Plasmon-induced Radiation Force
Kosei Ueno (Hokkaido University, Japan); Hiroko Itoh (Hokkaido University, Japan); Wakako Nakano (Hokkaido University, Japan); Sho Nozawa (Hokkaido University, Japan); Hiroaki Misawa (Hokkaido University, Japan);
13:40 Optical Trapping with Plasmonic Nano-islands
Zhiwen Kang (The Chinese University of Hong Kong, China); Jiajie Chen (The Chinese University of Hong Kong, China); Shu-Yuen Wu (The Chinese University of Hong Kong, China); Aaron Ho-Pui Ho (The Chinese University of Hong Kong, China);
14:00 Light Propagation in High Aspect Metal Structures Prepared Using Ordered Anodic Porous Alumina
Hideki Masuda (Tokyo Metropolitan University, Japan); Toshiaki Kondo (Tokyo Metropolitan University, Japan);
14:20 Improving Light Emission by Plasmonic Lattice Coupled to Waveguide
Yuntian Chen (Huazhong University of Science and Technology, China); A. Femius Koenderink (FOM Institute AMOLF, The Netherlands);
14:40 On-chip Long-wave Photodetector Based on Hybrid Plasmonic Waveguides
Hao Wu (Zhejiang University, China); Xiaowei Guan (Zhejiang University, China); Daoxin Dai (Zhejiang University, China);
15:00 Near-field Confinement in 3D SRR Metamolecules for Optical Refractive Index Sensor
Pin Chieh Wu (National Taiwan University, Taiwan); Hsiang Lin Huang (National Taiwan Ocean University, Taiwan); Wei Ting Chen (National Taiwan University, Taiwan); Kuang Yu Yang (National Taiwan University, Taiwan); Ta-Jen (David) Yen (National Tsing Hua University, Taiwan); Din Ping Tsai (National Taiwan University, Taiwan, R.O.C.); Hai-Pang Chiang (National Taiwan Ocean University, Taiwan);
15:20 Coffee Break

Session 1P4b
SC2&3: Nano-focusing and Applications

Monday PM, August 25, 2014
Room D
Organized by Ruoxi Yang
Chaired by Ruoxi Yang

00:00 Optical Manipulation with Nanostructured Plasmonic Fields
Keiji Sasaki (Hokkaido University, Japan);
00:00 Reproducible Ultrahigh SERS Enhancement in Gold Nanoparticle-plane Junctions under Radially Polarized Excitation
Tian Yang (Shanghai Jiao Tong University, China); Jing Long (Shanghai Jiao Tong University, China); Hui Yi (Shanghai Jiao Tong University, China); Hongquan Li (Shanghai Jiao Tong University, China);
00:00 Recent Progresses on Silicon Hybrid Nanoplasmonics for Ultra-dense Photonic Integration
Daoxin Dai (Zhejiang University, China);
00:00 Microfiber Bragg Grating Sensors
Bai-Ou Guan (Jinan University, China); Yang Ran (Jinan University, China); Jie Li (Jinan University, China); Long Jin (Jinan University, China);
00:00 High Efficiency Compact SIN Focusing Grating Coupler with a Metal Reflector for Visible Light
Yaoran Sun (Zhejiang University, China); Yuqiang Zhang (Zhejiang University, China); Fengxin Chen (Zhejiang University, China); Yaocheng Shi (Zhejiang University, China); Daoxin Dai (Zhejiang University, China);
00:00 Exploiting Plasmonic Confinement for High-resolution Structural Colors and Sub-wavelength Nanolithography
L. Jay Guo (The University of Michigan, USA);
00:00 Aperture-independent Nano Focusing of Light by Surface and Bulky Plasmonic Structures
Changtao Wang (Institute of Optics and Electronics, Chinese Academy of Sciences, China); Xiangqiang Luo (Institute of Optics and Electronics, Chinese Academy of Sciences, China); Jiayu He (Institute of Optics and Electronics, Chinese Academy of Sciences, China); Na Yao (Institute of Optics and Electronics, Chinese Academy of Sciences, China); Zeyu Zhao (Institute of Optics and Electronics, Chinese Academy of Sciences, China);

00:00 Engineered Highly Efficient Nanofocusing Plasmonic Waveguides
Hyeck Choo (California Institute of Technology, USA);

00:00 Dynamic Plasmonic Trapping and Manipulation of Metallic Particles for SERS Application
Changjun Min (Nankai University, China); Yuyuan Zhang (Nankai University, China); Junfeng Shen (Nankai University, China); Wei Shi (Nankai University, China); X.-C. Yuan (Shenzhen University, China);

00:00 Plasmon Coupling in Gold Nanostructures
Huanjun Chen (Sun Yat-sen University, China); Lei Shao (The Chinese University of Hong Kong, China); Jianfang Wang (The Chinese University of Hong Kong, China);

00:00 Tailoring Artificial Plasmonic Nanostructures to Visible-near IR Regime: Towards Versatile and Ultraselective Plasmonic Biosensors
Qihua Xiong (Nanyang Technological University, Singapore);

00:00 Reconfigurable THz Chiral Metamaterials and Tunable Hyperbolic Metamaterial Cavities
Junsuk Rho (Pohang University of Science and Technology (POSTECH), Korea); Xiang Zhang (University of California, USA);

00:00 Optically Controlled Active Terahertz Meta-surfaces
Abul K. Azad (MPA-CINT, Los Alamos National Laboratory, USA); Dibakar Roy Choudhury (Los Alamos National Laboratory, USA); Hou-Tong Chen (MPA-CINT, Los Alamos National Laboratory, USA); Antonette J. Taylor (MPA-CINT, Los Alamos National Laboratory, USA);

00:00 Spontaneous Chiral Symmetry Breaking in Magnetoelastic Metamaterials
Mingkai Liu (Australian National University, Australia); David A. Powell (Australian National University, Australia); Ilya V. Shadrivov (Australian National University, Australia); Mikhail Lapine (University of Sydney, Australia); Yuri S. Kivshar (Australian National University, Australia);

00:00 Near-dispersionless, Broadband Transmission Enhancement in Plasmonic Quasicrystals
Venu Gopal Achanta (Tata Institute of Fundamental Research, India); V. J. Yallapragada (Tata Institute of Fundamental Research, India); Sachin Kasture (Tata Institute of Fundamental Research, India); P. R. Ajith (Tata Institute of Fundamental Research, India);

00:00 Making Structured Metals Transparent for White Light by Surface Plasmons
Ru-Wen Peng (Nanjing University, China); Ren-Hao Fan (Nanjing University, China); Xiang Xiong (Nanjing University, China); Mu Wang (Nanjing University, China);

00:00 Design and Implementation of Synthetic Multi-spectral Materials
David R. S. Cumming (University of Glasgow, UK); Iain J. H. McCrindle (University of Glasgow, UK); James Grant (University of Glasgow, UK); Timothy David Drysdale (University of Glasgow, UK);

00:00 Controlling Surface Plasmon Polaritons Using Magneto-optical Cavities
Dmitry Alekzevich Bykov (Image Processing Systems Institute of RAS and Samara State Aerospace University, Russia); Leonid Leonidovich Doskolovich (Image Processing Systems Institute of the Russian Academy of Sciences, Russia);

00:00 Tunable Rejections of Metamaterial Filter Based on Spoof Surface Plasmon Polaritons
Bai Cao Pan (Southeast University, China); Tie Jun Cui (Southeast University, China);
Enhancing Spontaneous Emission Rates of Molecules Using Nanopatterned Multilayer Hyperbolic Metamaterials
Dylan Lu (University of California, USA); Jimmy J. Kan (University of California, USA); Eric E. Fullerton (University of California, USA); Zhaowei Liu (University of California, USA);

Reconfigurable Plasmonic and Metamaterial Devices Using Liquid Metals
Jiqi Wang (University of Utah, USA); Shuchang Liu (University of Utah, USA); Ajay Nahata (University of Utah, USA);

Surface Wave on Graphene by a Moving Charged Particle
Xihang Shi (Nanyang Technological University, Singapore); Baile Zhang (Nanyang Technological University, Singapore);

Liquid Crystal Controlled and Tunable Metamaterials
Andrey E. Miroshnichenko (Australian National University, Australia); Manuel Decker (Australian National University, Australia); Isabelle Staude (Australian National University, Australia); Alexander Miroshnichenko (Australian National University, Australia); Dragomir N. Neshev (Australian National University, Australia); Yuri S. Kivshar (Australian National University, Australia);

Optical Properties on Demand: Reconfigurable and Coherently Controlled Metadevices
Nikolay I. Zheludev (University of Southampton, UK);

Active THz Phase Modulators Based on Graphene Metamaterials
Zi Qi Miao (Fudan University, China); Qiong Wu (Fudan University, China); Xin Li (Fudan University, China); Qiong He (Fudan University, China); Zhonghui An (Fudan University, China); Yuanbo Zhang (Fudan University, China); Lei Zhou (Fudan University, China);

Optical Control of Plasmonic Structures and Metasurfaces at THz Frequencies
Giorgos Georgiou (FOM Institute AMOLF, The Netherlands); A. Bhattachary (FOM Institute AMOLF, The Netherlands); M. C. Schafsma (FOM Institute AMOLF, The Netherlands); T. Steinbusch (FOM Institute AMOLF, The Netherlands); H. K. Tyagi (FOM Institute AMOLF, The Netherlands); J. Gomez-Rivas (FOM Institute AMOLF, The Netherlands);

Session 1P6
3. FocusSession.SC3: Photoacoustic Tomography and Sensing

Monday PM, August 25, 2014
Room F
Organized by Li Hong V. Wang

Real-time Interleaved Ultrasound and Photoacoustic Imaging System
Matthew O’Donnell (University of Washington, USA); Chen-Wei Wei (University of Washington, USA); Thu-Mai Nguyen (University of Washington, USA); Bastien Arnal (University of Washington, USA); Ivan Pelwanov (University of Washington, USA);

New Look into Medicine and Biology with Thermoacoustic and Optoacoustic Tomography
Vasilis Ntziachristos (Technische Universität München, Germany);

Mid-infrared Trace Gas Detection in Exhaled Breath for Disease Diagnostics and Monitoring
Frank K. Tittel (Rice University, USA); Wei Ren (Rice University, USA); Wenzhe Jiang (Rice University, USA); Yingchan Cao (Rice University, USA); Dongfang Jiang (Rice University, USA);

Coregistered Functional-anatomical Mapping of Live Tissue with Laser Optoacoustic Ultrasonic Imaging System (LOUIS)
Alexander A. Oraevsky (University of Houston, USA);

Recent Advancements in Photoacoustic Tomography Image Reconstruction
Mark A. Anastasio (Washington University in St. Louis, USA);

Photoacoustic Image Features of Breast Carcinoma with Conventional Imaging and Pathological Validation
Michelle Heijblom (University of Twente, The Netherlands); Daniele Piras (University of Twente, The Netherlands); Johan Van Hespen (University of Twente, The Netherlands); Ten Van Leeuwen (University of Twente, The Netherlands); Wendelt Steenbergen (University of Twente, The Netherlands); Srinath Manohar (University of Twente, The Netherlands); Frank Van den Eng (Medisch Spectrum Twente, The Netherlands); Margreet Van der Schaad (Medisch Spectrum Twente, The Netherlands); Joost Klaasse (Medisch Spectrum Twente, The Netherlands); Mariel Brinkhuis (Laboratory for Pathology East Netherlands, The Netherlands);
00:00 Full Aberration Correction towards High-resolution Deep Clinical Multimodal Optoacoustic and Ultrasound Imaging
Michael Jaeger (University of Bern, Switzerland); Hidayet Gunar Akaray (University of Bern, Switzerland); Michael Granig (University of Bern, Switzerland); Gerrit Held (University of Bern, Switzerland); Sara Peeters (University of Bern, Switzerland); Tigran Petrosyan (University of Bern, Switzerland); Stefan Preisser (University of Bern, Switzerland); Martin Frenz (University of Bern, Switzerland);

00:00 Enhanced Plasmonic Photothermal Therapy by Combining Targeted Delivery of Gold Nanoparticles with Sonoporation
Yu-Hsin Wang (National Taiwan University, Taiwan); Si-Ping Chen (National Taiwan University, Taiwan); Pai-Chi Li (National Taiwan University, Taiwan);

00:00 Photoacoustic and Ultrasound Dual-modality Imaging for Inflammatory Arthritis
Xueding Wang (University of Michigan School of Medicine, USA); Guan Xu (University of Michigan School of Medicine, USA); David Chamberland (University of Michigan School of Medicine, USA); Gandikota Girish (University of Michigan School of Medicine, USA);

00:00 The Application of Nonlinear Photoacoustic Cavitation
Xinmai Yang (The University of Kansas, USA);

00:00 Dual-modal Whole Eye Photoacoustic Imaging
Ning Wu (Peking University, China); Qushi Ren (Peking University, China); Changhui Li (Peking University, China);

00:00 In Vivo Photoacoustic Tomography: Systems and Contrast Agents
Chulhong Kim (Pohang University of Science and Technology, Korea);

00:00 Multi-scale Biomedical Imaging with Acoustic- and Optical-resolution Photoacoustic Tomography
Liang Song (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China);

00:00 Multiscale Photoacoustic Microscopy for Brain Imaging
Bowen Jiang (Huazhong University of Science and Technology, China); Xiaquan Yang (Huazhong University of Science and Technology, China); Hui Gong (Wuhan National Laboratory for Optoelectronics, Wuhan); Qingming Luo (Huazhong University of Science and Technology, China);
00:00 Guided-mode Resonance Enhanced Near-infrared-to-visible Upconversion Fluorescence in a Resonant Waveguide Grating
Hao Yu Liou (National Chung Cheng University, Taiwan); Jian-Hung Lin (National Chung Cheng University, Taiwan); Zhen-Dao Wang (National Chung Cheng University, Taiwan); Chun-Yen Tseng (National Chung Cheng University, Taiwan); Ching-Ting Lee (National Chung Cheng University, Taiwan); Chu-Chi Ting (National Chung Cheng University, Taiwan); Hung-Chih Kan (National Chung Cheng University, Taiwan); Chia Chen Hsu (National Chung Cheng University, Taiwan, R.O.C.);

00:00 Four-wave Mixing Response of a Graphene Layer Covered on a Tapered Fiber
Jiamei Lu (Zhejiang University, China); Qiang Jin (Zhejiang University, China); Xibin Li (Zhejiang University, China); Qiang Yan (Zhejiang University, China); Qianyu Gao (Zhejiang University, China); Shiming Gao (Zhejiang University, China);

00:00 Third-harmonic Generation in Graphene-clad Microfiber
Yingxin Xu (Zhejiang University, China); Shangliang Yu (Zhejiang University, China); Bigeng Chen (Zhejiang University, China); Wei Fang (Zhejiang University, China);

00:00 Iridium(III) Complexes as Nonlinear Absorbing Materials
Wenfang Sun (North Dakota State University, USA); Yahao Li (North Dakota State University, USA); Rui Liu (North Dakota State University, USA); Zhongqing Li (North Dakota State University, USA); Naveen Dandu (North Dakota State University, USA); Svetlana Kilina (North Dakota State University, USA);

00:00 Widely Wavelength Tunable Femtosecond Laser Resources Based on Nonlinear Optical Processes
Ming-Lie Hu (Tianjin University, China);

00:00 Reconfigurable All-optical Logic Operation Based on Semiconductor Optical Amplifiers
Xinhang Zhang (Huazhong University of Science and Technology, China);

00:00 Silicon-on-insulator Optical Circuits with High Q, Small Mode Volume Photonic Crystal Slot Microcavities: Nonlinear Response and Optical Trapping of Nanoparticles in Various Solvent Environments
Jeff F. Young (University of British Columbia, Canada); S. Hamed Mirsadeghi (University of British Columbia, Canada);

00:00 New Frontiers in Chip-based Nonlinear Optics
Benjamin J. Eggleton (University of Sydney, Australia);

00:00 All-optical Wavelength Conversion for 16-QAM Signal Using FWM in a Silicon Waveguide
Xiaoyan Wang (Zhejiang University, China); Lingchen Huang (Zhejiang University, China); Ke Yi (Zhejiang University, China); Qiang Yan (Zhejiang University, China); Wei Pan (Zhejiang University, China); Shiming Gao (Zhejiang University, China);

00:00 Graphene, Topological Insulator and Other 2-dimensional Layered Materials for Microwave and Terahertz Photonics Applications
Shuangchan Wen (Hunan University, China);

00:00 Coherent Anti-Stokes Raman Holography
Zhiwen Liu (Pennsylvania State University, USA); Kebin Shi (Peking University, China); Perry S. Edwards (Pennsylvania State University, USA); Nikhil Mehta (Pennsylvania State University, USA); Alexander S. Cocking (Pennsylvania State University, USA); Demetri Psaltis (Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland);

00:00 Stable Supercontinuum Pulse on Continuous Wave Background in a Nonlinear Fiber with High-order Effects
Li-Chen Zhao (Northwest University, China); Sheng-Chang Li (Xi’an Jiaotong University, China); Liming Ling (South China University of Technology, China);

Session 1P8a
SC2&3: Plasmonic, Metallic, or Dielectric Nanolasers
Monday PM, August 25, 2014
Room H
Organized by Cun-Zheng Ning, Tien-Chang Lu

00:00 Integration of InP Nanowire Lasers on (001) Silicon Substrate by Selective Epitaxial Growth
Zhechao Wang (Ghent University-IMEC, Belgium); Clement Merckling (IMEC, Belgium); Bin Tian (Ghent University-IMEC, Belgium); Weiming Guo (IMEC, Belgium); Marianna Pantouwaki (IMEC, Belgium); Joris Van Campenhout (IMEC, Belgium); Dries Van Thourhout (Ghent University-IMEC, Belgium); Philippe Absil (IMEC, Belgium);
00:00 Semiconductor Plasmonic Nano-cavity Laser on Silicon: Simulation, Design and Fabrication
Qian Wang (Data Storage Institute, Singapore); Chee Wei Lee (Data Storage Institute, Singapore); Kim Peng Lim (Data Storage Institute, Singapore);

00:00 III-V Semiconductor Nanowire Lasers
Chennupati Jagadish (The Australian National University, Australia);

00:00 Mode and Polarization Control in Gallium Nitride Nanowire Lasers
George T. Wang (Sandia National Laboratories, USA); Jeremy B. Wright (Sandia National Laboratories, USA); Huwwen Xu (University of New Mexico, USA); Antonio Hurtado (University of Essex, UK); Changyi Li (University of New Mexico, USA); Steven R. J. Brueck (University of New Mexico, USA); Qiming Li (Sandia National Laboratories, USA); Jeffery J. Figiel (Sandia National Laboratories, USA); Igal Brener (Sandia National Laboratories, USA);

00:00 Sizes Controllable Periodical Nanoslits Array for Surface Enhanced Raman Scattering (SERS)
Yunfei Zhu (South China Normal University, China); Guofu Zhou (South China Normal University, China); Mingliang Jin (South China Normal University, China);

00:00 Single-mode Single-nanowire FP Laser
Xiaowei Liu (Zhejiang University, China); Jiabei Li (Zhejiang University, China); Zongyin Yang (Zhejiang University, China); Qing Yang (Zhejiang University, China);

00:00 Strong Light-matter Coupling in ZnO Based Microcavities
Yu-Hsun Chou (National Chiao Tung University, Taiwan); Ying-Yu Lai (National Chiao Tung University, Taiwan); Shing-Chung Wang (National Chiao Tung University, Taiwan); Tien-Chang Lu (National Chiao Tung University, Taiwan);

00:00 Quantum Nanoplasmonics and Spaser
Mark I. Stockman (Georgia State University, USA);

Session 1P8b
SC3-workshop: Integrated Nanophotonics for Optical Interconnects in Data Centers
Monday PM, August 25, 2014
Room H
Organized by Lech Wosinski, Lin Yang
Chaired by Lech Wosinski, Lin Yang

00:00 Integrated Nanophotonic Devices for Optical Interconnections
Yidong Huang (Tsinghua University, China); Xue Feng (Tsinghua University, China); Denqie Zhang (Tsinghua University, China); Hai Yan (Tsinghua University, China); Xiangdong Li (Tsinghua University, China); Kaiyu Cui (Tsinghua University, China);

00:00 Silicon and Hybrid Silicon Photonics for Optical Interconnects in Datacenters
Andrew Wing On Poon (The Hong Kong University of Science and Technology, China); Yu Zhang (The Hong Kong University of Science and Technology, China); Yu Li (The Hong Kong University of Science and Technology, China); Lei Zhang (The Hong Kong University of Science and Technology, China);

00:00 Optical Interconnects for Datacenter Networks: Progress and Challenges
Xuezhi Hong (South China Normal University, China); Matteo Fiorani (KTH Royal Institute of Technology, Sweden); Jiajia Chen (KTH Royal Institute of Technology, Sweden);

00:00 Hybrid AlGaInAs/InP on Silicon Lasers for Optical Interconnects
Yue-De Yang (Institute of Semiconductors, Chinese Academy of Sciences, China); Shao-Shuai Sui (Institute of Semiconductors, Chinese Academy of Sciences, China); Ming-Ying Tang (Institute of Semiconductors, Chinese Academy of Sciences, China); Jin-Long Xiao (Institute of Semiconductors, Chinese Academy of Sciences, China); Yong-Zhen Huang (Institute of Semiconductors, Chinese Academy of Sciences, China);
00:00 Group-IV Light Emitting Materials and Devices for Optical Interconnect
Buwen Cheng (Institute of Semiconductors, Chinese Academy of Sciences, China); Zhi Liu (Institute of Semiconductors, Chinese Academy of Sciences, China); Chao He (Institute of Semiconductors, Chinese Academy of Sciences, China); Dongliang Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Xu Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Wenqi Huang (Institute of Semiconductors, Chinese Academy of Sciences, China); Chunlai Xue (Institute of Semiconductors, Chinese Academy of Sciences, China); Chuanbo Li (Institute of Semiconductors, Chinese Academy of Sciences, China); Qiming Wang (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Silicon Multimode Photonic Integrated Devices for On-chip Optical Interconnects
Daoxin Dai (Zhejiang University, China);

00:00 Optical Routers for Photonic Networks-on-chip
Lin Yang (Institute of Semiconductors, Chinese Academy of Sciences, China); Fanfan Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Quashan Chen (Institute of Semiconductors, Chinese Academy of Sciences, China); Jianfeng Ding (Institute of Semiconductors, Chinese Academy of Sciences, China); Ruiqiang Ji (Institute of Semiconductors, Chinese Academy of Sciences, China); Rui Min (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 A Universal Method for Constructing \(N\)-port Non-blocking Optical Router Based on \(2\times2\) Optical Switch
Quashan Chen (Institute of Semiconductors, Chinese Academy of Sciences, China); Fanfan Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Ruiqiang Ji (Institute of Semiconductors, Chinese Academy of Sciences, China); Lei Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Lin Yang (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Energy-efficient and Fast Thermal-response in Silicon Hybrid Nanoplasmonic Waveguides
Xiaowei Guan (Zhejiang University, China); Hao Wu (Zhejiang University, China); Daoxin Dai (Zhejiang University, China);

00:00 Novel Hybrid Plasmonic Devices on Silicon Platform
Lech Wosinski (KTH Royal Institute of Technology, Sweden); Fei Lou (KTH Royal Institute of Technology, Sweden); Lars Thylén (KTH Royal Institute of Technology, Sweden);

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Session 1P9a
SC3: Functional Optical Fiber Devices

Monday PM, August 25, 2014
Room I
Organized by Liyang Shao, Zhe Chen
Chaired by Liyang Shao, Zhe Chen

00:00 Regeneration and Fibre Gratings: Towards the Penultimate High Temperature Sensor
John Canning (The University of Sydney, Australia);

00:00 Optically Controllable Fiber Device
Vincent K. S. Hsiao (National Chi Nan University, Taiwan);

00:00 Plasma-modified Optical Fiber Bio-sensors
Mateusz Smietana (Warsaw University of Technology, Poland); Marcin Koba (Warsaw University of Technology, Poland); Wojtek J. Bock (Université du Québec en Outaouais, Canada);

00:00 Special Functions of Modified Optical Microfiber
Xueliang Zhang (National University of Defense Technology, China); Yang Yu (National University of Defense Technology, China); Zhangqi Song (National University of Defense Technology, China); Yuzhong Chen (National University of Defense Technology, China); Zhou Meng (National University of Defense Technology, China);

00:00 Long-period Gratings and Applications in Sensing Systems
Chun-Liu Zhao (China Jiliang University, China); Xinyong Dong (China Jiliang University, China); Yongxing Jin (China Jiliang University, China); Juan Kang (China Jiliang University, China); Shangzhong Jin (China Jiliang University, China);

00:00 Polarisation Dynamics in Carbon Nanotube Mode Locked Ultrafast Fibre Lasers
Chengbo Mou (Aston University, UK); Sergey Sergeyev (Aston University, UK); Raz Arif (Aston University, UK); Alexsey Rozhin (Aston University, UK); Tatiana Habruseva (Aston University, UK); Veronika Tsatourian (Aston University, UK); Sergei K. Turitsyn (Aston University, UK);
00:00 Fabrication and Applications of D-shaped Fiber Based Graphene Saturable Absorber and Polarizer
Lilin Yi (Shanghai Jiao Tong University, China); Ran Zheng (Shanghai Jiao Tong University, China); Weixiong Li (Shanghai Jiao Tong University, China); Haiyan Nan (Southeast University, China); Zhenghua Ni (Southeast University, China); Weisheng Hu (Shanghai Jiao Tong University, China);

00:00 Nonlinear Effect in Carbon-nanotube-coated Optical Fiber Grating
Liyang Shao (Southwest Jiaotong University, China);

00:00 Miniaturized Fiber Interferometers and Their Applications as Fiber Sensors
Bo Dong (Institute for Infocom Research (I2R), Singapore); Banghong Zhang (Institute for Infocomm Research (I2R), Singapore); Junhong Ng (Institute for Infocom Research (I2R), Singapore); Yizin Wang (Institute for Infocom Research (I2R), Singapore);

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Session 1P9b
Specialty Optical Fibers: Design, Applications, Devices, and Process
Monday PM, August 25, 2014
Room I
Organized by Pramod R. Watekar
Chaired by Seongmin Ju, Pramod R. Watekar

00:00 THz False-color Imaging with Flexible Tube-lattice Fiber Probe
Wenliang Lu (Beijing Jiaotong University, China); Shuqin Lou (Beijing Jiaotong University, China); Xin Wang (Beijing Jiaotong University, China); Alexander Argyros (University of Sydney, Australia);

00:00 Temperature Profile of Soot Preform during Sintering Process
Ramesh Behera (Sterlite Technologies Ltd., India); Sham Nagarkar (Sterlite Technologies Ltd., India);

00:00 Yield Improvement of Optical Fiber Manufacturing through Redesign of OVD Burner
Ramesh Behera (Sterlite Technologies Ltd., India); Datta Pasare (Sterlite Technologies Ltd., India);

00:00 Core Profile Based Dispersion Optimization in Trench Assisted Bend-insensitive Optical Fibers
Pramod R. Watekar (Sterlite Technologies Ltd., India); Archi Bhattacharya (Sterlite Technologies Ltd., India); Nagaraju Bezawada (Sterlite Technologies Ltd., India);

00:00 Experimental Investigation of Modal Noise in Ultra Bend-insensitive Fibers
Nagaraju Bezawada (Sterlite Technologies Ltd., India); Manoj Gupta (Sterlite Technologies Ltd., India); Pramod R. Watekar (Sterlite Technologies Ltd., India);

00:00 Measurement of Nonlinear Coefficient of Ultra Bend-insensitive Optical Fiber
Manoj Gupta (Research & Development Sterlite Technologies Ltd., India); Nagaraju Bezawada (Sterlite Technologies Ltd., India); Pramod R. Watekar (Sterlite Technologies Ltd., India);

00:00 Surface Plasmon Resonance of Tapered Au Nanoparticles Cladding-doped Optical Fiber
Seongmin Ju (Gwangju Institute of Science and Technology, South Korea); Seongmook Jeong (Gwangju Institute of Science and Technology, South Korea); Youngwoong Kim (Gwangju Institute of Science and Technology, South Korea); Sang-Hyun Lee (Gwangju Institute of Science and Technology, South Korea); Won-Taek Han (Gwangju Institute of Science and Technology, South Korea);

00:00 Gamma-ray Irradiation Effect on Non-resonant Third-order Optical Nonlinearity of Germano-silicate Glass Optical Fiber
Youngwoong Kim (Gwangju Institute of Science and Technology, South Korea); Seongmin Ju (Gwangju Institute of Science and Technology, South Korea); Seongmook Jeong (Gwangju Institute of Science and Technology, South Korea); Jong-Yeol Kim (Korea Atomic Energy Research Institute, Korea); Nam-Ho Lee (Korea Atomic Energy Research Institute, Korea); Hyun-Kyu Jung (Korea Atomic Energy Research Institute, Korea); Won-Taek Han (Gwangju Institute of Science and Technology, South Korea);

00:00 Bending Effect on Optical Emission Properties of Yb/Al Doped Optical Fiber with Depressed Cladding Structure
Seongmook Jeong (Gwangju Institute of Science and Technology, South Korea); Seongmin Ju (Gwangju Institute of Science and Technology, South Korea); Youngwoong Kim (Gwangju Institute of Science and Technology, South Korea); Yune Hyoun Kim (Korea Photonics Technology Institute, South Korea); Swook Hann (Korea Photonics Technology Institute, South Korea); Won-Taek Han (Gwangju Institute of Science and Technology, South Korea);
**Session 1P_10a**  
**SC3: Advances in Optical Networking: Parts 1**  
**Monday PM, August 25, 2014**  
**Room J**  
Organized by Jiajia Chen, David Payne, Lena Wosinska  
Chaired by Jiajia Chen

00:00 Photonic Networks in Big Data Era  
Ken-ichi Kitayama (Osaka University, Japan);

00:00 Multi-domain Software Defined Optical Networks for Data Center Migration  
Jie Zhang (Beijing University of Posts and Telecommunications, China); Yongli Zhao (Beijing University of Posts and Telecommunications, China);

00:00 Transformable Optical Circuit and Packet Switching for Data Center Network  
Weisheng Hu (Shanghai Jiao Tong University, China); Weiqiang Sun (Shanghai Jiao Tong University, China);

00:00 Optical Networks for Energy-efficient Data Centers  
Lena Wosinska (KTH — Royal Institute of Technology, Sweden);

00:00 Survivable Techniques for Flex-grid Elastic Optical Networks  
Gangxiang Shen (Soochow University, China);

00:00 Software-defined Elastic Optical Networking in Temporal, Spectral and Spatial Domains  
S. J. Ben Yoo (University of California, Davis, USA);

00:00 Software Defined Networking (SDN) Enabled Optical as a Service (OaaS) with Dynamic Network Provisioning  
Yongli Zhao (Beijing University of Posts and Telecommunications, China); Jie Zhang (Beijing University of Posts and Telecommunications, China);

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**Session 1P_10b**  
**SC3: Onchip Multiplexing Technologies and Devices for Optical Interconnects. Parts 1 & 2**  
**Monday PM, August 25, 2014**  
**Room J**  
Organized by Daoxin Dai, Dan-Xia Xu, Di Liang  
Chaired by Daoxin Dai

00:00 Silicon Reflective-type Arrayed-waveguide Grating (De)multiplexers with Micro Reflectors  
Sitaol Chen (Zhejiang University, China); Daoxin Dai (Zhejiang University, China);

00:00 Low-crosstalk 8-channel Silicon Mode Demultiplexer with Grating Polarizers  
Jian Wang (Zhejiang University, China); Pengxin Chen (Zhejiang University, China); Sitaol Chen (Zhejiang University, China); Yaocheng Shi (Zhejiang University, China); Daoxin Dai (Zhejiang University, China);

00:00 Si-photonic Based Optical OFDM Demultiplexer for Tb/s Transmission Links  
L. Zimmermann (IHP, Germany); A. Rahim (Universite Laval, Canada); Stefan Schwarz (Helmut-Schmidt-Universitat, Germany); Jurgen Bruns (Technische Universitat Berlin, Germany); Karsten Voigt (Technical University of Berlin, Germany); G. Winzer (IHP, Germany); C. G. Scaffer (Helmut-Schmidt-Universitat, Germany); K. Petermann (Technical University of Berlin, Germany);

00:00 Reconfigurable Two-mode Mux/Demux Device for Optical Interconnects  
Andy H. P. Chan (City University of Hong Kong, China); Wai Ying Chan (City University of Hong Kong, China);

00:00 Recent Progress in On-chip Multiplexing/Demultiplexing Silicon Photonic Devices and Technologies  
Jian Wang (Huazhong University of Science and Technology, China);

00:00 Higher-order Ring Resonators and Delayed Interferometers Based on 300-nm SOI Technology for WDM Applications  
Seok-Hwan Jeong (Photonics Electronics Technology Research Association (PETRA), Japan); Yu Tanaka (Photonics Electronics Technology Research Association (PETRA), Japan); Ken Morito (Photonics Electronics Technology Research Association (PETRA), Japan);

00:00 III-V Quantum-dot Lasers Monolithically Grown on Si Substrates for Silicon Photonics  
Huiyun Liu (University College London, UK);

00:00 Photonic Crystal Cavities for Optical Interconnects  
Liam O’Faolain (University of St Andrews, UK);
Session 1P_11
SC4: Recent Progress on Magnetic and Multiferroic Materials

Monday PM, August 25, 2014
Room K
Organized by Nian-Xiang Sun, Yun-gui Ma
Chaired by Nian-Xiang Sun, Yun-gui Ma

00:00 Tunable Bandpass Filters with Magnetodielectric and Multiferroic Materials
Guo-Min Yang (Fudan University, China); Nian-Xiang Sun (Northeastern University, USA);

00:00 Magnetoelectric and Magnetic Thin Film Microwave/RF Components
Xi Yang (University of California, USA); Yuanxun E. Wang (University of California, USA); Nian-Xiang Sun (Northeastern University, USA);

00:00 Magnetic Field Tuned Semiconducting Properties in Ferromagnetic/Semiconducting Composites
Junyi Zhai (Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences, China); Mingzeng Peng (Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences, China); Ming Song (Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences, China); Yudong Liu (Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences, China);

00:00 Self-assembly and Field-directed Assembly of Ferrite-ferroelectric Core-shell Nanocomposites: Studies on Magneto-electric Interactions
G. Sreenivasulu (Oakland University, USA); Ferman Chavez (Oakland University, USA); Gopalan Srinivasan (Oakland University, USA);

00:00 Multiferroics and Magnetoelectric Coupling Effects in Metal-organic Frameworks
Young Sun (Institute of Physics, Chinese Academy of Sciences, China); Y. Tian (Institute of Physics, Chinese Academy of Sciences, China); J.-Z. Cong (Institute of Physics, Chinese Academy of Sciences, China); S.-P. Shen (Institute of Physics, Chinese Academy of Sciences, China); Y.-S. Chai (Institute of Physics, Chinese Academy of Sciences, China); L.-Q. Yan (Institute of Physics, Chinese Academy of Sciences, China);

00:00 The Stress-induced Magnetic Anisotropy of Microwave Soft Magnetic Films: From Composition Gradient Sputtering to Multiferroic Laminates
Shandong Li (Qingdao University, China); Honglei Du (Qingdao University, China); Jie Xu (Qingdao University, China); Shiming Xie (Qingdao University, China); Qian Xue (Qingdao University, China); Xiaoyang Gao (Qingdao University, China); Caiyan Chen (Qingdao University, China); Nian X. Sun (Northeastern University, USA);

00:00 Enhanced Magnetization in Highly Strained BiFeO₃ Films
Ying-Hao Chu (National Chiao Tung University, Taiwan);

00:00 Composition-graded Magnetic Thin Films with Tunable Microwave Performance Controlled by Electrical Field
Nguyen Nguyen Phuoc (National University of Singapore, Singapore); Chong Kim Ong (National University of Singapore, Singapore);

00:00 Thin Film Magnetoelectric Composites as Biomagnetic Sensors
Andre Piorra (University of Kiel, Germany); Christine Kirchhof (University of Kiel, Germany); Erdem Yarar (University of Kiel, Germany); Volker Robisch (University of Kiel, Germany); Dirk Meyners (University of Kiel, Germany); Eckhard Quandt (University of Kiel, Germany);

00:00 Multiferroic Co₂Z Hexaferrite-BaTiO₃ Particulate Composites for Microwave Absorption Applications
Xian Wang (Huazhong University of Science and Technology, China); Qifan Li (Huazhong University of Science and Technology, China); Yan Nie (Huazhong University of Science & Technology, China); Zekun Feng (Huazhong University of Science & Technology, China); Rongzhou Gong (Huazhong University of Science and Technology, China);
00:00 Strain-mediated Control of Magnetic Properties in Flexible Multilayered Magnetostrictive FeGa Films
Qingfeng Zhan (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Guohong Dai (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Xiaoshan Zhang (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Jiashuai Ma (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Xiangyong Zhao (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Haosu Luo (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Ying Liu (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Hong Wang (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Run-Wei Li (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Xing Rong (Institute of Physics, Chinese Academy of Sciences, China); Yiwei Liu (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Zhenghu Zuo (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Xing Rong (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Run-Wei Li (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Jie Jiao (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Yong Li (Northwest Institute of Nuclear Technology, China); Haiyan Xie (Northwest Institute of Nuclear Technology, China); Xiu-Yin Zhang (South China University of Technology, China); Xiangyong Zhao (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Haosu Luo (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Hong Wang (Northwest Institute of Nuclear Technology, China); Xiangyong Zhao (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Haosu Luo (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Ying Liu (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Hong Wang (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Run-Wei Li (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Xing Rong (Institute of Physics, Chinese Academy of Sciences, China); Yiwei Liu (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Zhenghu Zuo (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Xing Rong (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Run-Wei Li (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Jie Jiao (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Yong Li (Northwest Institute of Nuclear Technology, China); Haiyan Xie (Northwest Institute of Nuclear Technology, China); Xiu-Yin Zhang (South China University of Technology, China); Xiangyong Zhao (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Haosu Luo (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Hong Wang (Northwest Institute of Nuclear Technology, China); Xiangyong Zhao (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Haosu Luo (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Yong Li (Northwest Institute of Nuclear Technology, China); Haiyan Xie (Northwest Institute of Nuclear Technology, China); Xiu-Yin Zhang (South China University of Technology, China); Hsuan-Ling Kao (Chang Gung University, Taiwan);

00:00 Low Loss Magnetodielectric Composites for RF and Microwave Applications
Hong Wang (Xi’an Jiaotong University, China);

00:00 Magnetization Dynamics of Ni-Fe Elliptical Dot Arrays Measured by the FMR Measurement with a CPW
Yasushi Endo (Tohoku University, Japan); Masahiro Yamaguchi (Tohoku University, Japan);

00:00 Non-volatile Switching of Magnetism for Reconfigurable Microwave Devices
Ming Liu (Xi’an Jiaotong University, China);

00:00 Toward Magnetic Switching by Electrical Field
Xiaoxi Liu (Shinshu University, Japan);

00:00 Multifunctional Materials for Electronics and Photonics
Federico Rosei (INRS, Canada);

00:00 Enhanced Sensitivity in Magnetoelectric Laminate Sensors Based on Magnetoelectric Nonlinearity
Jie Jiao (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Yuting Liu (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Jiashuai Ma (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Xiangyong Zhao (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China); Haosu Luo (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China);

00:00 Magnetoelectric Coupling Across BiFeO3-La7Sr3MnO3 Heterointerfaces Driven by Orbital Selective Charge Screening
Pu Yu (Tsinghua University, China);

Session 1P.12
SC4: Si-based Microwave Devices and ICs
Monday PM, August 25, 2014
Room L
Organized by Albert Chin, Hsuan-Ling Kao
Chaired by Albert Chin, Hsuan-Ling Kao

00:00 The Difference of Temperature and Electron Mobility in Silicon and InGaAs PIN Photodiode
N. Y. M. Yasin (Universiti Teknikal Malaysia Melaka, Malaysia); Mohd Azlishah Othman (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Z. A. F. M. Napiah (Universiti Teknikal Malaysia Melaka, Malaysia); Mohd Nor Husein (Universiti Teknikal Malaysia Melaka, Malaysia); Mohamad Zoinol Abidin Abd Aziz (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Muhammad Ramlee Kamarudin (Universiti Teknologi Malaysia, Malaysia);

00:00 Dual-band Bandpass Filter Based on GaN MMIC
Zhi Xia Du (South China University of Technology, China); Xiu-Yin Zhang (South China University of Technology, China); Hsuan-Ling Kao (Chang Gung University, Taiwan);

00:00 Study of Response of PIN Diode to Electromagnetic Pulse
Yong Li (Northwest Institute of Nuclear Technology, China); Haiyan Xie (Northwest Institute of Nuclear Technology, China); Chun Xuan (Northwest Institute of Nuclear Technology, China); Hongfu Xia (Northwest Institute of Nuclear Technology, China); Jian-quo Wang (Northwest Institute of Nuclear Technology, China);
00:00 The Experimental Study of THz Power Detector Design in 0.18 µm CMOS Technology
Chih-Wei Lai (National Chiao-Tung University, Taiwan); Wei-Cheng Chen (National Chiao-Tung University, Taiwan); Tzu-Chao Yan (National Chiao-Tung University, Taiwan); Chien-Nan Kuo (National Chiao-Tung University, Taiwan); Chien-Nan Kuo (National Central University, Taiwan);

00:00 An Analysis of the Effect of Junction Capacitance towards Si SDR IMPATT Diode
T. S. Mohd Arshad (Universiti Teknikal Malaysia Melaka, Malaysia); Mohd Azlishah Othman (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia);

00:00 Widely Tunable Inductors Utilizing Transmission-line with Variable Distributed Load Capacitor for Millimeter-wave Applications
Yizhao Wang (Peking University, China); Xichang Hao (Peking University, China); Le Ye (Peking University, China); Hualin Liao (Peking University, China);

00:00 Performance Analysis of Different Materials on Avalanche Photodiode Structures
S. N. Taib (Universiti Teknikal Malaysia Melaka, Malaysia); Mohd Azlishah Othman (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia);

00:00 Drain Current Enhancement for Room Temperature Sub-Terahertz Detector Using 0.35 µm AMS Technology
Mohd Azlishah Othman (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Ian Harrison (University of Nottingham, UK);

00:00 The Experimental Study of THz Power Detector Design
Widely T unable Inductors Utilizing Transmission-

00:00 The Experimental Study of THz Power Detector Design
Widely T unable Inductors Utilizing Transmission-

00:00 The Experimental Study of THz Power Detector Design
Widely T unable Inductors Utilizing Transmission-

00:00 The Experimental Study of THz Power Detector Design
Widely T unable Inductors Utilizing Transmission-

00:00 Investigation of a Miniature and High Gain On-chip V Band Microstrip Antenna
Li-Yan Xie (University of Electronic Science and Technology of China, China); Jia-Qi Liu (University of Electronic Science and Technology of China, China); Yu-Bo Wang (University of Electronic Science and Technology of China, China); Chenghsin Chuang (National Chiao-Tung University, Taiwan); Albert Chiu (National Chiao-Tung University, Taiwan); Joshua Le-Wei Li (Monash University, Malaysia); Kai Kung (University of Electronic Science and Technology of China, China);

00:00 Investigation of a Miniature and High Gain On-chip V Band Microstrip Antenna
Li-Yan Xie (University of Electronic Science and Technology of China, China); Jia-Qi Liu (University of Electronic Science and Technology of China, China); Yu-Bo Wang (University of Electronic Science and Technology of China, China); Chenghsin Chuang (National Chiao-Tung University, Taiwan); Albert Chiu (National Chiao-Tung University, Taiwan); Joshua Le-Wei Li (Monash University, Malaysia); Kai Kung (University of Electronic Science and Technology of China, China);

00:00 An Ultra-wideband and Low Phase Noise LC-VCO Using NMOS Varactor with MOM Digital Capacitor Switching Arrays
Mohammed Aqeeli (University of Manchester, United Kingdom); Zhirun Hu (University of Manchester, UK); Xianjun Huang (University of Manchester, UK); Abdullah Albarakain (University of Manchester, UK); Cahyo Muvianto (The University of Manchester, UK);

00:00 An Ultra-wideband and Low Phase Noise LC-VCO Using NMOS Varactor with MOM Digital Capacitor Switching Arrays
Mohammed Aqeeli (University of Manchester, United Kingdom); Zhirun Hu (University of Manchester, UK); Xianjun Huang (University of Manchester, UK); Abdullah Albarakain (University of Manchester, UK); Cahyo Muvianto (The University of Manchester, UK);

00:00 Design and Analysis of 81 to 86 GHz 3-Stages Cascode Low Noise Amplifier with π-type Matching Network Using 65 nm CMOS Process
Hsuan-Der Yen (National Tsing Hua University, Taiwan, R.O.C.); Yi-Chun Lee (National Nano Device Laboratories, Taiwan); Guo-Wei Huang (National Nano Device Laboratories, Taiwan); Fon-Shan Huang (National Tsing Hua University, Taiwan, R.O.C.);

00:00 Design and Analysis of 81 to 86 GHz 3-Stages Cascode Low Noise Amplifier with π-type Matching Network Using 65 nm CMOS Process
Hsuan-Der Yen (National Tsing Hua University, Taiwan, R.O.C.); Yi-Chun Lee (National Nano Device Laboratories, Taiwan); Guo-Wei Huang (National Nano Device Laboratories, Taiwan); Fon-Shan Huang (National Tsing Hua University, Taiwan, R.O.C.);

00:00 Microwaves and Millimeter-wave CMOS Frequency Doubler and Tripler Design
Kun-Long Wu (National Chiao Tung University, Taiwan); Han-Ting Tsai (National Chiao Tung University, Taiwan); Pei-Ling Tseng (National Chiao Tung University, Taiwan); Rob Hu (National Chiao Tung University, Taiwan); Christina F. Jou (National Chiao Tung University, Taiwan); Yu-Shao Shiao (National Nano-Device Laboratories, Taiwan);
### Session 1P_13a
**SC4: Optimal Antennas**

**Monday PM, August 25, 2014**

**Room M**

Organized by Mats Gustafsson, B. Lars G. Jonsson

Chaired by Mats Gustafsson, B. Lars G. Jonsson

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<td>00:00</td>
<td>Bandwidth Limitations and Trade-off Relations for Wide- and Multi-band Array Antennas over a Ground Plane</td>
<td>B. Lars G. Jonsson (KTH — Royal Institute of Technology, Sweden);</td>
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<tr>
<td>00:00</td>
<td>Low-cost Solutions for Optimal Antenna Design</td>
<td>Amalendu Patnaik (Indian Institute of Technology, India);</td>
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<tr>
<td>00:00</td>
<td>Quality Factor for Antennas: A Tutorial</td>
<td>Arthur D. Yaghjian (Electromagnetics Research Consultant, USA);</td>
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<td>00:00</td>
<td>Determining Physical Bounds for Antennas above Ground Planes</td>
<td>Doruk Taylı (Lund University, Sweden); Mats Gustafsson (Lund University, Sweden);</td>
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<tr>
<td>00:00</td>
<td>Further Research on the Stored Energies and Radiations Q</td>
<td>Geyi Wen (Nanjing University of Information Science and Technology, China);</td>
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<tr>
<td>00:00</td>
<td>An Overview of Current Optimization and Physical Bounds on Antennas</td>
<td>Jingjuan Wang (Beijing University of Posts and Telecommunications, China);</td>
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<td>00:00</td>
<td>Edge Effects in a Strongly Coupled Dipole Element Array in Triangular Lattice</td>
<td>Sven Nordebo (Linnaeus University, Sweden); Mats Gustafsson (Lund University, Sweden);</td>
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<tr>
<td>00:00</td>
<td>Computational Challenges in Convex Optimization for Antenna Analysis</td>
<td>Fangyuan Cheng (Beijing University of Posts and Telecommunications, China);</td>
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<tr>
<td>00:00</td>
<td>Antenna Lenses from Transformation Optics</td>
<td>Rhiannon C. Mitchell-Thomas (University of Exeter, UK); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden);</td>
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<tr>
<td>00:00</td>
<td>Indoor Transparent Antenna for Television Reception</td>
<td>Siti Nor Hafizah Sa’don (Universiti Teknologi Malaysia, Malaysia); Mohamed Ramlee Kamarudin (Universiti Teknologi Malaysia, Malaysia); Mohsen Khalily (Universiti Teknologi Malaysia, Malaysia);</td>
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</tbody>
</table>

### Session 1P_13b
**SC4: THz Antennas and Systems**

**Monday PM, August 25, 2014**

**Room M**

Organized by Xiaodong Chen, Junsheng Yu

<table>
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<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>00:00</td>
<td>A Simple Experimental Method to Analyze the Properties of Terahertz-wave Propagation in Complex Atmosphere</td>
<td>Xian Qi Lin (University of Electronic Science and Technology of China, China); Peng Mei (University of Electronic Science and Technology of China, China); X. F. Yang (Luoyang Electronic Equipment Center of China, China); Jia Wei Yu (University of Electronic Science and Technology of China, China); Yuan Jiang (University of Electronic Science and Technology of China, China); Yong Fan (University of Electronic Science and Technology of China, China);</td>
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<tr>
<td>00:00</td>
<td>A General and Effective Clutter Filtering Strategy for Quiet Zone Evaluation in Tri-reflector Compact Range</td>
<td>Jingjuan Wang (Beijing University of Posts and Telecommunications, China); Cheng Yang (Beijing University of Posts and Telecommunications, China); Yuan Yao (Beijing University of Posts and Telecommunications, China); Xiaoming Liu (Beijing University of Posts and Telecommunications, China); Junsheng Yu (Beijing University of Posts and Telecommunications, China); Xiaodong Chen (Queen Mary University of London, UK);</td>
</tr>
<tr>
<td>00:00</td>
<td>Implementation of Three-dimensional Diffractive Gaussian Beam Analysis Method</td>
<td>Fangguan Cheng (Beijing University of Posts and Telecommunications, China); Zejian Lu (Beijing University of Posts and Telecommunications, China); Xingming Liu (Beijing University of Posts and Telecommunications, China); Hai Wang (Beijing University of Posts and Telecommunications, China); Junsheng Yu (Beijing University of Posts and Telecommunications, China); Xiaodong Chen (Queen Mary University of London, UK);</td>
</tr>
</tbody>
</table>
00:00 A Fast Gaussian Beam Tracing Method for Quasi-optical System Analysis Based on Gabor Frame Expansion
Hai Wang (Beijing University of Posts and Telecommunications, China); Zejian Lu (Beijing University of Posts and Telecommunications, China); Fangyuan Cheng (Beijing University of Posts and Telecommunications, China); Junsheng Yu (Beijing University of Posts and Telecommunications, China); Xiaodong Chen (Queen Mary University of London, UK); Xiaoming Liu (Beijing University of Posts and Telecommunications, China); Yuan Yao (Beijing University of Posts and Telecommunications, China);
00:00 Microstrip Patch Antenna for Future Terahertz Communications
Umair Rafique (Mohammad Ali Jinnah University, Pakistan); Ali Iriram Najam (National Electronics Complex, Pakistan);
00:00 Development of Sub-Terahertz Wireless Technology at 175 GHz
Guangcun Shan (City University of Hong Kong, China); C. H. Shek (City University of Hong Kong, China);
00:00 Evaluation of the Fast Scanning THz-TDS Unit Using Voice Coil Motor
Yuma Nanba (Okayama University, Japan); Yasumasa Matsuoka (Okayama University, Japan); Kenji Sakai (Okayama University, Japan); Toshihiko Kiwa (Okayama University, Japan); Keiji Tsukada (Okayama University, Japan);
00:00 Simultaneous Reconstruction of the PEC and Dielectric Scatterers Via Inverse Scattering Method
Xiuzhu Ye (Beihang University, China);
00:00 Subspace-based Optimization for Inverse Scattering Problems at Oblique Incidence
Qingyang Meng (Zhejiang University, China); Dezin Ye (Zhejiang University, China); Qingyi Lu (Zhejiang University, China); Lizin Ran (Zhejiang University, China);
00:00 Contrast Source Inversion Method Using the Wavelet Basis
Oguz Semerci (Schlumberger-Doll Research, USA); Maokun Li (Schlumberger-Doll Research, USA); Aria Abubakar (Schlumberger-Doll Research, USA);
00:00 Non-contact Thermoacoustic Imaging
Xiong Wang (University of Arizona, USA); Yexian Qin (University of Arizona, USA); Tao Qin (University of Arizona, USA); Huan Meng (University of Arizona, USA); Russell S. Witte (University of Arizona, USA); Hao Xin (University of Arizona, USA);
00:00 Reconstructing 2D Perfectly Electric Conductors
Xudong Chen (National University of Singapore, Singapore); Xiuzhu Ye (Beihang University, China);
00:00 Multi-input Localized Electrical Property Retrieval — Theories and Numerical Examples
Shao Ying Huang (Massachusetts Institute of Technology, USA);
00:00 Fast Forward and Inverse Solution Methods for Magnetodielectric Materials
Qing Huo Liu (Duke University, USA); Wenji Zhang (Duke University, USA); Zhiru Yu (Duke University, USA); Yunyun Hu (Duke University, USA); Yuan Fang (Duke University, USA); Jianyang Zhou (Duke University, USA);

Session 1P_14b
SC5: Microwave Imaging: Detection, Localization and Profiling

Monday PM, August 25, 2014
Room N
Organized by Rocco Pierri, Raffaele Solimene
Chaired by Jean-Charles Bolomey

00:00 RCS Measurement of Large Target in Non-cooperative Near Field Environments
Xiuli Xu (Science and Technology on Electromagnetic Scattering Laboratory, China); Guangde Tong (Science and Technology on Electromagnetic Scattering Laboratory, China); Li Li (Science and Technology on Electromagnetic Scattering Laboratory, China); Kun Cai (Science and Technology on Electromagnetic Scattering Laboratory, China); Xiaobing Wang (Science and Technology on Electromagnetic Scattering Laboratory, China);

00:00 Parabolic Strip Telescope
Vladislav Kosejk (Czech Technical University in Prague, Czech Republic); Goce Chadzitaskos (Czech Technical University in Prague, Czech Republic); Jaroslav Cerveny (Czech Technical University in Prague, Czech Republic);

00:00 Nanoscale Imaging of a Transmission Mode Scanning Microwave Microscope Investigated by a 3D Finite-element Method
Abiola O. Oladipo (University College London, UK); Andrea Lucibello (University of Roma Tor Vergata, Italy); Manuel Kasper (Johannes Kepler University Linz, Austria); Spyros Lavdas (University College London, UK); Giovanni M. Sardi (Institute of Microelectronics and Microsystems, Italy); Emanuela Pioietti (Institute for Microelectronics and Microsystems, Italy); Ferry Kienberger (Agilent Technologies Austria GmbH, Austria); Romolo Marcelli (Institute of Microelectronics and Microsystems, Italy); Nicolae-Coriolan Panoiu (University College London, UK);

00:00 Comparison of the Time-reversal MUSIC and BP Algorithms in Multi-target Detection
Bing Li (South China University of Technology, China); Bin-Jie Hu (South China University of Technology, China);
00:00 Development of Magnetic Phase Mapping for Analyzing the Internal Structure of the Spot Welding
Song Nannan (Okayama University, Japan); Keisyu Shiga (Okayama University, Japan); Yuuya Tsukamoto (Okayama University, Japan); Kenji Sakai (Okayama University, Japan); Toshihiko Kiwa (Okayama University, Japan); Weiyang Cheng (Okayama University, Japan); Keiji Tsukada (Okayama University, Japan);

00:00 The Beam-wave Interaction for Different Modes in Three-gap Coupled Cavity Output Circuit
Jian Cui (North China University of Technology, China); Jirun Luo (Institute of Electronics, Chinese Academy of Science, China); Kainan Qi (Communication University of China, China); Jing Huang (Science and Technology on Electromagnetic Scattering Laboratory, China); Hongcheng Yin (National Electromagnetic Scattering Laboratory, China);

00:00 Fan-shaped Patch Element Wideband Terahertz Metamaterial Perfect Absorber
Xiaodong Hao (Nanjing University of Posts and Telecommunications, China); Weiping Qin (Nanjing University of Posts and Telecommunications, China);

00:00 Induced Polarization Method 3D Forward Modeling in Time Domain by Using Laplace Transformation
Wei Deng (Kyushu University, Japan); Hideki Mizunaga (Kyushu University, Japan); Jinsong Shen (China Petroleum University, China);

00:00 The Research of Methods Based on Traveling Wave Suppression
Guoqing Zhu (Science and Technology on Electromagnetic Scattering Laboratory, China); Chunzhu Dong (Communication University of China, China); Kainan Qi (Communication University of China, China); Jing Huang (Science and Technology on Electromagnetic Scattering Laboratory, China); Hongcheng Yin (National Electromagnetic Scattering Laboratory, China);

00:00 Solitary Wave Induced in a Sinusoidal Water Surface Wave Field of Hydrodynamics
Shigeisha Nakamura (Kyoto University, Japan);

00:00 Efficient Electromagnetic Scattering Simulation Approach of the Rotating Moving Complex Targets
Guoqing Zhu (Science and Technology on Electromagnetic Scattering Laboratory, China); Chunzhu Dong (Communication University of China, China); Kainan Qi (Communication University of China, China); Jing Huang (Science and Technology on Electromagnetic Scattering Laboratory, China); Hongcheng Yin (National Electromagnetic Scattering Laboratory, China);

00:00 Analytical Formulation for Electromagnetic Leakage from an Apertured Rectangular Cavity
Yue-Yue Li (North China Electric Power University, China); Chong-Qing Jiao (North China Electric Power University, China);

00:00 Influence of the Socket on Chip-level ESD Testing
Yu Xiao (Xiangtan University, China); Jianchong Li (National University of Defense Technology, China); Jianfei Wu (National University of Defense Technology, China); Yunzhi Kang (TEDA, China); Jianwei Su (Xiangtan University, China);

00:00 Fan-shaped Patch Element Wideband Terahertz Metamaterial Perfect Absorber Based on Split Ring Resonant
Jia-Lin Yuan (Nanjing University of Aeronautics and Astronautics, China); Shaoxin Liu (Nanjing University of Aeronautics and Astronautics, China); Bo-Rui Bian (Nanjing University of Aeronautics and Astronautics, China); Xiang-Kun Kong (Nanjing University of Aeronautics and Astronautics, China); Hai Feng Zhang (Nanjing University of Aeronautics and Astronautics, China); Ben Ma (Nanjing University of Aeronautics and Astronautics, China); Zhiwen Mao (Nanjing University of Aeronautics and Astronautics, China); Beigui Wang (Nanjing University of Aeronautics and Astronautics, China);

00:00 The Research of Methods Based on Traveling Wave Suppression
Xiaodong Hao (Nanjing University of Posts and Telecommunications, China); Weiping Qin (Nanjing University of Posts and Telecommunications, China);

00:00 Induced Polarization Method 3D Forward Modeling in Time Domain by Using Laplace Transformation
Wei Deng (Kyushu University, Japan); Hideki Mizunaga (Kyushu University, Japan); Jinsong Shen (China Petroleum University, China);

00:00 The Beam-wave Interaction for Different Modes in Three-gap Coupled Cavity Output Circuit
Jian Cui (North China University of Technology, China); Jirun Luo (Institute of Electronics, Chinese Academy of Science, China); Wenkai Liu (North China University of Technology, China); Haiyan Sun (North China University of Technology, China); Zhi Liu (North China University of Technology, China); Ming Huang (North China University of Technology, China);

00:00 Efficient Electromagnetic Scattering Simulation Approach of the Rotating Moving Complex Targets
Guoqing Zhu (Science and Technology on Electromagnetic Scattering Laboratory, China); Chunzhu Dong (Communication University of China, China); Kainan Qi (Communication University of China, China); Jing Huang (Science and Technology on Electromagnetic Scattering Laboratory, China); Hongcheng Yin (National Electromagnetic Scattering Laboratory, China);

00:00 Fan-shaped Patch Element Wideband Terahertz Metamaterial Perfect Absorber
Xiaodong Hao (Nanjing University of Posts and Telecommunications, China); Weiping Qin (Nanjing University of Posts and Telecommunications, China);

00:00 Solitary Wave Induced in a Sinusoidal Water Surface Wave Field of Hydrodynamics
Shigeisha Nakamura (Kyoto University, Japan);

00:00 The Casimir Force and Heat Conduction Viewed as Exclusion of Natural Spatial Energy and Lateral EM Coupling between the Walls of a Waveguide
Michael James Underhill (Underhill Research Ltd., UK);
00:00 A Broadband Terahertz Metamaterial Absorber Based on Square Ring Resonators
Guo-Dong Wang (Huazhong University of Science and Technology, China); Jun-Feng Chen (Huazhong University of Science and Technology, China); Xiwei Hu (Huazhong University of Science and Technology, China); Minghai Liu (Huazhong University of Science and Technology, China);

00:00 Multi-band Microwave Metamaterial Perfect Absorber Based on Mie Resonance Theory
Jun-Feng Chen (Huazhong University of Science and Technology, China); Guo-Dong Wang (Huazhong University of Science and Technology, China); Zhaokuan Chen (Anhui University of Science and Technology, China); Minghai Liu (Huazhong University of Science and Technology, China); Xiwei Hu (Huazhong University of Science and Technology, China);

00:00 Temperature Dependence of Liquid Filled Photonic Crystal Fibers
Jingli Lei (Lanzhou University of Technology, China); Shang-Lin Hou (Lanzhou University of Technology, China); Yanjun Liu (Lanzhou University of Technology, China); Xiaoxiao Li (Lanzhou University of Technology, China);

00:00 Integrated Optical Chemical Sensor Based on an SOI Ring Resonator Using Phase-interrogation
Xi Zhou (South China Normal University, China); Zhi Qiao (South China Normal University, China); Chenzhao Zhang (South China Normal University, China); Jianhao Zhang (South China Normal University, China); Tuowen Xiang (South China Normal University, China); Yaocheng Shi (Zhejiang University, China); Liu Liu (South China Normal University, China); Xi Zhou (South China Normal University, China);

00:00 Neural Correlates of Feigned Memory Impairment with Different Motivations: A Functional Near-infrared Spectroscopy (FNIRS) Study
Fang Li (South China Normal University (SCNU), China); Quanqian Gao (South China Normal University (SCNU), China); Huilin Zhu (South China Normal University (SCNU), China); Guanzhong Xu (South China Normal University (SCNU), China); Xinge Li (South China Normal University (SCNU), China); Ziqiang Hu (South China Normal University (SCNU), China); Sailing He (Zhejiang University, China);

00:00 A Low-cost CCD-based Imager for Mapping Venous Oxygenation
Jun Li (South China Normal University, China); Xiao Zhang (South China Normal University, China);
00:00 Using Functional Near-infrared Spectroscopy to Investigate Frontal Cortical Response to Joint/non-joint Attention in Children
Jun Li (South China Normal University, China); Zhi-fang Zhu (South China Normal University, China); Huilin Zhu (South China Normal University (SCNU), China);

00:00 A Novel Compact Tri-band Bandpass Filter with Good Selectivity
Ding-Hong Jia (Southwest Jiaotong University, China); Quanyuan Feng (Southwest Jiaotong University, China); Xiao-Guo Huang (Southwest Jiaotong University, China); Qian-Yin Xiang (Southwest Jiaotong University, China);

00:00 Dual-band Antenna Using Composite Right/Left-handed Transmission Lines for MICS and ISM Application
Yemin Hein (Korea Electronics Technology Institute, Korea); Se-Hwan Choi (Korea Electronics Technology Institute, Republic of Korea);

00:00 Dual-band Bandpass Filter with Good Selectivity and Stopband Rejection
Daotong Li (University of Electronic Science and Technology of China, China); Yonghong Zhang (University of Electronic Science and Technology of China, China); Kaida Xu (University of Electronic Science and Technology of China, China); Kaifeng Song (University of Electronic Science and Technology of China, China); Joshua Le-Wei Li (Monash University, Malaysia);

00:00 Diagnosis of Faulty Elements in Array Antenna Using Nature Inspired Cuckoo Search Algorithm
Shafqat Ullah Khan (ISRA University, Pakistan); Ijaz Mansoor Qureshi (Air University, Pakistan); Bilal Shoaib Khan (International Islamic University, Pakistan); Fawad Zaman (International Islamic University, Pakistan);

00:00 A Multi-layer Inductive Frequency Selective Surface for Use in the Ka and Ku Frequency Bands
Jonathan M. Rigelsford (The University of Sheffield, United Kingdom); Andrea Vallecchi (The University of Sheffield, United Kingdom);

00:00 New Design of Low Cost and Easy Tuning Compact GPS Microstrip Antenna
Chunjuan Li (Dalian Maritime University, China); Shiqiang Fu (Dalian Maritime University, China); Te Shao (Dalian Maritime University, China); Hongmei Liu (Dalian Maritime University, China);

00:00 Solitary Wave Induced in a Water Surface Wave Field
Shigeisa Nakamura (Kyoto University, Japan);

00:00 Chaotic FM Signals for Circular SAR Imaging
Lingjuan Yu (Graduate University of the Chinese Academy of Sciences, China); Xiao-Chun Xie (Gannan Normal University, China); Lingling Xiao (Jiangxi University of Science and Technology, China);

00:00 Improve Compressive Sensing Radar Imaging Performance by Optimizing Measurement Matrix
Xiao-Chun Xie (Gannan Normal University, China); Lingjuan Yu (Graduate University of the Chinese Academy of Sciences, China);

00:00 Compact Microstrip Diplexer for 4G Wireless Communication
Fangqi Yang (East China Jiaotong University, China); Xuehui Guan (East China Jiaotong University, China); Lei Zhu (University of Macau, China); Hui Wen Liu (East China Jiaotong University, China);

00:00 A High Gain Slot Antenna Based on Surface Plasmon Polaritons
Hongjuan Han (Soochow University, China); Huiping Guo (Soochow University, China); Xueguan Liu (Soochow University, China); Ying Wang (Soochow University, China);

00:00 A Compact Circular Polarized Tag Antenna in UHF Band for Metallic Object Application
Yusha Liu (Zhejiang University, China); Qi Liu (Zhejiang University, China); Bo Xu (Zhejiang University, China); Jun Hu (Zhejiang University, China);

00:00 A Miniaturized Unidirectional Moxon Antenna for UHF RFID Tags
Qi Liu (Zhejiang University, China); Shuai Zhang (KTH Royal Institute of Technology, Sweden); Bo Xu (Zhejiang University, China);

00:00 Optimization of Machine Learning Parameters for Spectrum Survey Analysis
Robert Urban (Brno University of Technology, Czech Republic); Miloslav Steinbauer (Brno University of Technology, Czech Republic);

00:00 Novel Miniaturized Satellite Navigation Antennas Based on Substrate Integrated Waveguide
Shunyu Fang (East China Normal University, China); Tailei Wang (East China Normal University, China); Shouzheng Zhu (East China Normal University, China);

00:00 A Novel Phase Measurement System Based on Six Port Reflectometer and LabVIEW
Tailei Wang (East China Normal University, China); Jiayun Bian (East China Normal University, China); Shouzheng Zhu (East China Normal University, China);
00:00 TD-LTE Antenna Array Smart Cover Study
Feng Gao (China Mobile Group Design Institute, China); Runhong Shan (Copyright Protection Center of China, China); Wentao Zhu (China Mobile Group Design Institute, China); Kai He (China Mobile Group Design Institute, China); Zhiyuan Song (China Mobile Group Design Institute, China);

00:00 Investigation on Electromagnetic Scattering form Dielectric Soil Rough Surface with a PEC Object Embedded in It
Hongmei Miao (Yunan University, China); Peng-Ju Yang (Xidian University, China);

00:00 Design and Development of a One Layer Planar Slot Antenna for Secondary Surveillance Radar
Maziar Hedayati (Iran University of Science and Technology, Iran); Gholamreza Askari (Isfahan University of Technology (IUT), Iran); Parisa Moslemi (Isfahan University of Technology, Iran); Hamid Mirmohammad Sadeghi (Isfahan University of Technology (IUT), Iran);

00:00 Study on the Characteristics of Long-wave Radiation over China Area
Yuntao Ma (Shenyang Jianzhu University, China); Lishuang Sun (Shenyang Jianzhu University, China); H. Ding (Shenyang Jianzhu University, China);

00:00 The Study of the Generalized Stereopair Matching Method
Lishuang Sun (Shenyang Jianzhu University, China); Yuntao Ma (Shenyang Jianzhu University, China); He Wang (Liaoning Water Conservancy Vocational College, China);

00:00 Study on Surface Albedo of Different Land Cover Types in Liaoning Province
Jingli Wang (Shenyang Jianzhu University, China); Yuntao Ma (Shenyang Jianzhu University, China); Lishuang Sun (Shenyang Jianzhu University, China);

00:00 Study on the Variation of Vegetation in Shenyang City Based on MODIS Data
Yuntao Ma (Shenyang Jianzhu University, China); Jingli Wang (Shenyang Jianzhu University, China); Lishuang Sun (Shenyang Jianzhu University, China);

00:00 Oil Spill Detection Based on Characteristic Parameters and HAC
Honglei Zheng (Ocean University of China, China); Yan-Min Zhang (Ocean University of China, China); Yuhua Wang (Ocean University of China, China);

00:00 The Damping Model for Sea Waves Covered by Oil Films of Finite Thickness
Yuhua Wang (Ocean University of China, China); Yan-Min Zhang (Ocean University of China, China); Honglei Zheng (Ocean University of China, China);

00:00 Optimization of Pickup Coil in Compact Magnetometer with DC/AC Unit Employing High-Tc SQUID
Yuichi Ishihara (Okayama University, Japan); Mohd Mawardi Saari (Okayama University, Japan); Taki Kusaka (Okayama University, Japan); Yuya Tsukamoto (Okayama University, Japan); Kenji Sakai (Okayama University, Japan); Toshikazu Kawa (Okayama University, Japan); Keiji Tsukuda (Okayama University, Japan);

00:00 Microwave Radiation Image Reconstruction Method Based on Adaptive Multi-structural Dictionary Learning
Lu Zhu (East China Jiaotong University, China); Jiangfeng Liu (East China Jiaotong University, China); Yuanjuan Liu (East China Jiaotong University, China); Suhua Chen (East China Jiaotong University, China);

00:00 The EMC Impact due Household Appliances in Smart Grid Networks
Stefania Sousa (Universidade Federal de Sao Joao Del Rei — UFSJ, Brazil); C. E. Capovilla (Universidade Federal do ABC — UFABC, Brazil); Humberto Xavier De Araujo (Universidade Federal de Sao Joao Del Rei — UFSJ, Brazil);

00:00 Parallel Computing of Discontinuous Galerkin Time-domain Method
Junru Gong (National University of Defense Technology, China); Da Peng (National University of Defense Technology, China); Xingji Tang (National University of Defense Technology, China); Hu Yang (National University of Defense Technology, China);

00:00 Determination of Microwave Conductivity of Electrolyte Solutions from Debeye-Drude Model
Shuo Li (Soochow University, China); Sucheng Li (Soochow University, China); Shahzad Anwar (Soochow University, China); Fa Tian (Soochow University, China); Weizin Lu (Soochow University, China); Bo Hou (Soochow University, China);

00:00 Under CPCI Architecture is RF Amplitude and Phase Control Technology Based on All-digital IQ
Shaopeng Zhong (Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China);

00:00 Numerical Simulations of a Complete GTEM Chamber
Humberto Xavier De Araujo (Universidade Federal de Sao Joao Del Rei — UFSJ, Brazil); C. E. Capovilla (Universidade Federal do ABC — UFABC, Brazil); L. C. Kretly (Universidade Estadual de Campinas — UNICAMP, Brazil);
00:00 Stacked Metamaterials Enables Ultranarrow and Directional Thermal Emission

Yongkang Gong (University of South Wales, UK); Kang Li (University of South Wales, UK); Jun-gang Huang (University of South Wales, UK); J. J. Martinez (University of South Wales, UK); Nigel Copner (University of South Wales, UK);

00:00 Microwave Coherent Perfect Absorption Based on Ultrathin Conductive Films

Sucheng Li (Soochow University, China); Jie Luo (Soochow University, China); Shahzad Anwar (Soochow University, China); Shuo Li (Soochow University, China); Weixin Lu (Soochow University, China); Zhi Hong Hang (Soochow University, China); Yun Lai (Soochow University, China); Bo Hou (Soochow University, China); Mingrong Shen (Soochow University, China); Chinhua Wang (Soochow University, China);

00:00 A Metamaterial-based Probe for EMC Measurements

M. F. P. Tartaglia (Universidade Federal de S˜ ao Jo˜ ao Del Rei — UFSJ, Brazil); A. V. Cardoso (Universidade Federal de S˜ ao Jo˜ ao Del Rei — UFSJ, Brazil); C. E. Capovilla (Universidade Federal do ABC — UFABC, Brazil); Humberto Xavier De Araujo (Universidade Federal de S˜ ao Jo˜ ao Del Rei — UFSJ, Brazil);

00:00 Investigation of L Band Metallic Photonic Crystal TEM-TE_{11} Mode Converter

Dong Wang (Institute of Applied Electronics, China Academy of Engineering Physics, China); Fen Qin (Institute of Applied Electronics, China Academy of Engineering Physics, China); Chunxia Li (Institute of Applied Electronics, China Academy of Engineering Physics, China); Sha Xu (Institute of Applied Electronics, China Academy of Engineering Physics, China);

00:00 Study on the Electromagnetic Properties of Reentry Plasma Sheath with FDTD Method Using Z-transforms

Yuan Fang (Harbin Institute of Technology, China); Chenzun Yuan (Harbin Institute of Technology, China); Ruilin Gao (Harbin Institute of Technology, China); Ying Wang (Harbin Institute of Technology, China); Zhongxiang Zhou (Harbin Institute of Technology, China);

00:00 Ultra-wideband Low-reflection Metamaterial Absorber Based on Symmetrical Split Ring Resonator

Bo-Rui Bian (Nanjing University of Aeronautics and Astronautics, China); Shaobin Liu (Nanjing University of Aeronautics and Astronautics, China); Xiang-Kun Kong (Nanjing University of Aeronautics and Astronautics, China); Hai Feng Zhang (Nanjing University of Aeronautics and Astronautics, China); Ben Ma (Nanjing University of Aeronautics and Astronautics, China); Jia-Lin Yuan (Nanjing University of Aeronautics and Astronautics, China); Beiyin Wang (Nanjing University of Aeronautics and Astronautics, China);

00:00 A Novel Ultrathin and Broadband Microwave Metamaterial Absorber

Beiyin Wang (Nanjing University of Aeronautics and Astronautics, China); Shaobin Liu (Nanjing University of Aeronautics and Astronautics, China); Bo-Rui Bian (Nanjing University of Aeronautics and Astronautics, China); Zhiwen Mao (Nanjing University of Aeronautics and Astronautics, China); Lin Chen (Nanjing University of Aeronautics and Astronautics, China);

00:00 Novel Triple-band Wide Angles Microwave Metamaterial Absorber

Ben Ma (Nanjing University of Aeronautics and Astronautics, China); Shaobin Liu (Nanjing University of Aeronautics and Astronautics, China); Bo-Rui Bian (Nanjing University of Aeronautics and Astronautics, China); Xiang-Kun Kong (Nanjing University of Aeronautics and Astronautics, China); Hai Feng Zhang (Nanjing University of Aeronautics and Astronautics, China); Zhiwen Mao (Nanjing University of Aeronautics and Astronautics, China); Beiyin Wang (Nanjing University of Aeronautics and Astronautics, China);

00:00 3D Subwavelength Resolution beyond the Abbe Barrier with Zone Plate in Millimeter Wave

Igor V. Minin (Siberian State Geodesy Academy, Russia); Oleg V. Minin (Novosibirsk State Technical University, Russia);

00:00 Experimental Realization of Modulated Cerenkov Frequency-conversions in Nonlinear Photonic Crystals via Ultra-fast Laser

Changdong Chen (Nanjing University of Aeronautics and Astronautics, China); Xiao Peng Hu (Nanjing University, China);

00:00 Synthesis of NaY/GdF₄:Yb, Er Nanocrystals with Efficient Up-conversion Fluorescence

Meng Han (Beijing Jiaotong University, China);
00:00 Design of Base Station Antenna for RF Energy Harvesting  
Jung-Ick Moon (Electronics and Telecommunications Research Institute, South of Korea); In-Kui Cho (Electronics and Telecommunications Research Institute, South of Korea); Seong-Min Kim (Electronics and Telecommunications Research Institute, South of Korea); Jae-Hun Yun (Electronics and Telecommunications Research Institute, South of Korea); Woo Jin Byun (Electronics and Telecommunications Research Institute, South Korea);

00:00 Sidelobes Artifacts Suppression in Through-the-wall MIMO Radar Imaging  
Xin Sun (National University of Defense Technology, China); Bi Ying Lu (National University of Defense Technology, China); Pengfei Liu (National University of Defense Technology, China); Zhi-Min Zhou (National University of Defense Technology, China);

00:00 Design and Analysis of a Wideband Frequency Synthesizer  
Jin-Kui Yan (Shanghai University, China); Yue-Yu Xiao (Shanghai University, China); Jia-Ke Tian (Shanghai University, China);

00:00 Electromagnetic Modeling of Microwave Components  
Malika Ourabia (University of Sciences and Technologies Houari Boumediene, Algeria);

00:00 Design of Compact Passive Tag Antenna for Practical RFID Applications  
Zihan Chen (Zhejiang University, China); Sailing He (Zhejiang University, China); Dongdi Zhu (Zhejiang University, China); Chengcheng Du (Zhejiang University, China);

00:00 Statistical Characterization of Multiple Antennas Dynamic Body-to-body Radio Propagation Channel  
Hasliza A. Rahim (Universiti Malaysia Perlis (UniMAP), Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia); V. Ganesan (Universiti Malaysia Perlis, Malaysia); K. K. Goh (Universiti Malaysia Perlis, Malaysia); F. A. A. Fuad (Universiti Malaysia Perlis, Malaysia); Noor Anida Abu Talib (Universiti Malaysia Perlis (UniMAP), Malaysia); Farah Salwani Abdullah (Universiti Malaysia Perlis (UniMAP), Malaysia);

00:00 An Efficient Design Method for Actively Shielded Cylindrical Gradient Coils  
Xuewei Ping (Nanjing University of Science and Technology, China); Xinghui Yin (HoHai University, China); Jiaqi Chen (HoHai University, China);

00:00 Another Concept of Brain Functioning  
Isaev Anatoly (P. N. Lebedev Physical Institute, Russia);

00:00 Effects of 2.45 GHz Wireless Body Area Network Electromagnetic Field Exposure on Human Cognitive Performance  
Hasliza A. Rahim (Universiti Malaysia Perlis (UniMAP), Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia); Noor Anida Abu Talib (Universiti Malaysia Perlis (UniMAP), Malaysia); Farah Salwani Abdullah (Universiti Malaysia Perlis (UniMAP), Malaysia);

00:00 Fractal Etched Bow-tie Antenna Loading Zero-index Metamaterials  
Kai Ma (Southeast University, China); Huifeng Ma (Southeast University, China); Qiang Cheng (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 Validating Generalized Nonlocal Optics by First Principles Calculations  
Pu Zhang (Zhejiang University, China); Martijn Wubs (Technical University of Denmark, Denmark); N. Asger Mortensen (Technical University of Denmark, Denmark);

00:00 An Ultra-dense Optical Comb Based DWDM-OFDM-PON System  
Rui Lin (Huazhong University of Science and Technology, China); Ming Tang (Huazhong University of Science and Technology (HUST), China); Ruozu Wang (Huazhong University of Science and Technology (HUST), China); Zhenhua Feng (Huazhong University of Science and Technology, China); Songjuan Fu (Huazhong University of Science and Technology, China); Deming Liu (Huazhong University of Science and Technology, China); Jiajia Chen (KTH Royal Institute of Technology, Sweden); Perry Ping Shum (Nanyang Technological University, Singapore);

00:00 Enhancing Plasmonic Photocatalytic Activity Using Silver Nanobeads  
Jia Shuan Wu (Chien Hsin University of Science and Technology, Taiwan, R.O.C.); Wayne Yang (Chien Hsin University of Science and Technology, Taiwan, R.O.C.); Yuan-Fong Chau (Chien Hsin University of Science and Technology, Taiwan, R.O.C.);

00:00 Giant Enhancement of Nonreciprocity Using Hybrid Plasmonic-photonic Crystals  
Kezin Liu (Zhejiang University, China); Wei Jiang (Zhejiang University, China); Sailing He (Zhejiang University, China);
00:00 Magnetic Tuning Ferrite-dielectric Left-handed Material
Bai Du (Xi’an Jiaotong University, China); Jun Wang (Xi’an Jiaotong University, China); Zhuo Xu (Xi’an Jiaotong University, China); Song Xia (Xi’an Jiaotong University, China);

00:00 Controlled Growth of ZnO Nanorods via Coprecipitation Method with Application to Dye-sensitized Solar Cells
Ru Chen (Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, China); Lei Miao (Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, China); Haoliang Cheng (Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, China); Chengyan Liu (Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, China); Hui Gu (Shanghai Institute of Ceramics, Chinese Academy of Sciences, China);

00:00 Compact SU8-silica Hybrid Thermo-optic Switch with Low Power Consumption
Wei Peng (Zhejiang University, China); Pengzhen Chen (Zhejiang University, China); Yaoceng Shi (Zhejiang University, China);

00:00 Two-dimensional Polarization Independent All-dielectric Left-handed Metamaterial in Free Space
Jun Wang (Xi’an Jiaotong University, China); Shaobo Qu (Air Force Engineering University, China); Mingde Feng (Air Force Engineering University, China); Bai Du (Xi’an Jiaotong University, China); Zhuo Xu (Xi’an Jiaotong University, China);

00:00 Two-photon Absorption Effects and Its Characteristics of Terahertz Radiation
Che-Wei Huang (National Sun Yat-sen University, Taiwan); Jian-An Yao (National Sun Yat-sen University, Taiwan); Hsuan-Yin Chen (National Sun Yat-sen University, Taiwan); Chao-Kuei Lee (National Sun-Yat-Sen University, Taiwan, R.O.C.);

00:00 Optical Transmission through Ultrathin Metal Films
Shanshan Wu (Xiamen University, China); Jinfeng Zhu (Xiamen University, China); Jiaye Li (Xiamen University, China); Yangqiang Bai (Xiamen University, China); Qinghuo Liu (Duke University, USA);

00:00 Study of an Agar Medium Using Terahertz Chemical Microscope
Akhiro Nakamura (Okayama University, Japan); Hiroguki Nino (Okayama University, Japan); Kenji Sakai (Okayama University, Japan); Toshikazu Kiwa (Okayama University, Japan); Keiji Tsukada (Okayama University, Japan);

00:00 Metallohalide Perovskite-polymer Composite Film for Hybrid Planar Heterojunction Solar Cells
Hin-Lap Yip (South China University of Technology, China);

00:00 Stability of Four- and Five-soliton Molecules in Dispersion-managed Optical Fiber
Abdelali Boudjemaa (Hassiba Benbouali University of Chlef, Algeria);

00:00 Photonic Temporal Integrator Based on Semiconductor Lasers Under Lasing Condition
Ming Li (Institute of Semiconductors, Chinese Academy of Sciences, China); Ningbo Huang (Institute of Semiconductors, Chinese Academy of Sciences, China); Reza Ashrafi (Institut National de la Recherche Scientifique-Energie, Matériaux et Télécommunications (INRS-EMT), Canada); Xin Wang (Institute of Semiconductors, Chinese Academy of Sciences, China); Wei Li (Institute of Semiconductors, Chinese Academy of Sciences, China); Lixian Wang (Institute of Semiconductors, Chinese Academy of Sciences, China); Jose Azana (Institut National de la Recherche Scientifique-Energie, Matériaux et Télécommunications (INRS-EMT), Canada); Ninghua Zhu (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Typical Activation but Atypical Connectivity in Prefrontal Cortex of Children with Autism Spectrum Disorder under Rehabilitation during Joint Attention: A fNIRS Study
Jun Li (South China Normal University (SCNU), China); Hulin Zhu (South China Normal University (SCNU), China); Huan Guo (South China Normal University (SCNU), China); Heyon Shen (South China Normal University (SCNU), China); Lan Gao (South China Normal University (SCNU), China); Ziqiang Hu (South China Normal University (SCNU), China); Quanqian Gao (South China Normal University (SCNU), China); Sailing He (Zhejiang University, China);

00:00 Plasmonic Butterfly-shaped Photocoupling in Charge Sensitive Infrared Phototransistors
Jie Xu (Fudan University, China); Qinbai Qian (Fudan University, China); Peng Gou (Fudan University, China); Le Yang (Fudan University, China); Zhenghua An (Fudan University, China);
00:00 Highly Integrated Microfluidic Chip for Immunoassays Based on Phase-sensitive Surface Plasmon Resonance Biosensing
Li Jiang (Zhejiang University, China); Gaoao Ye (Zhejiang University, China); Sailing He (Zhejiang University, China);

00:00 Tungsten Selective Emitter Based on Core-shell Nanospheres
Lei Mo (Zhejiang University, China); Liu Yang (Zhejiang University, China); Sailing He (Zhejiang University, China);

00:00 Solution-grown Organic Single-crystalline p-n Junctions with Ambipolar Transport
Congcheng Fan (Zhejiang University, China); Hongzheng Chen (Zhejiang University, China); Hanging Li (Zhejiang University, China);

00:00 Study on Accuracy and Efficiency of the Numerical Algorithm for Electromagnetic Scattering from Targets and Rough Surface
Yu Liang (Yangzhou University, China); Li-Xin Guo (Xidian University, China); Xiang-Hua Zeng (Yangzhou University, China); Jinguo Hu (Yangzhou University, China); Zhen-Sen Wu (Xidian University, China);

00:00 Analysis of the Far Field of Communication Base-station Antenna under the Condition of Flat Ground
Kai Wu (University of Electronic Science and Technology of China (UESTC), China); Jin Pan (University of Electronic Science and Technology of China, China);

00:00 Application of S-UTD-CH Model into Multiple Diffraction Scenarios at 900 MHz
Mehmet Baris Tubakcioglu (Bayburt University, Turkey); Doruk Ayberkin (Bayburt University, Turkey);

00:00 Analysis of Changing of Building Parameters via S-UTD-CH Model in Multiple Diffractions
Mehmet Baris Tubakcioglu (Bayburt University, Turkey); Doruk Ayberkin (Bayburt University, Turkey);

00:00 When ‘Light’ Dawns upon Them: Mapping the Conceptual Understanding of Electromagnetism Students
Stefan Yoshi Buhmann (University of Freiburg, Germany);

00:00 Electromagnetic Education: Is There a Magic Bullet to Fix the Crisis?
Raj Mittra (The Pennsylvania State University, USA);

00:00 Flux-cutting and Electromotive Force: How to Motivate Students into Electrodynamics
Ari Sihvola (Aalto University School of Electrical Engineering, Finland);

00:00 Alignment of Student Activities, through Exercises, Quizzes, Demonstrations, and Lectures, Applied to Electromagnetic Teaching
B. Lars G. Jonsson (KTH — Royal Institute of Technology, Sweden);

00:00 Electrical Engineering Education Systems in Finnish and Chinese Universities
Jiaran Qi (Harbin Institute of Technology, China);

00:00 Using Popular Science Summaries to Improve Writing Skills in Master Theses
Daniel Sjoberg (Lund University, Sweden);

00:00 Practices and Explorations on Introducing New Scientific Research Achievements into Electromagnetics Teaching for Undergraduates
Jing Liu (National University of Defense Technology, China); Jun Zhang (National University of Defense Technology, China); Hanwu Yang (National University of Defense Technology, China);

00:00 Study of Fraunhofer Diffraction Pattern Using Frequency Image Processing
Jimmy Alexander Cortes Osorio (Universidad Tecnológica de Pereira, Colombia); Jairo Alberto Mendoza Vargas (Universidad Tecnológica de Pereira, Colombia);

Session 2A2
MS-2.2: Focus Session on Radio-over-Fiber Systems

Tuesday AM, August 26, 2014
Room B
Organized by Kun Xu, Woo-Young Choi
Chaired by Kun Xu
00:00 High-speed Photo-detectors for Millimeter-wave RoF Applications
Toshimasa Umezawa (National Institute of Information and Communications Technology, Japan); Atsushi Kanno (National Institute of Information and Communications Technology, Japan); Tetsuya Kawanishi (National Institute of Information and Communications Technology, Japan);

00:00 The Convergence of Wireless and Radio-over-Fiber Systems
Wai Pang Ng (Northumbria University, UK);

00:00 In-home Fiber Wireless Networks Incorporating Optical Microwave Beam Steering: System Architecture and Integrated Device
Zizheng Cao (Eindhoven University of Technology, The Netherlands); A. M. J. Koonen (Eindhoven University of Technology, The Netherlands); Y. Jiao (Eindhoven University of Technology, The Netherlands); Q. Wang (Eindhoven University of Technology, The Netherlands); Henric P. A. Van den Boom (Eindhoven University of Technology, The Netherlands); E. Tangdiongga (Eindhoven University of Technology, The Netherlands);

00:00 Photonic-assisted Ultrafast THz Wireless Access
Xianbin Yu (Technical University of Denmark, Denmark); Ying Chen (Technical University of Denmark, Denmark); Michael Galili (Technical University of Denmark, Denmark); Toshio Marioka (Technical University of Denmark, Denmark); Peter Uhd Jepsen (Technical University of Denmark, Denmark); Leif K. Oxenow (Technical University of Denmark, Denmark);

00:00 All-optical Frequency Conversion Techniques for Radio-over-fiber Applications
Jong-In Song (Gwangju Institute of Science and Technology (GIST), South Korea);

00:00 Multi-dimensional Digital Predistortion for Multi-band Radio-over-fiber Systems
Jianqiang Li (Beijing University of Posts and Telecommunications, China); Hao Chen (Beijing University of Posts and Telecommunications, China); Yingming Pei (Beijing University of Posts and Telecommunications, China); Changjing Yin (Beijing University of Posts and Telecommunications, China); Kun Xu (Beijing University of Posts and Telecommunications, China);

00:00 Wireless Backhaul Challenge: Optical-wireless Network Integration as a Solution
Thas Ampalavanapillai Nirmalathas (The University of Melbourne, Australia); Chathurika Ranaweera (The University of Melbourne, Australia); Yizhuo Yang (The University of Melbourne, Australia); Elaine Wong (The University of Melbourne, Australia); Christina Lim (The University of Melbourne, Australia);

00:00 Fiber-wireless System Techniques for Next-Gen Multi-Gb/s Wireless Applications
Anthony Ng’Oma (Corning Incorporated, USA); Hejie Yang (Eindhoven University of Technology, The Netherlands); Po-Tsung (Boris) Shih (Corning Taiwan Research Center, Taiwan, R.O.C.);

00:00 High Capacity Radio over Fiber System at the 75–110 GHz Band
Lei Deng (Huazhong University of Science and Technology, China); Songmian Fu (Huazhong University of Science and Technology (HUST), China); Ming Tang (Huazhong University of Science and Technology (HUST), China); Deming Liu (Huazhong University of Science and Technology, China); Perry Ping Shum (Nanyang Technological University, Singapore);

00:00 Broadband Analysis and Characterization of Noise for In-door Power-line Communication Channels
Modisa Mosalaosi (University of KwaZulu-Natal, South Africa); Thomas Joachim Odhiambo Afullo (University of Kwa-Zulu Natal (UKZN), South Africa);

Session 2A3
MS-1.5: Organic and Hybrid Solar Cells 1
Tuesday AM, August 26, 2014
Room C
Organized by Wallace C. H. Choy, Hin-Lap Yip
Chaired by Wallace C. H. Choy, Hin-Lap Yip

00:00 Dynamic Donor: Acceptor and Electrode Interfaces in Organic Bulk-heterojunction and Perovskite Solar Cells under Device-operating Condition
Bin Hu (Huazhong University of Science and Technology, China);
00:00 Film Morphology Control for High Efficiency Perovskite Solar Cells  
Liyan Han (National Institute for Materials Science, Japan); Xudong Yang (National Institute for Materials Science, Japan); Chuanjiang Qin (National Institute for Materials Science, Japan); Yongzhen Wu (National Institute for Materials Science, Japan); Jian Liu (National Institute for Materials Science, Japan);

00:00 Nickel Oxide Electrode Interlayer in CH$_3$NH$_3$PbI$_3$ Perovskite/PCBM Planar-heterojunction Hybrid Solar Cells  
Jun-Yuan Jeng (National Cheng Kung University, Taiwan); Kuo-Cheng Chen (National Cheng Kung University, Taiwan); Tsung-Ya Chiang (National Cheng Kung University, Taiwan); Tsung-Fang Guo (National Cheng Kung University, Taiwan); Peter Chen (National Cheng Kung University, Taiwan);

00:00 Organic and Hybrid Photovoltaics Based on Conjugated Polymers and Organo-lead Halides  
Chih-Ping Chen (Ming Chi University of Technology, Taiwan);

00:00 P-type Solar Cells Based on Organometal Halide Perovskites Sensitized Mesoporous NiO Photocathodes  
Xianwei Zeng (Huazhong University of Science and Technology, China); Wei Chen (Huazhong University of Science and Technology, China);

00:00 High-performance Planar Heterojunction Perovskite Solar Cells: Preserving Long Charge Carrier Diffusion Lengths and Interfacial Engineering  
Yizheng Jin (University of Surrey, China); Baoguan Sun (Soochow University, China);

00:00 Interface Engineering and Morphology Control for High Performance Perovskite/Fullerene Planar Heterojunction Solar Cells  
Hin-Lap Yip (South China University of Technology, China); Qifan Xue (South China University of Technology, China); Chen Sun (South China University of Technology, China); Zhicheng Hu (South China University of Technology, China); Fei Huang (South China University of Technology, China); Yong Cao (South China University of Technology (SCUT), China);

00:00 Two-dimensional Conjugated Benzo[1,2-b:4,5-b']dithiophene-based Photovoltaic Polymers  
Jianhui Hou (Institute of Chemistry, Chinese Academy of Sciences, China);

00:00 Synthesis and Molecular Properties of Ladder-type Structures and Their Applications in Organic Photovoltaics  
Yen-Ju Cheng (National Chiao Tung University, Taiwan);

00:00 High-efficiency All-polymer Solar Cells Enabled by a Low Bandgap Polymer  
He Yan (The Hong Kong University of Science and Technology, China);

00:00 Control of Molecular Packing via Evaporation Rate of Small Molecule Organic Solar Cell  
Po-Sheng Wang (National Taiwan University, Taiwan); Jiun-Haw Lee (National Taiwan University, Taiwan, R.O.C.); Shun-Wei Liu (Ming Chi University of Technology, Taiwan); Chin-Ti Chen (Institute of Chemistry, Academia Sinica, Taiwan); Yong-Chih Cheng (National Dong Hwa University, Taiwan); Mau-Kuo Wei (National Dong Hwa University, Taiwan); Chih-Chien Lee (National Taiwan University of Science and Technology, Taiwan); Wei-Cheng Su (National Taiwan University of Science and Technology, Taiwan); Tien-Lung Chiu (Yuan Ze University, Taiwan); Chi-Feng Lin (National United University, Taiwan);

00:00 Photovoltage Loss in Excitonic Solar Cells  
Sai-Wing Tsang (City University of Hong Kong, China); Song Chen (University of Florida, USA); Tzung-Han Lai (University of Florida, USA); John R. Reynolds (Georgia Institute of Technology, USA); Franky So (University of Florida, USA);

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**Session 2A4**

**SC2: Plasmonic Nanophotonics 2 — Design, Modeling and Simulation**

**Tuesday AM, August 26, 2014**

**Room D**

Organized by Din Ping Tsai, Yung-Chiang Lan  
Chaired by Yung-Chiang Lan, Pin Han

00:00 Effective Model for Plasmonic Coupling  
Meng Qiu (Fudan University, China); Bin Xi (Fudan University, China); Shiyi Xiao (Fudan University, China); Hao Xu (Fudan University, China); Lei Zhou (Fudan University, China);

00:00 Plasmonic Nanoantennas as Coherent Perfect Absorbers on SOI Waveguides for Modulators and All-optical Switches  
Roman Bruck (University of Southampton, UK); Otto L. Muskens (University of Southampton, UK);

00:00 Perfect Optical Imaging in the Quasi-static Regime  
David J. Bergman (Tel Aviv University, Israel);
00:00 Second-order Surface Plasmon Enhanced Photore- sponse in Ge Photodetectors with Bull’s Eye Antennas
Fang-Fang Ren (The Australian National University, Australia); Hai Lu (Nanjing University, China); Hark Hoe Tan (The Australian National University, Australia); Chennupati Jagadish (The Australian National University, Australia);

00:00 New Optical Properties of Nanoapertures and Their Applications
Vasily V. Klimov (Lebedev Physical Institute, Russian Academy of Sciences, Russia);

00:00 Magnetic Toroidal Moment in Coupled Plasmonic Nanodisks and Their Properties
Qiang Zhang (Harbin Institute of Technology, China); Sheng Lei Wang (Harbin Institute of Technology, China); Fei Fei Qin (Harbin Institute of Technology, China); Jun Jun Xiao (Harbin Institute of Technology, China);

00:00 Plasmonics: Evolution from Sensors to Nanowire Waveguides for Interconnect Applications
Lech Wosinski (KTH Royal Institute of Technology, Sweden); Fei Lou (KTH Royal Institute of Technology, Sweden); Lars Thylen (KTH Royal Institute of Technology, Sweden);

00:00 Universal Eigenvalue Analysis for 2D Periodic Plasmonic Nanostructures
Wei E. I. Sha (The University of Hong Kong, China); Hui Wang (Anhui University, China); Wallace C. H. Choy (The University of Hong Kong, China); Weng Cho Chew (University of Illinois, USA);

00:00 Near-field Surface Plasmon Effects on Au-double-slit Diffraction for Polychromatic Light
Pin Han (National Chung Hsing University, Taiwan);

00:00 A Lagrange RLC Circuit Model for Split-ring Resonators
Hsun-Chi Chan (National Taiwan University, Taiwan); Guang-Yu Guo (National Taiwan University, Taiwan);

00:00 Optical Multiple Bistability in Metal-insulator-metal Plasmonic Waveguides Side-coupled with Twin Resonators
Ruei-Cheng Shiu (National Cheng Kung University, Taiwan, R.O.C.); Guang-Yu Guo (National Taiwan University, Taiwan); Yung-Chiang Lan (National Cheng Kung University, Taiwan, R.O.C.);

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Session 2A5
2. FocusSession.SC2: Microwave Metamaterials 1

00:00 Electromagnetic Cloaks Made of Isotropic Materials
Yichao Liu (Zhejiang University, China); Yungui Ma (Zhejiang University, China);

00:00 Integrated Circuits Based on Spoof Surface Plasmon Polaritons
Hao Chi Zhang (Southeast University, China); Xiaoping Shen (Southeast University, China); Shuo Liu (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 Metamaterial Based Patch Antenna with Broad Bandwidth and Simple Structures
Xueshi Li (Guangdong University of Technology, China); Fu Min Lin (Guangdong University of Technology, China); D. L. Wu (Guangdong University of Technology, China);

00:00 Minifying and Magnifying Scattering Coefficients by a Metasurface
Fan Yang (Lanzhou University, China); Zhong-Lei Mei (Lanzhou University, China); Tie Jun Cui (Southeast University, China);

00:00 Improvement of Oblique Incidence Performance for a Microwave Absorber Based on Magnetic Polymer Composites
Linbo Zhang (University of Electronic Science and Technology of China, China); Nan Zhang (University of Electronic Science and Technology of China, China); Pei-Heng Zhou (University of Electronic Science and Technology of China, China); Yangqiu Xu (University of Electronic Science and Technology of China, China); Jianliang Xie (University of Electronic Science and Technology of China, China); Long-Jiang Deng (University of Electronic Science and Technology of China, China);
00:00 Frequency Dependant Microwave Properties of Aramid Paper Based Honeycomb Substrate Impregnated with Carbonaceous Solution
Lie Liu (National University of Singapore, Singapore); C. Z. Fan (Kuang-Chi Institute of Advanced Technology, China); Z. Y. Zhao (Kuang-Chi Institute of Advanced Technology, China); G. X. Xu (Kuang-Chi Institute of Advanced Technology, China); R. P. Liu (Kuang-Chi Institute of Advanced Technology, China);

00:00 Study on the Scattering Properties of an Artificial Electromagnetic Hard Surface
Xingxing Huang (University of Electronic Science and Technology of China, China); Pei-Heng Zhou (University of Electronic Science and Technology of China, China); Hai-Yan Chen (University of Electronic Science and Technology of China, China); Mangui Han (University of Electronic Science and Technology of China, China); Long-Jiang Deng (University of Electronic Science and Technology of China, China);

00:00 Electromagnetic Scattering Controlling for a Rectangular Groove with High Impedance Surfaces Loading
Dong-Jiao Guo (University of Electronic Science and Technology of China, China); Hai-Yan Chen (University of Electronic Science and Technology of China, China); Pei-Heng Zhou (University of Electronic Science and Technology of China, China); Xingxing Huang (University of Electronic Science and Technology of China, China); Jianliang Xie (University of Electronic Science and Technology of China, China); Long-Jiang Deng (University of Electronic Science and Technology of China, China);

00:00 High Gain and High Efficient Antenna
Zui Tao (Southeast University, China); Shuo Liu (Southeast University, China); Mei Qing Qi (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 Design and Optimization of Millimeter Wave SPP Devices
Qian Zhang (Southeast University, China); Xiaopeng Shen (Southeast University, China); Hao Chi Zhang (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 Analysis and Design of Multi-band Absorber with Periodic Three-dimensional Square Ring Units
Guorui Zhang (University of Electronic Science and Technology of China, China); Yang Zhou (University of Electronic Science and Technology of China, China); Nan Zhang (University of Electronic Science and Technology of China, China); Pei-Heng Zhou (University of Electronic Science and Technology of China, China); Hai-Yan Chen (University of Electronic Science and Technology of China, China); Long-Jiang Deng (University of Electronic Science and Technology of China, China);

00:00 Multiband THz Metamaterial Absorber Based on Snowflake-type Resonators
Jun Chuan Zhu Ge (Southeast University, China); Di Bao (Southeast University, China); Xiaopeng Shen (Southeast University, China); Tie Jun Cui (Southeast University, China);

Session 2A6
3. FocusSession.SC3: Biophotonics — Clinical and Preclinical Applications

Tuesday AM, August 26, 2014
Room F
Organized by Katarina Svanberg
Chaired by Katarina Svanberg

00:00 Compact Diode Laser-based Systems for Biophotonics Application
Peter E. Andersen (Technical University of Denmark, Denmark); Ole Bjarlin Jensen (Technical University of Denmark, Denmark); A. Muller (Leibniz-Institut für Höchstfrequenztechnik, Germany); B. Sumpf (Leibniz-Institut für Höchstfrequenztechnik, Germany); A. K. Hansen (Technical University of Denmark, Denmark); P. M. Petersen (Technical University of Denmark, Denmark); Peter M. Skovgaard (Norlase ApS, Denmark); Angelika Unterhuber (Medical University of Vienna, Austria); W. Drexler (Medical University of Vienna, Austria);
00:00 Development of New LED Light Sources for Improved Visualization of Bio-samples
Askaterini Argyraki (Technical University of Denmark, Denmark); Jakob Munkgaard Andersen (Technical University of Denmark, Denmark); Soren Stentoft Hansen (Technical University of Denmark, Denmark); Jorgen Stubager (Technical University of Denmark, Denmark); Dennis Dan Corell (Technical University of Denmark, Denmark); Paul Michael Petersen (Technical University of Denmark, Denmark);

00:00 Laser-activated Plasmonic Particles for Cancer Theranostics: Novel Targeting Strategies Tested in Vitro and in Vivo
Roberto Pini (Institute of Applied Physics, National Research Council of Italy, Italy); Fulvio Ratto (Institute of Applied Physics, National Research Council of Italy, Italy); Francesca Tatini (Institute of Applied Physics, National Research Council of Italy, Italy); Sonia Centi (University of Florence, Italy); Ida Landini (University of Florence, Italy); Stefania Nobili (University of Florence, Italy); Ewa Witort (University of Florence, Italy); Sergio Capaccioli (University of Florence, Italy); Enrico Mini (University of Florence, Italy);

00:00 Microcirculation Imaging with Light and Sound
Martin J. Leahy (National University of Ireland, Ireland); Haroon Zafar (National University of Ireland, Ireland); Sean O’Gorman (National University of Ireland, Ireland); Aedan Breathnach (National University of Ireland, Ireland); Hrubesh M. Subhash (National University of Ireland, Ireland);

00:00 Transfer of Angular Momentum of Light in Optical Tweezers and Applications
Halina Rubinsztein-Dunlop (The University of Queensland, Australia);

00:00 Cortical Functional Connectivity Revealed by Optical Brain Imaging
Jun Li (South China Normal University, China); Lina Qiu (South China Normal University, China);

00:00 Atypical Activation Pattern of Children with Autism Spectrum Disorder (ASD) in Language Area During Listening Comprehension: A fNIRS Study
Huilin Zhu (South China Normal University (SCNU), China); Xinge Li (South China Normal University (SCNU), China); Guiziong Xu (South China Normal University (SCNU), China); Rongwei Zhang (Fujian Polytechnic of Information Technology, China); Quanqian Gao (South China Normal University (SCNU), China); Ziqiang Hu (South China Normal University (SCNU), China); Sailing He (South China Normal University (SCNU), China);

00:00 Optical Diagnosis of Middle Ear Infection Using Spectroscopic Techniques — Phantom Experiments
Hao Zhang (South China Normal University, China); Jing Huang (South China Normal University, China); Tianqi Li (South China Normal University, China); Sune Svanberg (Lund University, Sweden); Katarina Svanberg (Lunds University, Sweden);

00:00 Assessment of Human Sinus Cavity Air Volume — Temporal Study
Hao Zhang (South China Normal University, China); Jing Huang (South China Normal University, China); Tianqi Li (South China Normal University, China); Katarina Svanberg (Lund University, Sweden); Sune Svanberg (Lund University, Sweden);

00:00 Studies of Oxygen and Oxygen Exchange in Fruits Using Gas in Scattering Media Absorption Spectroscopy
Jing Huang (South China Normal University, China); Hao Zhang (South China Normal University, China); Tianqi Li (South China Normal University, China); Guangyu Zhao (South China Normal University, China); Sune Svanberg (Lund University, Sweden); Katarina Svanberg (Lund University, Sweden);

00:00 Modulation of Cellular Signaling and Processes by Femtosecond Laser
Hao He (Tianjin University, South Korea);

00:00 Optical Remote Monitoring of Flying Insects
M. Brydeggaard (Lund University, Sweden); Sune Svanberg (Lund University, Sweden);

00:00 Effective Bioimaging by Using Two-photon Absorbing Chromophores and Nanoparticles
Kwang-Sup Lee (Hannam University, South Korea);
Session 2A7
SC3: Optical Resonances and Microresonators

Tuesday AM, August 26, 2014
Room G
Organized by Andrew Wing On Poon, Ali Serpenguzel
Chaired by Andrew Wing On Poon

00:00 Random Lasing by Chosen Resonances in Disordered Microcavities
Ceferino Lopez Fernandez (Instituto de Ciencia de Materiales de Madrid (CSIC), Spain);

00:00 The Application of Optical Resonators in Biosensing
Qimin Quan (Rowland Institute at Harvard University, USA);

00:00 High-performance Microcavity Optical Sensor Connected with a Waveguide
Shuai Liu (Harbin Institute of Technology, China); Nan Zhang (Harbin Institute of Technology, China); Shumin Xiao (Harbin Institute of Technology, China); Qinghai Song (Harbin Institute of Technology, China);

00:00 Compact Multi-channel Cascaded-ring Optical Sensor with High Sensitivity
Mao Mao (Zhejiang University, China); Sitao Chen (Zhejiang University, China); Daoxin Dai (Zhejiang University, China);

00:00 Coherent Phase Control in Microresonators and Its Application in Optical Signal Processing
Linjie Zhou (Shanghai Jiao Tong University, China); Liangjun Lu (Shanghai Jiao Tong University, China); Jingya Xie (Shanghai Jiao Tong University, China); Jianping Chen (Shanghai Jiao Tong University, China);

00:00 Silicon Based Optical Matrix Processor for Parallel Computing
Lin Yang (Institute of Semiconductors, Chinese Academy of Sciences, China); Jianfeng Ding (Institute of Semiconductors, Chinese Academy of Sciences, China); Lei Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Ruqiang Ji (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Influence of External Optical Injection on Small-signal Modulation Response for AlGaInAs/InP Microring Lasers
Yong-Zhen Huang (Institute of Semiconductors, Chinese Academy of Sciences, China); Xiao Meng Lv (Institute of Semiconductors, Chinese Academy of Sciences, China); Ling-Xiu Zou (Institute of Semiconductors, Chinese Academy of Sciences, China); Bo-Wen Liu (Institute of Semiconductors, Chinese Academy of Sciences, China); Yue-De Yang (Institute of Semiconductors, Chinese Academy of Sciences, China); Heng Long (Institute of Semiconductors, Chinese Academy of Sciences, China); Jin-Long Xiao (Institute of Semiconductors, Chinese Academy of Sciences, China); Yun Du (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Making Microwave Radiation Visible: Phase-matching in Non-linear Crystalline Whispering Gallery Mode Resonators
Harald G. L. Schwefel (Max Planck Institute for the Science of Light, Germany);

00:00 Demonstration of a 3-bit Digital-to-analog Convertor Based on Silicon Microring Resonators
Jianfeng Ding (Institute of Semiconductors, Chinese Academy of Sciences, China); Fanfan Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Qiaoshan Chen (Institute of Semiconductors, Chinese Academy of Sciences, China); Lin Yang (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Laser from Localized Modes on a Conical Surface
Xing Lin (Zhejiang University, China); Yuan Niu (Zhejiang University, China); Yingxin Xu (Zhejiang University, China); Wei Fang (Zhejiang University, China);

00:00 Thermally-tuned Silicon Double Ring Resonator for External Cavity Tunable Laser
Lei Ding (Zhejiang University, China); Xianxin Jiang (Zhejiang University, China); Chang Yang (Zhejiang University, China); Jian-Jun He (Zhejiang University, China);

Session 2A8
SC2&1: Effective Medium Theories and Homogenization

Tuesday AM, August 26, 2014
Room H
Organized by Ying Wu
Chaired by Ying Wu
00:00 From Acoustic Metamaterials to Functional Metasurfaces
Nicholas X. Fang (Massachusetts Institute of Technology, USA);

00:00 Generalized Effective Medium Theory for Metamaterials Beyond the Long-wavelength Limit
Baocheng Zhu (Fudan University, China); Shiwei Tang (Fudan University, China); Shiyi Xiao (Fudan University, China); Lei Zhou (Fudan University, China);

00:00 Angle Dependent Effective Medium Theory for 2D Photonic Crystals
Meng Xiao (The Hong Kong University of Science and Technology, China); Xueqin Huang (The Hong Kong University of Science and Technology, China); Anan Fang (The Hong Kong University of Science and Technology, China); Che Ting Chan (The Hong Kong University of Science and Technology, China);

00:00 Nonlocal Effective Medium Model for Periodic Layered Metamaterials
Ruey-Lin Chern (National Taiwan University, Taiwan, R.O.C.);

00:00 Double Dirac Cones in Phononic Crystals and Zero Refractive Index Material
Jun Mei (South China University of Technology, China); Yan Li (South China University of Technology, China);

00:00 Homogenizations of Micropolar Elastic Metamaterial Using Field Averaging
Chung-Ning Weng (National Cheng Kung University, Taiwan); Tungyang Chen (National Cheng Kung University, Taiwan);

00:00 Homogenization Model of Aligned Spheres in a Host Sphere
Fabio Mangini ("La Sapienza" University of Rome, Italy); Fabrizio Frezza ("La Sapienza" University of Rome, Italy); Ari Sihvola (Aalto University School of Electrical Engineering, Finland);

00:00 Dynamic Effective Medium Theory for Anisotropic Photonic Crystals
Xiujuan Zhang (King Abdullah University of Science and Technology, Saudi Arabia); Ying Wu (King Abdullah University of Science and Technology, Saudi Arabia);

Session 2A9
SC3: Optical Fiber Sensing Devices
Tuesday AM, August 26, 2014
Room I
Organized by Yiping Wang, Tao Zhu
Chaired by Yiping Wang

00:00 Micro/Nano Fiber-based Photonic Devices and Sensors
Wei Jin (The Hong Kong Polytechnic University, China); Wa Jin (The Hong Kong Polytechnic University, China); Chao Wang (The Hong Kong Polytechnic University, China); Hoi Lut Ho (The Hong Kong Polytechnic University, China);

00:00 Polarimetric Heterodyning Fiber Grating Laser Magnetic Field Sensors
Bai-Ou Guan (Jinan University, China); Linghao Cheng (Jinan University, China); Long Jin (Jinan University, China);
00:00 Femtosecond-laser-micromachined Optical Fiber In-line Interferometers
Changrui Liao (Shenzhen University, China); Lei Xu (The Hong Kong Polytechnic University, China); Yiping Wang (Shenzhen University, China); D. N. Wang (The Hong Kong Polytechnic University, China); Shen Liu (Shenzhen University, China); Zhengyong Li (Shenzhen University, China); Xiaoyong Zhong (Shenzhen University, China); Jiangtao Zhou (Shenzhen University, China); Qiao Wang (Shenzhen University, China); Kaiming Yang (Shenzhen University, China);

00:00 Acceleration Monitoring System Based on Light Intensity Measurement of Dual Fiber Bragg Gratings
Yongjiao Wang (Wuhan University of Technology, China); Yinquan Yuan (Wuhan University of Technology, China);

00:00 Highly Hygroscopic Polymer Microcavity Fiber Fizeau Interferometer for Humidity Sensing
Yan-Wun You (National United University, Taiwan, R.O.C.); Jia-Heng Dai (National United University, Taiwan, R.O.C.); Cheng-Ling Lee (National United University, Taiwan);

00:00 Side-polished Fiber Sensing for Determination of Nematic Liquid Crystal Orientation
Yuqi Han (Jinan University, China); Zhe Chen (Jinan University, China); Jianhui Yu (Jinan University, China); Haozhi Li (Jinan University, China); Xiaoli He (Jinan University, China); Jun Zhang (Jinan University, China); Yukuan Luo (Jinan University, China); Huhui Lu (Jinan University, China); Jieyuan Tang (Jinan University, China);

00:00 Magnetic Field Sensing with Up-taper Fiber-optic Structure
Shengli Pu (University of Shanghai for Science and Technology, China); Shaohua Dong (University of Shanghai for Science and Technology, China);

00:00 Optical Fiber Flowmeter Using Silver-coated FBG Cascaded by Waist-enlarged Bitaper
Xinhuaui Wang (China Jiliang University, China); Xingong Dong (China Jiliang University, China); Yan Zhou (China Jiliang University, China);

00:00 Temperature-insensitive Refractive Index Sensor Based on In-fiber Michelson Interferometer
Zhengyong Li (Shenzhen University, China); Yiping Wang (Shenzhen University, China); Changrui Liao (Shenzhen University, China);

00:00 Compact Tunable Multibandpass Filters Based on Liquid-filled Photonic Crystal Fibers
Yingjie Liu (Shenzhen University, China); Yiping Wang (Shenzhen University, China); Bing Sun (Shenzhen University, China); Changrui Liao (Shenzhen University, China);

00:00 High Sensitivity Micro Fabry-Perot Interferometer with Encapsulated Optical Liquid
Yu-Cheng Li (National United University, Taiwan); Tsai-Chia Lung (National United University, Taiwan); Nan-Kuang Chen (National United University, Taiwan);

00:00 Micro-tapered Fiber Mach-Zehnder Interferometers for Picoliter Index Sensing
Shu-Wei Chuang (National United University, Taiwan); Jian-Wei Zheng (National United University, Taiwan); Wen-Chuan Lin (National United University, Taiwan); Nan-Kuang Chen (National United University, Taiwan);

00:00 Reflective Optical Fiber Refractometer Based on Fiber Bragg Grating in Thin-core Fiber
Yebin Zhang (Zhejiang University, China); Chentiang Wang (Zhejiang University, China); Bin Zhou (South China Normal University, China); Sailing He (Zhejiang University, China);

Session 2A_10
SC3: Advances in Optical Networking: Parts 2

Tuesday AM, August 26, 2014
Room J
Organized by Jiajia Chen, David Payne, Lena Wosinska
Chaired by Jiajia Chen

00:00 Optical Performance Monitoring for Flexible Optical Networks
Calvin Chun-Kit Chan (The Chinese University of Hong Kong, China);

00:00 An Efficient Regenerator and Wavelength Assignment Approach for $1+1 : 1$ and $1 : 1+1$ Protected Lightpath Services
Gangxiang Shen (Soochow University, China); Chuanjun Wu (Huawei Technologies, China); Jiuxiong Dong (Huawei Technologies, China);
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00:00 Dark Fiber Monitoring System for Ring-and-Spur Long-Reach Passive Optical Networks
Min Cen (Université de Mons, Service d’Electromagnétisme et de Télécommunications, Belgium); Jiaya Chen (KTH Royal Institute of Technology, Sweden); Patrice Mégret (Université de Mons, Service d’Electromagnétisme et de Télécommunications, Belgium); Véronique Moqgaard (Université de Mons, Service d’Electromagnétisme et de Télécommunications, Belgium); Marc Wuilpart (Université de Mons, Service d’Electromagnétisme et de Télécommunications, Belgium);

00:00 Towards a Framework for Small-cell Network Planning
Elaine Wong (The University of Melbourne, Australia); Ishita Akhtar (The University of Melbourne, Australia); Sandu Abeywickrama (The University of Melbourne, Australia); Chathurika Ranaeeera (The University of Melbourne, Australia); Christina Lim (The University of Melbourne, Australia); Ampalanavapillai Nirmalathas (The University of Melbourne, Australia);

00:00 Capacity Constraints for Phase Noise Influenced Coherent Optical DnPsk Systems
Gunnar Jacobsen (Acreo Swedish ICT, Sweden); Sergei Popov (Royal Institute of Technology (KTH), Sweden); Tianhua Xu (KTH Royal Institute of Technology, Sweden); Sergey Sergeyev (Aston University, UK);

00:00 Secure Optical Communication System with Orthogonal CSK/DPsk Modulation Scheme
Bo Dai (Heriot-Watt University, UK); Zhensen Gao (Alcatel-Lucent Shanghai Bell, China); Naoya Wada (National Institute of Information and Communications Technology (NICT), Japan); Xu Wang (Heriot-Watt University, UK);

00:00 New Development in Critical Components for 40 Gbit/s Long-reach Passive Optical Networks
Xin Yin (Ghent University, Belgium); Xing-Zhi Qiu (Ghent University, Belgium); Guy Torfs (Ghent University, Belgium); Romain Brenot (III-V Lab, France); Fabrice Blache (III-V Lab, France); Mohand Achouche (III-V Lab, France); Johan Bauwelinct (Ghent University, Belgium);

00:00 Low-cost and Large-capacity Optical Access Network Supporting Thousand ONUs by One Feeder Fiber
Deming Liu (Hua Zhong University of Science and Technology, China);

00:00 Ultra-high Speed Visible Light Communication Based on Advanced Modulation Formats and Digital Signal Processing
Nan Chi (Fudan University, China); Xingxing Huang (Fudan University, China); Yuanquan Wang (Fudan University, China); Yiguang Wang (Fudan University, China);

00:00 Passive Optical Network Expansion by Using Active Splitters
Biao Chen (Zhejiang University, China);

00:00 Availability Analysis for Elastic Optical Networks with Multi-path Virtual Concatenation Technique
Xiaoling Wang (Soochow University, China); Limei Peng (Ajou University, South Korea); Gangxiong Shen (Soochow University, China);

00:00 Optimal Time-dependent Spectrum Sharing between Neighboring Channels in Elastic Optical Networks
Xiaowei Zhao (Soochow University, China); Gangxiong Shen (Soochow University, China); Sanjay K. Bose (Indian Institute of Technology, India);

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Session 2A_11a

SC4: Advanced Magnetic Materials for Microwave Applications

Tuesday AM, August 26, 2014

Room K

Organized by Chong Kim Ong, Yungui Ma
Chaired by Chong Kim Ong, Yungui Ma

00:00 Exceeding Natural Resonance Frequency Limit of Monodisperse Fe3O4 Nanoparticles via Superparamagnetic Relaxation
Ning-Ning Song (Institute of Physics, Chinese Academy of Sciences, China); Hai-Tao Yang (Institute of Physics, Chinese Academy of Sciences, China); Hao-Liang Liu (Institute of Physics, Chinese Academy of Sciences, China); Xiao Ren (Institute of Physics, Chinese Academy of Sciences, China); Hao-Feng Ding (Institute of Physics, Chinese Academy of Sciences, China); Xiang-Qun Zhang (Institute of Physics, Chinese Academy of Sciences, China); Zhao-Hua Cheng (Institute of Physics, Chinese Academy of Sciences, China);

00:00 Rotatable Anisotropy in Magnetic Thin Films
Guozi Chai (Lanzhou University, China); Nguyen Nguyen Phuoc (National University of Singapore, Singapore); Chong Kim Ong (National University of Singapore, Singapore);
00:00 Double Resonance Peaks of FeCo Thin Films with NiFe Underlayer
Xiaoxi Zhong (National University of Singapore, Singapore); Wee Tee Soh (National University of Singapore, Singapore); Nguyen Nguyen Phuoc (National University of Singapore, Singapore); Chong Kim Ong (National University of Singapore, Singapore);

00:00 Application of Electromagnetic Waves in Softmaterials
Shengyong Xu (Peking University, China);

00:00 Investigation of Microwave Absorption Properties of Epoxy/Strontium Hexaferrite Nano Particles Composite
T. Zibaeenejad (Shiraz University, Iran); B. Hashemi (Shiraz University, Iran);

00:00 Monte-Carlo Simulation of Magnetic Domain Structures in Nanomagnets
Xingsen Gao (South China Normal University, China); Jipei Chen (South China Normal University, China); Guo Tian (South China Normal University, China); Xiao Song (South China Normal University, China); Junming Liu (Nanjing, China);

00:00 Tunable In-plane Uniaxial Magnetic Anisotropy of Nanocrystalline Fe-N Thin Films for High Frequency Application
Xiaoy Li (Lanzhou University, China); Jianbo Wang (Lanzhou University, China); Qingfang Liu (Lanzhou University, China);

00:00 Lightweight Thin Wide Band Electromagnetic Absorbers for X & Ku Band Frequency Region
Tilok Chand Shami (Defence Materials Stores Research and Development Establishment, India); Rudresh Kumar (Defence Materials Stores Research and Development Establishment, India); Himangshu Bhusan Baskey (Indian Institute of Technology Kanpur, India); Alok K. Dixit (Defence Materials Stores Research and Development Establishment, India); A. K. Saxena (Defence Materials Stores Research and Development Establishment, India);

00:00 Microwave Tunable Ferromagnetic Microwires-filled Polymer under External Stimuli
Fuxiang Qin (National Institute for Materials Science, Japan); J. Tang (National Institute for Materials Science, Japan); Hua-Xin Peng (University of Bristol, UK); Christian Brosseau (Université de Bretagne Occidentale, France);

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**Session 2A_11b**

**SC4: Recent Advances in Magneto-impedance Sensors**

**Tuesday AM, August 26, 2014**

**Room K**

Organized by Tsuyoshi Uchiyama
Chaired by Tsuyoshi Uchiyama

00:00 Development of Low Noise MI Sensor and Its Applications
Norihiko Hamada (Aichi Steel Corporation, Japan); A. Shimode (Aichi Steel Corporation, Japan); C. M. Cai (Aichi Steel Corporation, Japan); M. Yamamoto (Aichi Steel Corporation, Japan);

00:00 Test-production of High Sensitivity Multi-core MI Element and Its Characteristics
Norihiko Hamada (Aichi Steel Corporation, Japan); A. Shimode (Aichi Steel Corporation, Japan); S. Tatematsu (Aichi Steel Corporation, Japan); M. Yamamoto (Aichi Steel Corporation, Japan);

00:00 Arousal Effect of ELF Magnetic Stimulus on Car Driver’s Spine Evaluated with Occipital Electroencephalogram and Back Magneto-cardiogram
Yoshiyuki Mohri (Meijo University, Japan); Muneo Yamada (Meijo University, Japan); Wataru Kato (Meijo University, Japan); Tsuyoshi Uchiyama (Nagoya University, Japan); Kaneo Mohri (Nagoya Industrial Science Research Institute (NISRI), Japan);

00:00 Detection of Back Magneto-cardiogram for Heart Disease Using Pico-Tesla Resolution Amorphous Wire Magneto-Impedance Sensor
Yoshiyuki Mohri (Meijo University, Japan); Tsuyoshi Uchiyama (Nagoya University, Japan); Muneo Yamada (Meijo University, Japan); Kaneo Mohri (Nagoya Industrial Science Research Institute (NISRI), Japan);

00:00 Biomagnetic Field Detection of Cellular Organizations Using Improved Gradio-type MI Magneto Sensor
Shinsuke Nakayama (Nagoya University, Japan); Satoshi Atsuta (Fujidenolo Corporation, Japan); Tsuyoshi Uchiyama (Nagoya University, Japan);

00:00 Promotion Rate Index in ELF Magneto-protonics
Kaneo Mohri (Nagoya Industrial Science Research Institute (NISRI), Japan); Masanori Fukushima (Translational Research Informatics Center, Japan); Yoshiyuki Mohri (MI Institute, Japan); Yuko Mohri (MI Institute, Japan);
### Session 2A_12
**SC4: Array Antenna for Wireless Communication**

**Tuesday AM, August 26, 2014**
**Room L**
Organized by Dau-Chyrh Chang, Wenhua Yu  
Chaired by Dau-Chyrh Chang

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<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
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<tr>
<td>00:00</td>
<td>Minimum Variance Variable Constrain DOA Algorithm</td>
<td>Ahmed Khairy Aboul-Seoud (Alexandria University, Egypt); Ahmed Khairy Mahmoud (Alexandria University, Egypt); Alaa El-Din Sayed Hafez (Alexandria University, Egypt); Ali Mohammed Ali Gaballa (Alexandria University, Egypt);</td>
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<td>00:00</td>
<td>Dual-band A-sandwich Radome Design for Airborne Applications</td>
<td>Licheng Zhou (Peking University, China); Yongmao Pei (Peking University, China); Daining Fang (Peking University, China);</td>
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<td>00:00</td>
<td>Nonuniform Phase Reversal Antennas with Double-side near Field Focusing Beams</td>
<td>Zi Long Ma (The University of Hong Kong, China); Li Jun Jiang (The University of Hong Kong, China); S. Gupta (The University of Hong Kong, China);</td>
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<td>A Dual Band Center-fed Sleeve Dipole Array for IEEE802.11a/b Application</td>
<td>Dau-Chyrh Chang (Oriental Institute of Technology, Taiwan, R.O.C.); Yi-Ci Su (Oriental Institute of Technology, Taiwan); Chih-Hung Lee (Yuan Ze University, Taiwan);</td>
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<td>Patch Antenna Array for IEEE 802.11a/n MIMO Application</td>
<td>Dau-Chyrh Chang (Oriental Institute of Technology, Taiwan, R.O.C.); Ming-Ching Yen (Oriental Institute of Technology, Taiwan, R.O.C.); Chih-Hung Lee (Yuan Ze University, Taiwan); Yau-Jyan Tsai (Oriental Institute of Technology, Taiwan, R.O.C.);</td>
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<td>Rectangular DRA Reflectarray with an Inclined Top-loading Microstrip Patch</td>
<td>Eng Hock Lim (Universiti Tunku Abdul Rahman, Malaysia); Hong Yik Wong (Universiti Tunku Abdul Rahman, Malaysia); Fook-Loong Lo (Universiti Tunku Abdul Rahman, Malaysia);</td>
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<td>Decoupled Hepta-band MIMO Antenna with a Neutralization Line for Smartphone Applications</td>
<td>Zhong-Xiang Chen (University of Electronic Science and Technology of China, China); Yong-Ling Ban (University of Electronic Science and Technology of China, China);</td>
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<td>Transmission Line Type Circularly Polarized Series Patch Array for UHF RFID Applications</td>
<td>Menglin Chen (The University of Hong Kong, China); Li Jun Jiang (The University of Hong Kong, China); J. Xi (Hong Kong LSCM, China); Terry Ye (Hong Kong LSCM, China);</td>
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<td>Design of Multi-band Sector Antenna for Mobile Communication Systems</td>
<td>Shiyi Ibrahim Kitutu (Tianjin University of Technology and Education, China); Hong-Xing Zheng (Tianjin University of Technology and Education, China);</td>
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<td>00:00</td>
<td>A Compact Triple-band MIMO Antenna for Wimax/WLAN Application</td>
<td>Hui-Fen Huang (South China University of Technology, China); Yuanhua Hu (South China University of Technology, China); Wei Zhao (South China University of Technology, China);</td>
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<td>00:00</td>
<td>Analysis and Design of the Switched-beam Antenna Array for Automotive Radar Applications</td>
<td>Jau-Jr Lin (National Changhua University of Education, Taiwan, R.O.C.);</td>
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### Session 2A_13
**SC4: Wireless Power Transfer**

**Tuesday AM, August 26, 2014**
**Room M**
Organized by Qiaowei Yuan, Elisenda Bou Balust  
Chaired by Qiaowei Yuan, Elisenda Bou Balust

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<td>Power Transfer k-Q Product Explored for a Variety of Two-port LCR Circuit Topologies</td>
<td>Naoki Sakai (Toyohashi University of Technology, Japan); Takashi Ohira (Toyohashi University of Technology, Japan);</td>
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<td>A Novel Parallel Double Helix Loop Resonator for Magnetic Coupled Resonance Wireless Power Transfer</td>
<td>Cheng Yang (Chabu University, Japan); Koichi Tsunekawa (Chabu University, Japan);</td>
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<td>Three-phase Symmetrical Inductive Coupled Structure for Wireless EV Charging System</td>
<td>Jia-You Lee (National Cheng Kung University, Taiwan, R.O.C.); Hang-Yu Shen (National Cheng Kung University, Taiwan); Shan-Jen Chao (Lite-On Technology Corporation, Taiwan, R.O.C.);</td>
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<td>00:00</td>
<td>On Frequency Optimization of Asymmetric Resonant Inductive Coupling Wireless Power Transfer Links</td>
<td>Nuria Egidos (UPC BarcelonaTech, Spain); Elisenda Bou Balust (UPC BarcelonaTech, Spain); Raymond J. Sedwick (University of Maryland, USA); Eduard Alarcon (UPC BarcelonaTech, Spain);</td>
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<td>Input and Output Impedance Matching Conditions and Maximum RF-to-DC Rectification Efficiency in Wireless Power Transfer System</td>
<td>Qiaowei Yuan (Sendai National College of Technology, Japan); Shinji Abe (Sendai National College of Technology, Japan); Satoshi Suzuki (Sendai National College of Technology, Japan); Takashi Ohira (Toyohashi University of Technology, Japan);</td>
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<td>Development of Gallium Nitride Schottky Barrier Diode for Microwave Rectification</td>
<td>Jin-Ping Ao (The University of Tokushima, Japan);</td>
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<td>Design and Implementation of Wireless RF Power Transfer Circuit for Implantable Neurostimulator</td>
<td>Jia-You Lee (National Cheng Kung University, Taiwan, R.O.C.); Hung-Yu Shen (National Cheng Kung University, Taiwan); Che-Li Lin (TSMC Ltd., Taiwan, R.O.C.);</td>
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<td>Wireless Power Supply for ICP Devices with Hybrid Supercapacitor and Battery Storage</td>
<td>Aiguo Patrick Hu (University of Auckland, New Zealand); Fu-Yu Beverly Chen (University of Auckland, New Zealand); Yee Wen You (University of Auckland, New Zealand); Daniel McCormick (University of Auckland, New Zealand); David M. Budgett (University of Auckland, New Zealand);</td>
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<td>On-chip CMOS RF Energy Harvesting System Using Parasitic Capacitance Compensation Technique</td>
<td>Junsik Park (Chonbuk National University, Republic of Korea); Jaeyeon Kim (Chonbuk National University, Republic of Korea); Namisk Ryu (Electronics and Telecommunications Research Institute, Republic of Korea); Suhe Kim (Samsung Electronics, Republic of Korea); Yongchae Jeong (Chonbuk National University, Republic of Korea);</td>
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<td>Graphical Interactivity in Power Device and Circuit S-parameter Measurement Exploiting Möbius Transformation</td>
<td>Kyohei Yamada (Tohohashi University of Technology, Japan); Sonshu Sakihara (Tohohashi University of Technology, Japan); Takashi Ohira (Tohohashi University of Technology, Japan);</td>
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<td>Uncertainty Estimation in Vector Wind Retrievals from Satellite-based Polarimetric Microwave Radiometer Measurements</td>
<td>Xiaolin Tong (Huazhong University of Science and Technology, China); Zhenzhan Wang (National Space Science Center/Center for Space Science and Applied Research, Chinese Academy of Sciences, China); Qingxia Li (Huazhong University of Science and Technology, China);</td>
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<td>Removal of Synthetic Aperture Effect in Stepped Frequency Radar Altimeter</td>
<td>Yake Li (Memorial University of Newfoundland, Canada); Siu O’Young (Memorial University of Newfoundland, Canada);</td>
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<td>Refinement of the X and Ku Band Dual-polarization Scatterometer Snow Water Equivalent Retrieval Algorithm</td>
<td>Jian-Cheng Shi (Institute of Remote Sensing Applications, Chinese Academy of Sciences, China); Chuan Xiong (Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China);</td>
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<td>00:00</td>
<td>A Soil Moisture Downscaling Algorithm for the SMAP Mission</td>
<td>Jian-Cheng Shi (Institute of Remote Sensing Applications, Chinese Academy of Sciences, China); Peng Guo (State Key Laboratory of Remote Sensing Science, Jointly Sponsored by Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China); Tianjie Zhao (State Key Laboratory of Remote Sensing Science, Jointly Sponsored by Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China); Jingang Du (State Key Laboratory of Remote Sensing Science, Jointly Sponsored by Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China);</td>
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<td>00:00</td>
<td>Application of Backscattering Models in Active-passive Microwave Remote Sensing of Ocean Salinity</td>
<td>Jie Zhu (Center for Space Science and Applied Research, CAS, China); Xiangkun Zhang (National Space Science Center, Chinese Academy of Sciences, China); H. Liu (Center for Space Science and Applied Research, CAS, China);</td>
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00:00 Coherent and Multiple Scattering in Radar Scattering of Vegetated Surfaces at L band for SMAP Applications

Huanting Huang (University of Washington, USA); Shurun Tan (University of Washington, USA); Leung Tsang (University of Washington, USA); Xiaolan Xu (California Institute of Technology, USA); Seung-Bum Kim (California Institute of Technology, USA); Simon H. Yueh (California Institute of Technology, USA);

00:00 Development of a Radiative Transfer Model for the Soil Media with Including Vertical Profile Effects and Its Application in AMSR2

Hui Lu (Tsinghua University, China); Toshio Koike (The University of Tokyo, Japan); Ziwei Xu (Beijing Normal University, China);

00:00 Active and Passive Remote Sensing of Bare Soil from L-band to Ku-band Using NMM3D

T. H. Liao (University of Washington, USA); Leung Tsang (University of Washington, USA); S. Tanelli (California Institute of Technology, USA); N. Niamsuwan (California Institute of Technology, USA); S. Jaruwatanadilok (California Institute of Technology, USA);

00:00 Polarimetric Properties of Randomly Rough Surfaces at L-band Using Numerical 3D Solutions of Maxwell Equations

Kuan-Liang Chen (National Central University, Taiwan); Kun-Shan Chen (National Central University, Taiwan); Leung Tsang (University of Washington, USA); Tien-Hao Liao (University of Washington, USA);

00:00 New Design and Development of QEPAS Spectrophones for Trace Gas Detection

Lei Dong (Shanxi University, China); Hongpeng Wu (Shanxi University, China); Huadan Zheng (Shanxi University, China); Yanyan Liu (Shanxi University, China); Xiaoli Liu (Shanxi University, China);

00:00 Research of Composite Electromagnetic Scattering from Targets and Rough Surface Basing on the Efficient Numerical Algorithm

Yu Liang (Yangzhou University, China); Li-Xin Guo (Xidian University, China); Xiang-Hua Zeng (Yangzhou University, China); Zhen-Sen Wu (Xidian University, China);

00:00 Shielding Effectiveness Fitting of Local Electromagnetic Shielding Clothing Based on Human Figure

Xuachen Wang (Zhongyuan University of Technology, China); Xing Rong (Zhongyuan University of Technology, China); Qianxue Zheng (Zhongyuan University of Technology, China); Ruili Sun (Zhongyuan University of Technology, China); Yuna Chen (Zhongyuan University of Technology, China); Xiuchen Wang (Zhongyuan University of Technology, China);
00:00 On the Treatment of Hypersingularity for Solving Volume Integral Equations
P. C. Wang (Tongji University, China); Z. G. Zhou (Tongji University, China); J. H. Zhou (Tongji University, China); Xuefeng Yin (Tongji University, China); Mei Song Tong (Tongji University, China);

00:00 Simulation for Flat-plate Bounded Wave EMP Simulator with Distributed Terminator and Plane Source
Xiang-Qin Zhu (Northwest Institute of Nuclear Technology, China); Jianguo Wang (State Key Laboratory of Intense Pulsed Radiation Simulation and Effect (Northwest Institute of Nuclear Technology, China)); Guowei Zhang (State Key Laboratory of Intense Pulsed Radiation Simulation and Effect (Northwest Institute of Nuclear Technology, China)); Weiqing Chen (State Key Laboratory of Intense Pulsed Radiation Simulation and Effect (Northwest Institute of Nuclear Technology, China));

00:00 H-polarized Plane Wave Diffraction by an Acute-angled Dielectric Wedge: A Time Domain Solution
Marcello Frongillo (University of Salerno, Italy); Gianluca Gennarelli (National Research Council, Italy); Giovanni Riccio (University of Salerno, Italy);

00:00 Calculation of the Reflection and Transmission of Finite Sized Beams through Layered Uniaxial Anisotropic Media Accelerated by Plane Wave Spectrum Algorithm
Shihao Ji (Beihang University, China); Ming Bai (Beihang University, China); Zhao Liu (Beihang University, China); Yao Ma (Beihang University, China); Xiuzhu Ye (Beihang University, China);

00:00 Impact on the Performance of Compact Antenna Test Range due to Surface Deviation of the Reflector
Zhao Liu (Beihang University, China); Ming Bai (Beihang University, China); Shihao Ji (Beihang University, China); Xiao Fang (Beihang University, China); Xiuzhu Ye (Beihang University, China);

00:00 Electromagnetic Waves Described with the Complex Quaternion
Zi-Hua Weng (Xiamen University, China);

00:00 Methods for the Sensing and Evaluation of Ionosphere Changes and Their Impact on the Human Organism
Michael Hanzelka (Brno University of Technology, Czech Republic); Jiri Dan (Masaryk University, Czech Republic); Pavel Fiala (Brno University of Technology, Czech Republic); Martin Friedl (Brno University of Technology, Czech Republic); Vladan Holcner (University of Defence, Czech Republic);

00:00 Applications of Noise Spectroscopy in the Analysis of Periodic Material Structures
Zoltan Szabo (Brno University of Technology, Czech Republic); Petr Drexler (Brno University of Technology, Czech Republic); Jan Segink (Brno University of Technology, Czech Republic); Dusan Nesor (Brno University of Technology, Czech Republic); Martin Friedl (Brno University of Technology, Czech Republic); Petr Marcon (Brno University of Technology, Czech Republic); Pavel Fiala (Brno University of Technology, Czech Republic);

00:00 A Interdigital Slot-loaded Directional Coupler Design Based on Substrate Integrated Waveguide
Jie Cao (East China Normal University, China); Lu Fu (East China Normal University, China); Shouzheng Zhu (East China Normal University, China);

00:00 A Tunable Microwave Absorber Based on Active Frequency Selective Surface
Kaiman Qi (Communication University of China, China); Xiaofeng Yuan (Communication University of China, China); Yongfeng Wang (Communication University of China, China);

00:00 A Wideband Wide-angle Polarization-insensitive Metamaterial Absorber
Peng Cheng Zhang (University of Electronic Science and Technology of China, China); Xian Qi Lin (University of Electronic Science and Technology of China, China); Fei Cheng (University of Electronic Science and Technology of China, China); Rui Shen (University of Electronic Science and Technology of China, China); Yong Fan (University of Electronic Science and Technology of China, China);

00:00 Design and Analysis of a Wideband Metamaterial Absorber Applied to Radome
Zhewen Mao (Nanjing University of Aeronautics and Astronautics, China); Shaobin Liu (Nanjing University of Aeronautics and Astronautics, China); Xiang-Kun Kong (Nanjing University of Aeronautics and Astronautics, China); Bo-Rui Bian (Nanjing University of Aeronautics and Astronautics, China); Beigun Wang (Nanjing University of Aeronautics and Astronautics, China); Lin Chen (Nanjing University of Aeronautics and Astronautics, China);

00:00 Preliminary Experimental Results along a Horizontal Path for Adaptive Rate-controlled FSO
Changqi Yang (Xi’an Shiyou University, China); Juan Zhao (Xi’an Shiyou University, China); Anqi Liu (Hubei University, China);
00:00 A Transmission-typed Broadband Absorber
Hai-Ming Li (Nanjing University of Aeronautics and Astronautics, China); Shaobin Liu (Nanjing University of Aeronautics and Astronautics, China); Hai Feng Zhang (Nanjing University of Aeronautics and Astronautics, China); Xiang-Kun Kong (Nanjing University of Aeronautics and Astronautics, China);

00:00 Realization of XOR and OR Logic Gate with One Configuration in the Two-dimensional Photonic Crystals
Yuchi Jiang (Nanjing University of Aeronautics and Astronautics, China); Shaobin Liu (Nanjing University of Aeronautics and Astronautics, China); Hai Feng Zhang (Nanjing University of Aeronautics and Astronautics, China); Xiang-Kun Kong (Nanjing University of Aeronautics and Astronautics, China);

00:00 Efficient Localization of Terahertz Waves within a Gradient Dielectric-filled Metallic Grating
Wenmu Zhao (Harbin Institute of Technology, China); Dongquan Ju (Harbin Institute of Technology, China); Yongguan Jiang (Harbin Institute of Technology, China);

00:00 Nonreciprocal Self-collimation Transmission in Two-dimensional Gyromagnetic Photonic Crystals
Qing-Bo Li (Huaqiyin Normal University, China); Zhen Li (Nanjing University, China); Rui-Xin Wu (Nanjing University, China);

00:00 The Effect of Structural Parameters on Terahertz Quantum Cascade Lasers
Norihiko Sekine (National Institute of Information and Communications Technology, Japan); Iwao Hosako (National Institute of Information and Communications Technology, Japan);

00:00 Low Reflectance GaAs Nano-cones Fabricated by Colloidal Lithography for Solar Cells
Nan Liu (Zhejiang University, China); Yu Hu (Zhejiang University, China); Jian-Jun He (Zhejiang University, China);

00:00 Experimental Analysis of Thin Graphite Periodic Structures in the THz Band
Margherita Patrizia Maria Colleoni (Universitat Politècnica de Valencia, Spain); Borja Vidal Rodriguez (Universitat Politècnica de Valencia, Spain);

00:00 Label-free Multiscale Multiview and Multiwavelength Whole Body Photoacoustic Tomography of Small Animals in Vivo
Jeeseu Kim (Pohang University of Science and Technology, Korea); Mansik Jeon (Pohang University of Science and Technology, Korea); Chulhong Kim (Pohang University of Science and Technology, Korea);

00:00 Analysis, Design and Simulation of a Compact Wide Band VHF High Power Tubular Band Pass Filter
Zohre Pourgholamhossein (Isfahan University of Technology (IUT), Iran); Gholamreza Askari (Isfahan University of Technology (IUT), Iran); Hamid Mirmohammad Sadeghi (Isfahan University of Technology (IUT), Iran);

00:00 Analysis, Design and Implementation of a Broadband Coaxial-to-microstrip Transition for UWB Radars
Gholamreza Askari (Isfahan University of Technology (IUT), Iran); Mahmoud Kamarei (University of Tehran, Iran); Mahmoud Shahabadi (University of Tehran, Iran); Hamid Mirmohammad Sadeghi (Isfahan University of Technology (IUT), Iran);

00:00 A Broadband UHF RFID Tag Antenna with a Novel T-matching Network
Zhbin He (South China Normal University, China); Te Pan (South China Normal University, China); Hui Liu (South China Normal University, China); Yuan Zhang (South China Normal University, China); Sailing He (Zhejiang University, China);

00:00 Capacitively Coupled-fed Electrically Small Loop Antenna with High Efficiency for WiFi Application
Qingchong Liu (Zhejiang University, China); Yufeng Yu (China Jiangnan Electronics Communication Institute, China); Qi Liu (Zhejiang University, China);

00:00 25 G/s Passive Current Board Design of PRBS Generator
Chih-Wei Yu (National Kaohsiung University of Applied Sciences, Taiwan, R.O.C.); Jia-Jin Wu (National Kaohsiung University of Applied Sciences, Taiwan, R.O.C.); C. L. Chiu (National Kaohsiung University of Applied Sciences, Taiwan, R.O.C.); Jau-Ji Jou (National Kaohsiung University of Applied Sciences, Taiwan, R.O.C.); Tien-Tsorng Shih (National Kaohsiung University of Applied Sciences, Taiwan);

00:00 Analysis and Modeling of Effective Dielectric Constant of Multilayer Coplanar Waveguide (CPW) and Asymmetric Coplanar Waveguide (ACPW) Using Neuro-Fuzzy Models
Abdelaziz Ouchiche (University Hadj Lakhdar of Batna, Algeria); Farid Bouttou (University of M’sila, Algeria);
00:00 A Quasi-hexagon Shaped Band-stop FSS in Wideband RCS Reduction
Peng Cheng Zhang (University of Electronic Science and Technology of China, China); Xian Qi Lin (University of Electronic Science and Technology of China, China); Fei Cheng (University of Electronic Science and Technology of China, China); Rui Shen (University of Electronic Science and Technology of China, China); Yong Pan (University of Electronic Science and Technology of China, China);

00:00 A Spiral Antenna with Integrated Planar Feeding Structure
Hui-Fen Huang (South China University of Technology, China); Zonglin Lv (South China University of Technology, China); Junfeng Wu (South China University of Technology, China);

00:00 A Novel Compact UWB Antenna with Triple Band-notched Characteristics
Lin Chen (Nanjing University of Aeronautics and Astronautics, China); Shaobin Liu (Nanjing University of Aeronautics and Astronautics, China); Xiang-Kun Kong (Nanjing University of Aeronautics and Astronautics, China); Bo-Rui Bian (Nanjing University of Aeronautics and Astronautics, China); Zhiwen Mao (Nanjing University of Aeronautics and Astronautics, China);

00:00 Quasi-coherent Noise Jamming Based on Interrupted-sampling and Pseudo-random Serials Phase-modulation
Ning Tai (National University of Defense Technology, China); Yu-Jian Pan (National University of Defense Technology, China); Deping Zhang (National University of Defense Technology, China); Chao Wang (National University of Defense Technology, China); Naichang Yuan (National University of Defense Technology, China);

00:00 Validation Analysis and Test of Semiconductor Device Simulator GSRES
Yong Li (Northwest Institute of Nuclear Technology, China); Gong Ding (Northwest Institute of Nuclear Technology, China); Haiyan Xie (Northwest Institute of Nuclear Technology, China); Chun Xuan (Northwest Institute of Nuclear Technology, China); Hongfu Xia (Northwest Institute of Nuclear Technology, China); Jianguo Wang (Northwest Institute of Nuclear Technology, China);

00:00 A Triple-band Planar Inverted-F Antenna for WLAN Application
Hui-Fen Huang (South China University of Technology, China); Yuanhua Hu (South China University of Technology, China);

00:00 Radiation from Microstrip Patch Antennas Located on Elliptical Surfaces
Rafal Lech (Gdansk University of Technology, Poland); Adam Kusiek (Gdansk University of Technology, Poland); Wojciech Marynowski (Gdansk University of Technology, Poland);

00:00 Nonuniform Cylindrical Ferrite Coupled Line Junction
Adam Kusiek (Gdansk University of Technology, Poland); Wojciech Marynowski (Gdansk University of Technology, Poland); J. Mazur (Gdansk University of Technology, Poland);

00:00 Rigorous Analysis of Multilayered Elliptical Striplines
Adam Kusiek (Gdansk University of Technology, Poland); Rafal Lech (Gdansk University of Technology, Poland);

00:00 The Investigation of the Performance of Crossovers Placed on Curved Surfaces
Wojciech Marynowski (Gdansk University of Technology, Poland); Adam Kusiek (Gdansk University of Technology, Poland); Rafal Lech (Gdansk University of Technology, Poland);

00:00 Design and Implementation of a New One Layer Microstrip and CPW Feeding Structures
Wojciech Marynowski (Gdansk University of Technology, Poland); Adam Kusiek (Gdansk University of Technology, Poland); Rafal Lech (Gdansk University of Technology, Poland);

00:00 Microwave Radiation Interferometry High Resolution Reconstruction Based on Mixed Orthogonal Basis
Chao Song (East China Jiaotong University, China); Lu Zhu (East China Jiaotong University, China); Yuanyuan Liu (East China Jiaotong University, China); Suhua Chen (East China Jiaotong University, China);
00:00 Development of DC Current Distribution Mapping System for Solar Panels Using an HTS-SQUID Gradiometer
Shohei Kasuya (Okayama University, Japan); Kohei Tanaka (Okayama University, Japan); Mohd Mawardi Saari (Okayama University, Japan); Kenji Sakai (Okayama University, Japan); Toshikiko Kiva (Okayama University, Japan); Keiji Tsukada (Okayama University, Japan);

00:00 Highly Sensitive Detection Method for Rotating Sample Magnetometer Using HTS-SQUID
Naohiro Okamoto (Okayama University, Japan); Yuta Watanabe (Okayama University, Japan); Mohd Mawardi Saari (Okayama University, Japan); Kenji Sakai (Okayama University, Japan); Toshikiko Kiva (Okayama University, Japan); Keiji Tsukada (Okayama University, Japan);

00:00 Surface Effect of the Two-dimensional Photonic Crystal on Imaging Property
Yuanwei Tong (University of Shanghai for Science and Technology, China); Peng Fang Liu (University of Shanghai for Science and Technology, China); Zao Jie Zhu (University of Shanghai for Science and Technology, China);

00:00 Measurement of Moisture Content Using HTS-SQUID Magnetometer
Toki Kusaka (Okayama University, Japan); Mohd Mawardi Saari (Okayama University, Japan); Yuichi Ishihara (Okayama University, Japan); Yuya Tsukamoto (Okayama University, Japan); Kenji Sakai (Okayama University, Japan); Toshikiko Kiva (Okayama University, Japan); Keiji Tsukada (Okayama University, Japan);

00:00 Stereo-SAR Technique without Using Control Points to Estimate Terrain Height
Hsi-Tseng Chou (Yuan Ze University, Taiwan); Shih-Chung Tuan (Oriental Institute of Technology, Taiwan); Kung-Yu Lu (National Taiwan University, Taiwan);

00:00 Detection of Selected Chemical Substances by Means of Nuclear Quadrupole Resonance
Miloslav Steinbauer (Brno University of Technology, Czech Republic); Bohumil Kral (Prototypa, Czech Republic); Ivo Fiala (Prototypa, Czech Republic); Miroslav Stanek (Prototypa, Czech Republic); Michal Prochazka (Brno University of Technology, Czech Republic); Pavel Fiala (Brno University of Technology, Czech Republic); Jan Seginak (Brno University of Technology, Czech Republic); Petr Drezler (Brno University of Technology, Czech Republic);

00:00 Subsurface Imaging 3-D Objects in Multilayered Media by Using Electromagnetic Inverse Scattering Series Method (EISSM)
Jinguo Wang (University of Electronic Science and Technology of China (UESTC), China); Zhiqin Zhao (University of Electronic Science and Technology of China, China); Zai-Ping Nie (University of Electronic Science and Technology of China, China); Qing Hua Liu (Duke University, USA);

00:00 Combination of Physical Theory of Diffraction Time Domain with Finite Difference Time Domain for Analysis of Electromagnetic Scattering in Wideband
Pengfei Lyu (Institute of Microelectronics, Chinese Academy of Sciences, China); Xiaoyu Xu (Institute of Microelectronics, Chinese Academy of Sciences, China); Yian Wang (Institute of Microelectronics, Chinese Academy of Sciences, China); Zhaoxiang Ren (Institute of Microelectronics, Chinese Academy of Sciences, China);

00:00 Fibonacci Grating for Far-field Super-resolution Imaging
Kedi Wu (Wuhan University, China); Guo Ping Wang (Wuhan University, China);

00:00 High-order Localized Spoof Surface Plasmonic Resonances
Zhen Liao (Southeast University, China); Xi-aopeng Shen (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 A Single Anisotropic Metasurface to Realize Luneburg Lens and Maxwell Fisheye Lens Simultaneously
Xiang Wan (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 Suppression of Scattering Based on an Ultrathin Metasurface
Jie Zhao (Southeast University, China); Qiang Cheng (Southeast University, China); Li Hua Gao (Southeast University, China); Mei-Qing Qi (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 A Microwave Light-weight and Broadband Absorber Based on Multilayer Square Resistive Films
Yang Zhou (University of Electronic Science and Technology of China, China); Guorui Zhang (University of Electronic Science and Technology of China, China); Pei-Heng Zhou (University of Electronic Science and Technology of China, China); Hai-Yan Chen (University of Electronic Science and Technology of China, China); Jianliang Xie (University of Electronic Science and Technology of China, China); Long-Jiang Deng (University of Electronic Science and Technology of China, China);
00:00 Multi-wavelength Thulium-doped Fiber Laser near 2 μm Based on a Sagnac Loop Filter
Yizhen Wei (Zhejiang University, China); Xiong Yang (Zhejiang University, China);

00:00 Nonlinear Optical Properties of Chiral Nanostructures
Concita Sibilia (Università di Roma, La Sapienza, Italy); Alessio Benedetti (Università di Roma, La Sapienza, Italy); Alessandro Belardini (Università di Roma, La Sapienza, Italy); Fabio Antonio Bovino (Quantum Technology Lab, Italy);

00:00 The Calculation Method and the Device for Measurement of a Level of Visibility on the Road
Sergei Mikhailovich Gvozdev (“Bilight-trade” Ltd., Russian Federation); Egor Aleksandrovich Konовалов (Moscow Power Engineering Institute, Russian Federation); Natalia Dmitrievna Sadovsnikova (“Bilight-trade” Ltd., Russian Federation);

00:00 Design and Experiment Study of L Band Metallic Photonic Crystal TEM-TE_{11} Mode Converter
Sha Xu (Institute of Applied Electronics, China Academy of Engineering Physics, China); Dong Wang (Institute of Applied Electronics, China Academy of Engineering Physics, China); Fen Qin (Institute of Applied Electronics, China Academy of Engineering Physics, China);

00:00 Modulation Instability of Terahertz Pulses in Layered Structures n-InSb-Dielectric
Christian Castrejon-Martinez (Autonomous University of State Morelos (UAEM), Mexico); Volodymyr V. Grimalksky (Autonomous University of State Morelos (UAEM), Mexico); Svetlana V. Kosheva (Autonomous University of State Morelos (UAEM), Mexico); Jesus Escobedo-Alatorre (Autonomous University of State Morelos (UAEM), Mexico);

00:00 Study of the Thermal, Stress, and Thermo-optic Effects in High Average Power Photonic Crystal Fiber Lasers
Mostafa Abouricha (Université Hassan II Ain Chock, Morocco); Abdelkader Boulechar (Hassan II Casablanca University, Morocco); M. El Mouden (Université Hassan II Ain Chock, Morocco); N. Rochdi (Université Hassan II Ain Chock, Morocco);

00:00 Data Acquisition System for Body-to-body Radio Communication Channel
Hasliza A. Rahim (Universiti Malaysia Perlis (UniMAP), Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia); K. K. Goh (Universiti Malaysia Perlis, Malaysia); V. Ganesan (Universiti Malaysia Perlis, Malaysia); F. A. A. Faad (Universiti Malaysia Perlis, Malaysia); Noor Anida Abu Talib (Universiti Malaysia Perlis (UniMAP), Malaysia); Farah Salwani Abdullah (Universiti Malaysia Perlis (UniMAP), Malaysia);

00:00 Discretization of the Frequency Spectrum of Ultrawideband Radiator
Vladimir E. Fortov (Joint Institute for High Temperatures of RAS (JIHT RAS), Russia); V. M. Fedorov (Joint Institute for High Temperature of Russian Academy of Sciences (JIHT of RAS), Russia); Vasily Ye. O斯塔shev (Joint Institute for High Temperature of RAS, Russia); A. V. Ul’yanov (Joint Institute for High Temperatures of RAS, Russia);

00:00 Beam Switching Antenna
Lim Wai Leong (University Malaysia Perlis (UniMAP), Malaysia); Fwen Hoon Wee (University Malaysia Perlis (UniMAP), Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia); Kok Yeow You (University Teknologi Malaysia, Malaysia); Yeng Seng Lee (University Malaysia Perlis (UniMAP), Malaysia); Hana Abdull Halim (Universiti Malaysia Perlis (UniMAP), Malaysia); Farah Salwani Abdullah (Universiti Malaysia Perlis (UniMAP), Malaysia);

00:00 A Dual-polarized Cavity-backed Annular Slot Antenna for Indoor MIMO Systems
Weiwen Li (Xiamen University, China); Chen Wang (Xiamen University, China); Zhenyi Xie (Xiamen University, China); Baiqiang You (Xiamen University, China);

00:00 Dimension Reduction Analysis of Congregating Receivers in Local Area Network of Mid-distance Wireless Power Transfer
Xiaoyu Xu (Institute of Microelectronics, Chinese Academy of Sciences, China); Pengfei Lyu (Institute of Microelectronics, Chinese Academy of Sciences, China); Chao Zhang (Institute of Microelectronics, Chinese Academy of Sciences, China); Xiaojin Song (Institute of Microelectronics, Chinese Academy of Sciences, China); Zhuoxiang Ren (Institute of Microelectronics, Chinese Academy of Sciences, China);
00:00 A Wideband Metamaterial Absorber Based on Multi-layer Rings and Lumped Resistors
Yujie Liu (Huaqiao University, China); Wei Tang (Huaqiao University, China); Yuehe Ge (Huaqiao University, China);

00:00 Designing a Reliable Wireless Dual Mode Real-time Home Automation System Based on Arduino Single-board Microcontroller
Bader M. O. Al-thobaiti (Taif University, Kingdom of Saudi Arabia); Iman J. M. Abosolaiman (Taif University, Kingdom of Saudi Arabia); Mahdi H. M. Alzahrani (Taif University, Kingdom of Saudi Arabia); Sani H. A. Almalki (Taif University, Kingdom of Saudi Arabia); Mohamed S. Soliman (Taif University, Kingdom of Saudi Arabia);

00:00 A Miniaturized Dual-frequency Circularly Polarized Microstrip Antenna for Beidou and GPS Applications
Zhaofeng Chen (University of Electronic Science and Technology of China, China); Jin Pan (University of Electronic Science and Technology of China, China); Naijia Chu (University of Electronic Science and Technology of China, China);

00:00 Design of Low Noise Amplifier for Beidou B3 band
Pin Li (University of Electronic Science and Technology of China (UESTC), China); Jin Pan (University of Electronic Science and Technology of China, China);

00:00 Design of Broadband Dual-polarized Antenna with Inverted L-probe Feed
K. S. Phoo (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Mohamad Zoinal Abidin Abd Aziz (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Badrul Hisham Ahmad (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Mohd Azishah Othman (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Mohd Kadim Suaidi (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia);

00:00 Scrambling Study of Modal Power Distribution in Polygonal Fibers for Exoplanet Detection
Jian Han (Nanjing Institute of Astronomical Optics & Technology, National Astronomical Observatories, CAS, China); Dong Xiao (Nanjing Institute of Astronomical Optics & Technology, Chinese Academy of Sciences, China); Huiqi Ye (Nanjing Institute of Astronomical Optics & Technology, Chinese Academy of Sciences, China);

00:00 Self-reconstruction and Rectification of Non-diffracting Beams after Focusing
Lan Liu (Luohe Medical College, China); Haitao Zhang (Luohe Medical College, China); Pengtie Wu (Huaqiao University, China);

00:00 An Improved Method of Diagnosis of Failed Elements in Arrays Using Genetic Algorithm
Jing Miao (University of Electronic Science and Technology of China, China); Bo Chen (University of Electronic Science and Technology of China, China); Wuqiong Luo (University of Electronic Science and Technology of China, China);

00:00 Design of a C-band Coaxial Cavity Band Pass Filter
Xingxing Du (University of Electronic Science and Technology of China, China); Pu Tang (University of Electronic Science and Technology of China, China); Bo Chen (University of Electronic Science and Technology of China, China);

00:00 Three-component Decomposition for Polarimetric SAR Images Based on Coherency Matrix
Yongjun Cai (University of Chinese Academy of Sciences, China); Xiangkun Zhang (National Space Science Center, Chinese Academy of Sciences, China); Jingshan Jiang (Center for Space Science and Applied Research, Chinese Academy of Sciences, China);

00:00 An Improved Model-based Polarimetric Decomposition Preserving Dominant Scattering Characteristics
Yongjun Cai (University of Chinese Academy of Sciences, China); Xiangkun Zhang (National Space Science Center, Chinese Academy of Sciences, China); Jingshan Jiang (Center for Space Science and Applied Research, Chinese Academy of Sciences, China);

00:00 A Method for Pose Estimation of Ship Target from SAR ROI Based on Ellipse Fitting
Xiao Qiang Zhang (National University of Defense Technology, China); Boli Xiong (National University of Defense Technology, China); Gang Gang Dong (National University of Defense Technology, China); Gangyao Kuang (National University of Defense Technology, China);

00:00 Design of a Doherty Power Amplifier for Performance Enhancement
Yang Liu (Communication University of China, China); Huaibao Xiao (Communication University of China, China); Guizhen Lu (Communication University of China, China);
00:00 Application of the Method of Fresnel Zone Analysis in Base Station Location Survey
Zhiyuan Song (China Mobile Group Design Institute Co., Ltd., China); Feng Gao (China Mobile Group Design Institute Co., Ltd., China); Kai He (China Mobile Group Design Institute Co., Ltd., China); Wentai Zhu (China Mobile Group Design Institute Co., Ltd., China);

00:00 High-performance Ambipolar Organic Field-effect Transistors Based on Solution-grown TIPS-pentacene Single Crystals
Guobao Xue (Zhejiang University, China); Congcheng Fan (Zhejiang University, China); Jiale Wu (Zhejiang University, China); Shuang Liu (Zhejiang University, China); Hanying Li (Zhejiang University, China);

00:00 Large-area Fabrication of Organic Single Crystal Field-effect Transistors via Solution Growth
Shuang Liu (Zhejiang University, China); Congcheng Fan (Zhejiang University, China); Guobao Xue (Zhejiang University, China); Jiale Wu (Zhejiang University, China); Hanying Li (Zhejiang University, China);

00:00 Multiband Printed Monopole Antenna Loaded with Slot-type Resonator for WLAN/WiMAX Applications
Kai He (China Mobile Group Design Institute Co., Ltd., China); Feng Gao (China Mobile Group Design Institute Co., Ltd., China); Zhiyuan Song (China Mobile Group Design Institute Co., Ltd., China); Wentai Zhu (China Mobile Group Design Institute Co., Ltd., China);

00:00 A Novel Wideband Antenna Element for Base-station
You Li (Nanjing University of Aeronautics and Astronautics, China); Haimin Zhang (Nanjing University of Aeronautics and Astronautics, China); Qunsheng Cao (Nanjing University of Aeronautics and Astronautics, China);

00:00 Design of a Sing-feed Dual-band Circularly-polarized Square Microstrip Patch Antenna for Beidou Multisystem Navigation Terminal Devices
Lu Fu (East China Normal University, China); Zhiyang Liu (East China Normal University, China); Jie Cao (East China Normal University, China); Shouzheng Zhu (East China Normal University, China);

00:00 2.5 GHz Silicon Dioxide Dielectric Resonator Antenna on Gallium Arsenide Substrate
Parvathy Nair (Amrita Vishwa Vidyapeetham, India); P. Rajeswari (Amrita Vishwa Vidyapeetham, India);

00:00 Kind of TEM Waveguide Phase Shifter
Xue-Long Zhao (National University of Defense Technology, China); Cheng-Wei Yuan (National University of Defense Technology, China); Lie Liu (National University of Defense Technology, China); Shengren Peng (National University of Defense Technology (NUDT), China); Zhen Bai (National University of Defense Technology, China);

00:00 A Novel Mutual Coupling Matrix Monitoring Method in Two Dimensional Rectangle Antenna Array
Junhe Zhou (Tongji University, China); Jian Zhang (Tongji University, China); Hui Wang (Tongji University, China); Xuefeng Yin (Tongji University, China); Mei Song Tong (Tongji University, China); Jian Li (Huawei Technologies, China);

00:00 Research on Subwavelength Metal-based Waveguide Structures
Wen Zhou (South China Normal University, China); Qilong Tan (South China Normal University, China); Jieer Lao (South China Normal University, China); Xuan Huang (South China Normal University, China);

00:00 Optical Interaction of CircularResonators with Metal-insulator Confinement
Kai-Jun Che (Xiamen University, China);

00:00 Metal-clad Nanolasers for Dense Chip-scale Integration
Yeshaiahu Fainman (University of California at San Diego, USA);

00:00 Photonic Crystal Nano-emitters in InP and Si Integrated Nanophotonics
Masaaya Notomi (NTT Nanophotonics Center, Japan);

00:00 Plasmon Lasing Action in Gain-assisted Gold Nanoparticle-array-on-film Geometry
Lai-Na Shi (Institute of Microelectronics, Chinese Academy of Science, China); Changqing Xie (Institute of Microelectronics, Chinese Academy of Sciences, China);

00:00 Photostimulated Quantum Effects in Quantum Wire with a Parabolic Potential
Hoang Van Ngoc (Vietnam National University, Vietnam); Nguyen Vu Nhan (Academy of Defence Force-Air force, Vietnam); Nguyen Quang Bau (Hanoi National University, Vietnam);

00:00 The Influence of the Electromagnetic Wave on the Quantum Acoustomagnetoelectric Field in a Quantum Well with a Parabolic Potential
Nguyen Quang Bau (Hanoi National University, Vietnam); Nguyen Van Hieu (Danang University, Vietnam);
00:00 An Advanced Anti-collision Algorithm Based on Inter-tag Communication Mechanism in RFID-sensor Network
Menglong Li (Beijing University of Posts and Telecommunications, China);

00:00 The Fast Estimation of Near Fields for Parabolic Antenna
Keqiang He (Beijing Institute of Tracking and Telecommunications Technology, China); Wei Tan (Beijing Institute of Tracking and Telecommunications Technology, China);

00:00 Planar Monopole Ultrawide Band Antennae with WLAN Band-notch
Zeeshan Ahmed (National University of Science and Technology (NUST), Pakistan); Shakeel Ahmad Waqas (National University of Science and Technology (NUST), Pakistan); Fahad Shamshad (National University of Science and Technology (NUST), Pakistan); Gul Perwasha (COMSATS Institute of Information Technology, Pakistan); Farooq Ahmad Bhatti (National University of Sciences and Technology (NUST), Pakistan);

00:00 Compact Sized Meander Line Antenna for Wireless Applications
Shakeel Ahmad Waqas (National University of Science and Technology (NUST), Pakistan); Zeeshan Ahmed (National University of Science and Technology (NUST), Pakistan); Fahad Shamshad (National University of Science and Technology (NUST), Pakistan); Imad Ali (University of Engineering and Technology, Pakistan); Farooq Ahmad Bhatti (National University of Sciences and Technology (NUST), Pakistan);

00:00 UWB Bi-Coni-Log Hybrid Antenna Design by Using 3 Different Scaling Factors
Kunal Nate (P.V.P.C.O.E., India); Tanmay Shinde (P.V.P.C.O.E., India); Subodh Bansode (P.V.P.C.O.E., India); Leen Govekar (P.V.P.C.O.E., India);

00:00 Angular Diversity Scheme for Dipole Antennas
Andrew. O. Akala (University of Lagos, Nigeria); E. O. Somoye (Lagos State University, Nigeria); A. O. Adewale (University of Lagos, Nigeria);

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Session 2P1
1. FocusSession.SC1: Advances in Multiscale, Multiphysics Computation

Tuesday PM, August 26, 2014
Room A
Organized by Qing Huo Liu, Weng Cho Chew
Chaired by Qing Huo Liu, Weng Cho Chew

00:00 Giant Circular Dichroism Enhancement and Chiroptical Illusion in Hybrid Molecule-plasmonic Nanostructures
Yineng Liu (Beijing Institute of Technology, China); Xiangdong Zhang (Beijing Computational Science Research Center, China);

00:00 ISAR Scattering/Imaging and Reconstruction for a Space Target Observed in Multi-station and Multi-orbit Modes
Ya-Qiu Jin (Fudan University, China);

00:00 Thin Plasmonic Materials to Stop or Filter Waves
Yadong Xu (Soochow University, China); Quannan Wu (Soochow University, China); Huangyang Chen (Soochow University, China);

00:00 Electromagnetic Characterization of Tunable Band-pass Filters with a PET-controlled Perturber
Guochun Wan (Tongji University, China); J. X. Hong (Tongji University, China); Z. G. Zhou (Tongji University, China); X. W. Zhang (Tongji University, China); Mei Song Tong (Tongji University, China);

00:00 A Combined Method for Computing Installed Radiation Patterns of Antennas on Large Conducting Platforms
Huapeng Zhao (Institute of High Performance Computing, Singapore); Siping Gao (Institute of High Performance Computing, Singapore); Binfang Wang (Institute of High Performance Computing, Singapore); Weijiang Zhao (Institute of High Performance Computing, Singapore);

00:00 Efficient Wide-band Analysis of GPR Antenna Around a Platform Using the Best Uniform Rational Approximation Technique
Ji Ma (Key Laboratory of Electromagnetic Radiation and Sensing Technology, Chinese Academy of Sciences, China); Guangyou Fang (Key Laboratory of Electromagnetic Radiation and Sensing Technology, Chinese Academy of Sciences, China); Yicai Ji (Key Laboratory of Electromagnetic Radiation and Sensing Technology, Chinese Academy of Sciences, China);
Multi-scale Electromagnetic Modeling by Integral Equation Domain Decomposition Method with Hybrid Basis Functions
Ran Zhao (University of Electronic Science and Technology of China, China); Mi Tian (University of Electronic Science and Technology of China, China); Jun Hu (University of Electronic Science and Technology of China, China); Zai-Ping Nie (University of Electronic Science and Technology of China, China);

Analysis of New Phenomena Caused by the Interaction between Electromagnetic Fields and Charged Particles
Jianwei You (Southeast University, China); Tie Jun Cui (Southeast University, China);

A CAV-DDM Method for Scattering by Cavity with Thin Thickness
Jun Hu (University of Electronic Science and Technology of China, China); Ran Zhao (University of Electronic Science and Technology of China, China); Ming Jiang (University of Electronic Science and Technology of China, China); Zai-Ping Nie (University of Electronic Science and Technology of China, China);

Dyadic Green’s Function, Spectral Function, Local Density of States, and Fluctuation Dissipation Theorem
Weng Cho Chew (University of Illinois, USA); Wei E. I. Sha (The University of Hong Kong, China);

Applying CEM Techniques to Solve Nano-scale Quantum Transport Problems
Jun Z. Huang (Purdue University, USA); Weng Cho Chew (University of Illinois, USA); Li Jun Jiang (The University of Hong Kong, China);

Electromagnetic Wave Characterization in the Magnetized Cold Plasma
Ping Li (The University of Hong Kong, China); Li Jun Jiang (The University of Hong Kong, China);

Simulations of Scattering of Electromagnetic Waves by Bicontinuous Media for Applications in Microwave Remote Sensing of Terrestrial Snow
Leung Tsang (University of Washington, USA); Shurun Tan (University of Washington, USA); Wenmo Chang (University of Washington, USA); Xiaolan Xu (California Institute of Technology, USA);

Some Recent Progress on the Discontinuous Galerkin Time Domain Method for Multiscale Electromagnetics
Qing Hao Liu (Duke University, USA); Qiang Ren (Duke University, USA); Qingtao Sun (Duke University, USA); Luis Tobon (Duke University, USA);

Computational Electromagnetics (CEM) Research: Yesterday, Today, and Tomorrow
Jin-Fa Lee (The Ohio State University, USA);

Supercontinuum Generation in Elliptical Silicon Nanowire Embedded Spiral Photonic Crystal Fiber
Abdoul M. Abobaker (Collage of Electronic Technology, Libya); E. Gunasundari (VIT University, India); K. Senthilnathan (VIT University, India); S. Sivabalan (VIT University, India); Kaliyaperumal Nakkeeran (University of Aberdeen, UK); P. Ramesh Babu (VIT University, India);

Observation and Phenomenological Interpretation of Shifts in Electrical Resonance of Square Shaped Planar THz Split Ring Resonators
Rahul Kumar (Indian Institute of Technology Madras, India); Ankit Arora (Indian Institute of Technology Madras, India); Shaumik Ray (CSIR Campus, India); Bala Pesala (CSIR Campus, India); Enakshi Bhattacharya (Indian Institute of Technology Madras, India); Anantha Krishnan (Indian Institute of Technology Madras, India);

Development of 3D Anisotropic Artificial Dielectric Metamaterial for THz Frequency Range
Egor A. Gurvitz (ITMO University, Russia); S. A. Andronaki (ITMO University, Russia); Svyatoslav Igorevich Gusev (ITMO University, Russia); V. Y. Soboleva (ITMO University, Russia); Y. D. Nazarev (ITMO University, Russia); Mikhail Konstantinovich Khodzitsky (ITMO University, Russia);
00:00 Enhancement of Terahertz Surface Plasmon Polaritons Using Tapered Graphene Waveguide
Longfang Ye (Xiamen University, China); Liang Zhang (Xiamen University, China); Yanhui Liu (Xiamen University, China); Qing Huo Liu (Duke University, USA);

00:00 Fabrication and Characterization of Fused Silica-based Metamaterials for High Temperature Resistant Radome Applications
Xigeng Miao (Kuang-Chi Institute of Advanced Technology, China); Qingwen Feng (Kuang-Chi Institute of Advanced Technology, China); Xiaowei Fang (Kuang-Chi Institute of Advanced Technology, China); Zhi Ya Zhao (Kuang-Chi Research Institute of Advanced Technology, China); Rao Peng Liu (Southeast University, China);

00:00 Multiband and Polarization Insensitive Terahertz Absorption Using a Vertical Nanowire Metamaterial
Yongqiang Pang (Air Force Engineering University, China); Shaobo Qu (Air Force Engineering University, China); Jiafu Wang (Air Force Engineering University, China); Hua Ma (Air Force Engineering University, China); Yongfeng Li (Air Force Engineering University, China); Jieqiu Zhang (Air Force Engineering University, China); Mingbao Yan (Air Force Engineering University, China); Hongya Chen (Air Force Engineering University, China);

Session 2P2b
SC3: Optical Microcavities in Biosensing
Tuesday PM, August 26, 2014
Room B
Organized by Qimin Quan, Frank Vollmer
Chaired by Qimin Quan

00:00 Optical Sensing and Particle Manipulation Using Silicon-based Optofluidic Chips
Andrew Wing On Poon (The Hong Kong University of Science and Technology, China); Jiawei Wang (The Hong Kong University of Science and Technology, China); Zhanshi Yao (The Hong Kong University of Science and Technology, China);

00:00 Photonic Crystal Slabs for Biosensing
Sabrina Jahns (Christian-Albrechts-Universitat zu Kiel, Germany); Florian Von Oertzen (Christian-Albrechts-Universitat zu Kiel, Germany); Torben Karrrock (Christian-Albrechts-Universitat zu Kiel, Germany); Yousef Nazirizadeh (Christian-Albrechts-Universitat zu Kiel, Germany); Martina Gerken (Christian-Albrechts-Universitat zu Kiel, Germany);

00:00 Polymer-based Two Dimensional Photonic Crystal for Biosensing Application
Tatsuro Endo (Osaka Prefecture University, Japan);

00:00 Refractive Index Sensing Utilizing Photonic Crystal Nanobeam Cavity
Yaocheng Shi (Zhejiang University, China);

00:00 Organic Lasers for Biochemical Sensing
Parag B Deotare (Massachusetts Institute of Technology, USA); Tom Mahony (Massachusetts Institute of Technology, USA); Vladimir Bulovic (Massachusetts Institute of Technology, USA);

00:00 Single Nanoparticle Detection Using Microcavity Mode Broadening
Yun-Feng Xiao (Peking University, China);

00:00 Controlling Dynamical Tunneling in a Deformed Microcavity
Domenico Lippolis (Tsinghua University, China); Li Wang (Peking University, China); Xue Feng Jiang (Peking University, China); Yun-Feng Xiao (Peking University, China);

00:00 Fabrication and Sensing Capability of Rolled-up Tubular Optical Microcavity
Jiao Wang (Fudan University, China); Gaoshan Huang (Fudan University, China); Yongfeng Mei (Fudan University, China);

00:00 Optical Detection of Ultrasound Using Polymer Microring Resonators and Applications in High Resolution Photoacoustic Imaging
L. Jay Guo (The University of Michigan, USA);

Session 2P3a
MS-1.5: Organic and Hybrid Solar Cells 2
Tuesday PM, August 26, 2014
Room C
Organized by Wallace C. H. Choy, Hin-Lap Yip
Chaired by Wallace C. H. Choy, Hin-Lap Yip
00:00 Small-molecule Organic Cathode Interfacial Materials for Organic Photovoltaics
Wan-Yi Tan (South China University of Technology (SCUT), China); Rui Wang (National University of Singapore, Singapore); Min Li (South China University of Technology (SCUT), China); Gang Liu (South China University of Technology (SCUT), China); Ping Chen (Jilin University, China); Xinchen Li (The University of Hong Kong, China); Shun-Mian Lu (The University of Hong Kong, China); Huig Lu Zhu (The University of Hong Kong, China); Qi-Ming Peng (Jilin University, China); Xu-Hui Zhu (South China University of Technology (SCUT), China); Wei Chen (National University of Singapore, Singapore); Wallace C. H. Choy (The University of Hong Kong, China); Feng Li (Jilin University, China); Junbiao Peng (South China University of Technology (SCUT), China); Yong Cao (South China University of Technology (SCUT), China);

00:00 Application of Electrode Interlayers for Highly Efficient Polymer Solar Cells
Youchun Chen (Jilin University, China); Shuheng Sun (Jilin University, China); Weilong Zhou (Jilin University, China); Fenghong Li (Jilin University, China); Yuguang Ma (Jilin University, China);

00:00 Graphene Oxide Derivatives as Hole- and Electron-extraction Layers for Efficient Polymer Solar Cells
Jun Liu (Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, China);

00:00 Organic Solar Cells with Graphene Transparent Electrodes
Feng Yan (The Hong Kong Polytechnic University, China); Zhike Liu (The Hong Kong Polytechnic University, China);

00:00 Ultra-thin Hybrid Photovoltaics with Angle-insensitive Color Appearance, Transparency and High Quantum Efficiency
Jae Yong Lee (The University of Michigan, USA); Kyu-Tae Lee (The University of Michigan, USA); Sungyong Seo (The University of Michigan, USA); L. Jay Guo (The University of Michigan, USA);

00:00 Plasmonic-electrical Effects of Metal Nanoparticles for Highly Efficient Organic Solar Cells
Wallace C. H. Choy (The University of Hong Kong, China); Fengxian Xie (The University of Hong Kong, China); Di Zhang (The University of Hong Kong, China); Wei E. I. Sha (The University of Hong Kong, China); Xinchen Li (The University of Hong Kong, China); Baofu Ding (The University of Hong Kong, China);

00:00 Design Rule of Plasmonic Materials for High Performance Organic Solar Cells
Jung-Yong Lee (Korea Advanced Institute of Science and Technology (KAIST), Korea);

00:00 Light Manipulation for Organic Optoelectronics Using Bio-inspired Moth’s Eye Nanostructures
Jianxin Tang (Soochow University, China); Lei Zhou (Soochow University, China); Qing-Dong Ou (Soochow University, China); Jing-De Chen (Soochow University, China);

00:00 Engineering Nanostructured Materials for Organic/Inorganic Hybrid Solar Cells
Tao Chen (The Chinese University of Hong Kong, China);

Session 2P3b
MS-1.9: Light Management for Photovoltaics

Tuesday PM, August 26, 2014
Room C
Organized by Noel C. Giebink
Chaired by Noel C. Giebink

00:00 Solar Rectifying Antennas: A New Distinct Paradigm for Power Conversion
Jeffrey Gordon (Ben-Gurion University of the Negev, Israel);

00:00 Record Efficient Upconverter Solar Cell Devices
Jan Christoph Goldschmidt (Fraunhofer Institute for Solar Energy Systems, Germany); Stefan Fischer (Fraunhofer Institute for Solar Energy Systems, Germany); Barbara Herter (Fraunhofer Institute for Solar Energy Systems, Germany); Benjamin Frohlich (Fraunhofer Institute for Solar Energy Systems, Germany); Karl W. Kramer (University of Bern, Switzerland); Bryce S. Richards (Heriot-Watt University, Scotland); Aruna Ivaturi (Heriot-Watt University, Scotland); Sean K. W. MacDougall (Heriot-Watt University, Scotland); Jose Marques Hueso (Heriot-Watt University, Scotland); Elena Favilla (Università di Pisa, Italy); Mauro Tonelli (Università di Pisa, Italy);

00:00 Photonic Architectures for Beating Light Trapping and Efficiency Limits in Solar Cells
Jeremy N. Munday (University of Maryland, USA);

00:00 Light Management and Optical Requirements for Thin-film on Silicon Tandem Cells
Thomas P. White (Australian National University, Australia); Niraj N. Lal (Australian National University, Australia); Kylie R. Catchpole (Australian National University, Australia);
PIERS 2014 Guangzhou Program  
Tuesday PM, August 26, 2014

Session 2P4  
SC2: Wave Manipulations by Metasurfaces

Tuesday PM, August 26, 2014  
Room D

Organized by Shulin Sun, Jiaming Hao  
Chaired by Shulin Sun

00:00 Polarization Multiplexer by Plasmonic Metasurface  
Tao Li (Nanjing University, China); Lei Wang (Nanjing University, China); Lin Li (Nanjing University, China); Shi-Ning Zhu (Nanjing University, China);

00:00 Self-control of Light Polarization by Meta-surface  
Hui Liu (Nanjing University, China);

00:00 Dynamic Control of Electromagnetic Wave Propagation with Tunable Metasurface  
Bo Zhu (Nanjing University, China); Yijun Feng (Nanjing University, China);

00:00 Broadband Unidirectional Propagation Using Gradient Index Metamaterials  
Yadong Xu (Soochow University, China); Chendong Gu (Soochow University, China); Bo Hou (Soochow University, China); Yun Lai (Soochow University, China); Jensen Li (University of Birmingham, UK); Huangyang Chen (Soochow University, China);

00:00 Efficient Coupling of Microwave Surface-Plasmon- Like Mode to Propagating Waves  
Jun Jun Xu (Southeast University, China); Hao Chi Zhang (Southeast University, China); Qian Zhang (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 Recycling Radio Waves with Smart Walls  
Nadege Kaina (ESPCI ParisTech, France); Matthieu Dupre (ESPCI ParisTech & CNRS, France); Geoffroy Lerosey (ESPCI ParisTech & CNRS, France); Mathias Fink (ESPCI ParisTech & CNRS, France);

00:00 High-efficiency SPP Couplers Based on Gradient Meta-surfaces  
Wujiong Sun (Fudan University, China); Shulin Sun (Fudan University, China); Qiong He (Fudan University, China); Lei Zhou (Fudan University, China);

00:00 Meta-line  
Hong Chen Chu (Soochow University, China); Jie Luo (Soochow University, China); Yun Lai (Soochow University, China);

00:00 Controlling Surface Plasmon Polaritons by Holographic Surfaces  
Zhi-Yuan Li (Institute of Physics, Chinese Academy of Sciences, China); Yue-Gang Chen (Guizhou University, China);
00:00 Manipulating Electromagnetic Waves with GEometric MetaSurfaces (GEMS)
Lingling Huang (University of Birmingham, UK); Xianzhong Chen (University of Birmingham, UK); Holger Mühlenbernd (University of Paderborn, Germany); Guixin Li (Hong Kong Baptist University, China); Benfeng Bai (Tsinghua University, China); Qiaofeng Tan (Tsinghua University, China); Guofan Jin (The University of Paderborn, Germany); Shuang Zhang (University of Birmingham, UK);

00:00 Simultaneously Realize Luneburg Lens and Maxwell Fisheye Lens with a Single Anisotropic Metasurface
Xiang Wan (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 Design of the Surface Pseudo-Bessel Lens by Using Artificial Impedance Metasurfaces
Yunbo Li (Southeast University, China); Ben Geng Cai (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 Nanocavity Enhancement for Ultra-thin Film Photovoltaics
Haomin Song (The State University of New York at Buffalo, USA); Qiaoqiang Gan (The State University of New York at Buffalo, USA);

00:00 Photon Hopping and Nanowire Based Hybrid Plasmonic Ring-resonator
Zhiyu Gu (Harbin Institute of Technology, China); Shumin Xiao (Harbin Institute of Technology, China); Shuai Liu (Harbin Institute of Technology, China); Shang Sun (Harbin Institute of Technology, China); Kaiyang Wang (Harbin Institute of Technology, China); Qingsheng Song (Harbin Institute of Technology, China);

00:00 Directly Deposited Plasmonic Metasurface for Omnidirectional Visible Super Absorption
Kai Liu (The State University of New York at Buffalo, USA); Xie Zeng (The State University of New York at Buffalo, USA); Suhua Jiang (Fudan University, China); Dengxin Ji (The State University of New York at Buffalo, USA); Haomin Song (The State University of New York at Buffalo, USA); Nan Zhang (The State University of New York at Buffalo, USA); Qiaoqiang Gan (The State University of New York at Buffalo, USA);

00:00 Polarization-independent Metamaterial with Unnaturally High Reflective Index in the Terahertz Region
Zhengzian Liu (Harbin Institute of Technology, China); Shumin Xiao (Harbin Institute of Technology, China);

00:00 Efficient Generation of Second Harmonic from a Kind of Nonlinear Magnetic Metamaterial Composite
Shang Sun (Harbin Institute of Technology, China); Shumin Xiao (Harbin Institute of Technology, China);

00:00 A Planar Broadband Metamaterial Absorber with the Polarization Insensitive and Omnidirectional Absorption in the Min-infrared Regime
Nan Zhang (University of Electronic Science and Technology of China, China); Linbo Zhang (University of Electronic Science and Technology of China, China); Guorui Zhang (University of Electronic Science and Technology of China, China); Pei-Heng Zhou (University of Electronic Science and Technology of China, China); Jialiang Xie (University of Electronic Science and Technology of China, China); Long-Jiang Deng (University of Electronic Science and Technology of China, China);

00:00 Atomically Thin Transition Radiation of Surface Plasmons
Xiao Lin (Zhejiang University, China); Hongsheng Chen (Zhejiang University, China); Baile Zhang (Nanyang Technological University, Singapore);
00:00 Near-field Optical Storage System with a Real Artificial Negative Index Film
Taikei Suyama (Akashi National College of Technology, Japan); Xiaowei Ji (Kumamoto University, Japan); Akira Matsushima (Kumamoto University, Japan); Yaoju Zhang (Wenzhou University, China);

00:00 Hyperbolic Metamaterials for Super-resolution Imaging and Deep Sub-wavelength Cavities
Junsuk Rho (Pohang University of Science and Technology (POSTECH), Korea); Xiang Zhang (University of California, USA);

Session 2P5b
SC2: Thermal and Acoustic Metamaterials
Tuesday PM, August 26, 2014
Room E
Organized by Baile Zhang, Nicholas X. Fang
Chaired by Baile Zhang, Nicholas X. Fang

00:00 Acoustic Metasurface with Hybrid Resonances
Ping Sheng (Hong Kong University of Science and Technology, China);

00:00 Decorated Membrane Resonators as Acoustic Metamaterials
Guancong Ma (Hong Kong University of Science and Technology, China); Min Yang (Hong Kong University of Science and Technology, China); Jun Mei (South China University of Technology, China); Zhiyu Yang (Hong Kong University of Science and Technology, China); Ping Sheng (Hong Kong University of Science and Technology, China);

00:00 Facile Thermal Metamaterials to Manipulate Heat Signatures
Cheng-Wei Qiu (National University of Singapore, Singapore); Tiancheng Han (National University of Singapore, Singapore); Xue Bai (National University of Singapore, Singapore); Dongliang Gao (National University of Singapore, Singapore); Baowen Li (National University of Singapore, Singapore); John Thong (National University of Singapore, Singapore);

00:00 A Simple Thermal Cloak with Three Dimensional Realization
Baile Zhang (Nanyang Technological University, Singapore);

00:00 Photonic Flat Band for Broad-angle Acousto-optic Bragg Diffraction
Jensen Li (University of Birmingham, UK); Charles Croenne (City University of Hong Kong, China); Fu Liu (City University of Hong Kong, China); Shiyi Xiao (University of Birmingham, UK); Wontaek Seo (Samsung Advanced Institute of Technology, South Korea); Seunghoon Han (Samsung Advanced Institute of Technology, South Korea); Hong-Seok Lee (Samsung Advanced Institute of Technology, South Korea); U-In Chung (Samsung Advanced Institute of Technology, South Korea);

00:00 Tailoring Specific Heat and Density in the Design of Thermal Transformation Media
Yueh-Lin Tsai (National Chiao-Tung University, Taiwan, R.O.C.); Tungyang Chen (National Cheng Kung University, Taiwan);

00:00 Localization of Flexural Waves in Random Locally Resonant Plate
Marc Dubois (ESPCI ParisTech, France); Guatier Lefebvre (ESPCI ParisTech, France); Patrick Sebbah (ESPCI ParisTech, France);

00:00 Making Materials to Engineer Generation and Transport of Light
Ceferino Lopez Fernandez (Instituto de Ciencia de Materiales de Madrid (CSIC), Spain);

00:00 Imaging through Scattering Media
Jacopo Bertolotti (University of Exeter, England); E. G. Van Putten (Philips Research Laboratories, The Netherlands); C. Blum (University of Twente, The Netherlands); Ad Lagendijk (University of Twente, The Netherlands); Willem L. Vos (University of Twente, The Netherlands); Allard P. Mosk (University of Twente, The Netherlands);

Session 2P6
3. FocusSession.SC3&2: Disordered Photonics
Tuesday PM, August 26, 2014
Room F
Organized by Pedro David Garcia
Chaired by Pedro David Garcia, Jacopo Bertolotti

00:00 Making Materials to Engineer Generation and Transport of Light
Ceferino Lopez Fernandez (Instituto de Ciencia de Materiales de Madrid (CSIC), Spain);

00:00 Imaging through Scattering Media
Jacopo Bertolotti (University of Exeter, England); E. G. Van Putten (Philips Research Laboratories, The Netherlands); C. Blum (University of Twente, The Netherlands); Ad Lagendijk (University of Twente, The Netherlands); Willem L. Vos (University of Twente, The Netherlands); Allard P. Mosk (University of Twente, The Netherlands);
00:00 Guiding a Non-classical State of Light Propagating through a Multiply Scattering Medium
Hugo Defienne (Institut Langevin, ESPCI ParisTech, France); Marco Barbiers (University of Oxford, United Kingdom); Benoit Chalopin (Université Paul Sabatier, France); Beatrice Chatel (Université Paul Sabatier, France); Ian Walmsley (University of Oxford, United Kingdom); Brian Smith (University of Oxford, United Kingdom); Sylvain Gigan (Institut Langevin, ESPCI ParisTech, France);

00:00 Disorder in Nature: Optimisation of Light Scattering in White Beetles
Matteo Burresi (European Laboratory for Nonlinear Spectroscopy (LENS), Italy); Lorenzo Cortese (European Laboratory for Non-linear Spectroscopy (LENS), Italy); Mathias Kolle (Harvard University, USA); Peter Vukusic (University of Exeter, UK); Diederik S. Wiersma (European Laboratory for Nonlinear Spectroscopy (LENS) and INFIM, Italy); Bodo D. Wilts (University of Cambridge, UK); Ulrich Steiner (University of Cambridge, UK); Silvia Vi- ngolini (University of Cambridge, UK);

00:00 Anderson Localization in Low-dimensional Structures to Enhance Light-matter Interaction
Peter Lodahl (University of Copenhagen, Denmark); Pedro David Garcia (University of Copenhagen, Denmark);

00:00 Anderson Localization in Low-dimensional Structures to Enhance Light-matter Interaction
Peter Lodahl (University of Copenhagen, Denmark); Pedro David Garcia (University of Copenhagen, Denmark);

00:00 Random Laser with Er/Yb-codoped Fiber Grating
Lulu Wang (China Jiliang University, China); Xinyong Dong (China Jiliang University, China);

2P7a
SC3: Advanced Micro-/Nano-fabrication for Optical Sensing and Imaging Applications

Tuesday PM, August 26, 2014
Room G
Organized by Hyuck Choo, Monika Fleischer
Chaired by Hyuck Choo, Monika Fleischer

00:00 Infinitely Long One-nanometer Gaps for Terahertz Funneling
Dai-Sik Kim (Seoul National University, Korea);

00:00 Nanogap-enhanced Raman Scattering (NERS) Controlled by DNA
Yung Doug Suh (Korea Research Institute of Chemical Technology (KRICT), Korea);

00:00 The Role of Disorder in Plasmonic Hole Arrays
Ajay Nahata (University of Utah, USA); Z. Valy Vardeny (University of Utah, USA);

00:00 Optical Materials by Design for Enhancing Light Harvesting in Dye Solar Cells
G. Lozano (Spanish National Research Research, Spain); C. Lopez-Lopez (Spanish National Research Research, Spain); F. E. Galvez (Spanish National Research Research, Spain); S. Colodrero (Spanish National Research Research, Spain); A. Jimenez (Spanish National Research Research, Spain); M. E. Calvo (Spanish National Research Research, Spain); Hernan Miguez (Spanish National Research Research, Spain);

00:00 Nanogap-enhanced Raman Scattering (NERS) Controlled by DNA
Yung Doug Suh (Korea Research Institute of Chemical Technology (KRICT), Korea);

00:00 Optical Materials by Design for Enhancing Light Harvesting in Dye Solar Cells
G. Lozano (Spanish National Research Research, Spain); C. Lopez-Lopez (Spanish National Research Research, Spain); F. E. Galvez (Spanish National Research Research, Spain); S. Colodrero (Spanish National Research Research, Spain); A. Jimenez (Spanish National Research Research, Spain); M. E. Calvo (Spanish National Research Research, Spain); Hernan Miguez (Spanish National Research Research, Spain);
00:00 Electric and Magnetic Apertured NSOM Probes  
Dilip Kumar Singh (CSIR — National Physical Laboratory, India); Jae Sung Ahn (Seoul National University, Korea); Sukmo Koo (Seoul National University, Korea); Taehee Kang (Seoul National University, Korea); Joonyeon Kim (Seoul National University, Korea); Namkyoo Park (Seoul National University, Korea); Sukho Lee (Seoul National University, Korea); Junsuk Rho (Pohang University of Science and Technology (POSTECH), Korea); Jae Won Jeong (Korea Advanced Institute of Science and Technology (KAIST), Korea); Yeon Sik Jung (Korea Advanced Institute of Science and Technology (KAIST), Korea); Kyoungsik Yu (KAIST, Korea); Monika Fleischer (Eberhard Karls University Tuebingen, Germany); Julia Fulmes (Eberhard Karls University Tuebingen, Germany); Christian Schafer (Eberhard Karls University Tuebingen, Germany); Andreas Horrer (Eberhard Karls University Tuebingen, Germany); Dieter P. Kern (Eberhard Karls University Tuebingen, Germany); Changshui Chen (South China Normal University, China); Junxiong Wei (South China Normal University, China); He Jiang (South China Normal University, China); Tian Han (South China Normal University, China); Rongting Liu (South China Normal University, China); Chao Sun (South China Normal University, China); Pengpeng Li (South China Normal University, China); Yang-Qing Lu (Nanjing University, China); Liejia Qian (Shanghai Jiao Tong University, China); Guoqiang Xie (Shanghai Jiao Tong University, China); Peng Yuan (Shanghai Jiao Tong University, China); Yan-Qing Lu (Nanjing University, China);  

00:00 Recent Progress in Scalable Nanofabrication toward Optical Metamaterials and Metadevices  
Junsuk Rho (Pohang University of Science and Technology (POSTECH), Korea);  

00:00 Ultrahigh-resolution Nano-transfer Printing for Surface-enhanced Raman Spectroscopy (SERS) Analyses  
Jae Won Jeong (Korea Advanced Institute of Science and Technology (KAIST), Korea); Yeon Sik Jung (Korea Advanced Institute of Science and Technology (KAIST), Korea);  

00:00 Laser-based Photothermal Synthesis of Metal Oxides for Optoelectronic Applications  
Kyoungsik Yu (KAIST, Korea);  

00:00 Self-aligned Fabrication of Hybrid Nanoantenna/Nano-particle Systems for Optical Sensing and Spectroscopy  
Monika Fleischer (Eberhard Karls University Tuebingen, Germany); Julia Fulmes (Eberhard Karls University Tuebingen, Germany); Christian Schafer (Eberhard Karls University Tuebingen, Germany); Andreas Horrer (Eberhard Karls University Tuebingen, Germany); Dieter P. Kern (Eberhard Karls University Tuebingen, Germany);  

00:00 Nanoarray-enhanced Implantable Intraocular Pressure Sensor with Remote Optical Readout  
Jeong Oen Lee (California Institute of Technology, USA); Trong-Tuong Nguyen (Department of Ophthalmology, USA); David Sretavan (Department of Ophthalmology, USA); Hyuck Choo (California Institute of Technology, USA);  

00:00 Calculating the Current Density of the Radio Electrical Effect in Parabolic Quantum Wells  
Bui Duc Hung (Hanoi National University, Vietnam); Nguyen Dinh Nam (Hanoi National University, Vietnam); Dinh Quoc Vuong (Hanoi National University, Vietnam);  

00:00 Influence of an Intense Electromagnetic Wave on Magnetoconductivity and Hall Coefficient in Compositional Semiconductor Superlattices: Optical Phonon Interaction  
Bui Dinh Hoi (Vietnam National University, Vietnam); Hoang Van Ngoc (Vietnam National University, Vietnam); Nguyen Quang Bau (Hanoi National University, Vietnam);  

00:00 Tailored Nonlinear Optics  
Changshui Chen (South China Normal University, China); Junxiong Wei (South China Normal University, China); He Jiang (South China Normal University, China); Tian Han (South China Normal University, China); Rongting Liu (South China Normal University, China); Chao Sun (South China Normal University, China); Pengpeng Li (South China Normal University, China);  

00:00 Quantitative Mode Pulling Effect Analyses for Broadband Kerr Comb Generation Based on Lugiato-Lefever Model  
Chengying Bao (Tsinghua University, China); Changzi Yang (Tsinghua University, China);  

00:00 Domain Engineered Lithium Niobate, a Versatile Platform for Multifunctional Photonic Devices  
Yan-Qing Lu (Nanjing University, China);  

00:00 Quadratic Nonlinear Technologies for High-intensity Lasers  
Liejia Qian (Shanghai Jiao Tong University, China); Guoqiang Xie (Shanghai Jiao Tong University, China); Peng Yuan (Shanghai Jiao Tong University, China);
Session 2P8
SC2&3: Light Harvesting for Energy and Optoelectronic Applications

Tuesday PM, August 26, 2014
Room H
Organized by Qin Chen, Xiaofeng Li
Chaired by Qin Chen, Xiaofeng Li

00:00 Plasmonic and Nanophotonic Enhanced Organic Photovoltaics: Breaking the Power Conversion Efficiency Barrier
Qiaoqiang Gan (The State University of New York at Buffalo, USA); Kai Liu (The State University of New York at Buffalo, USA); Haomin Song (The State University of New York at Buffalo, USA);

00:00 Metallic Core-dielectric Shell Nanoparticles Boosting the Power Conversion Efficiency of Dye-sensitized Solar Cells
Dangyuan Lei (The Hong Kong Polytechnic University, China);

00:00 Advanced Light Trapping Designs for High Efficiency Crystalline Silicon Thin Film Solar Cells
Pingqi Gao (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China); Jichun Ye (Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, China);

00:00 Transparent Conductor of Aluminum Thin Film and Integrated Organic Solar Cells
Qing Guo Du (Institute of High Performance Computing, Singapore); Chan Hin Kam (Nanyang Technol Univ, Singapore); Xiao Wei Sun (Nanyang Technological University, Singapore); Ching-Eng Jason Png (Institute of High Performance Computing (IHPC), Singapore);

00:00 Extensive Study of Electromagnetic Functionality of Sub-wavelength Metallic Metamaterials
Yifang Chen (Fudan University, China); Yaqi Ma (Fudan University, China); Jianpeng Liu (Fudan University, China); Jinhai Shao (Fudan University, China); Sichao Zhang (Fudan University, China); Bingrui Lu (Fudan University, China);

00:00 Light-trapping and Electrical Response of GaAs-based Single-nanowire Solar Cells with Multi-shell Design
Xiaofeng Li (Soochow University, China); Yaqi Ma (Soochow University, China); Chinhua Wang (Soochow University, China); Shaolong Wu (Soochow University, China);

00:00 Incorporation of Cascaded Metallic Gratings into Thin Film Solar Cells for Broadband Plasmonic Light Trapping
Long Wen (Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, China); Fuhe Sun (Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, China); Qin Chen (Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, China);

00:00 Taper Structures to Harvest Light: Effective-medium Description and Optimum Shape
Baocheng Zhu (Fudan University, China); Shiyi Xiao (Fudan University, China); Lei Zhou (Fudan University, China);

00:00 First Experimental Demonstration of Solar Cell Efficiency Enhancement via External Photon Recycling
Jeffrey Gordon (Ben-Gurion University of the Negev, Israel);

00:00 Antireflection Performance of SiN Nanostructure Textured Si Surface for High Efficient Si Solar Cells
Zhen Zhang (Suzhou Institute of Nano-tech and Nano-devices, Chinese Academy of Sciences, China); Yanyan Wang (Suzhou Institute of Nano-tech and Nano-devices, Chinese Academy of Sciences, China); Xue-mei Wu (Soochow University, China); Ruiying Zhang (Suzhou Institute of Nano-tech and Nano-devices, Chinese Academy of Sciences, China);

00:00 Influence of pH Value on Photoluminescence Intensity of CdSe/ZnS Core/shell Quantum Dots with Gold Nanoparticles Hybrid
Qianqian Huang (Southeast University, China); Qilong Wang (Southeast University, China); Jing Chen (Southeast University, China); Yusheng Zhai (Southeast University, China);

00:00 Experimental Realization of Broadband Super Absorber Based on Rainbow Trapping in Hyperbolic Metamaterials
Denghan Ji (The State University of New York at Buffalo, USA); Haomin Song (The State University of New York at Buffalo, USA); Xie Zeng (The State University of New York at Buffalo, USA); Haifeng Hu (The State University of New York at Buffalo, USA); Kai Liu (The State University of New York at Buffalo, USA); Nan Zhang (The State University of New York at Buffalo, USA); Qiaoqiang Gan (The State University of New York at Buffalo, USA);
00:00 Realization of a MZI Based Integrated Optical Accelerometer
Wei Hu (Southeast University, China); Guang Qian (Southeast University, China); Ruo-Zhou Li (Southeast University, China); Feng-Hua Wan (Southeast University, China); Jie Tang (Southeast University, China); Tong Zhang (Southeast University, China);

00:00 Preliminary Experiment Results of Broadband Antireflective and Surface Passivation SiO Nanodome Structures Applied to Enhance the Conversion Efficiency of Flexible a-SiGe:H Solar Cells
Yanyan Wang (Suzhou Institute of Nano-tech and Nano-devices, Chinese Academy of Sciences, China); Xiaojun Ye (Shanghai Institute of Space Power-Sources, China); Xuemei Wu (Soochow University, China); Ruiying Zhang (Suzhou Institute of Nano-tech and Nano-devices, Chinese Academy of Sciences, China);

00:00 Optical Characterization of Laser Assisted Field Emitters on the Metallic Substrate with Periodical Patterning
Qilong Wang (Southeast University, China); Yusheng Zhai (Southeast University, China); Shengqi Wu (Southeast University, China); Qian-qian Huang (Southeast University, China); Zhiyang Qi (Southeast University, China);

00:00 Graphene Photodetector Based on Metamaterial Perfect Absorber
Shichao Song (Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, China); Long Wen (Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, China); Qin Chen (Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, China);

00:00 Photothermal Microbubbles Generation under a Graphene Oxide-microheater
Xiaobo Xing (South China Normal University, China); Debin Zhu (South China Normal University, China); Liang Lei (Guangdong University of Technology, China); Jiapeng Zheng (South China Normal University, China); Fengjia Li (South China Normal University, China); Xiang Cai (Guangdong Polytechnic, China); Ting Wu (Guangdong Polytechnic, China);

Session 2P9a
SC3: Fiber Optic Sensing Technologies for Structural Health Monitoring and Applications

Tuesday PM, August 26, 2014
Room I
Organized by Kazuo Hotate, Zuyuan He
Chaired by Kazuo Hotate, Zuyuan He

00:00 Fiber Optic Nerve Functions Realized by Optical Correlation Domain Techniques
Kazuo Hotate (University of Tokyo, Japan);

00:00 Intramodal and Intermodal Stimulated Brillouin Scattering in Few-mode Fibers
Kwang Yong Song (Chung-Ang University, Korea);

00:00 Improved Calibration Method for Raman Distributed Temperature Sensor
K. Oishi (Yokogawa Electric Corporation, Japan); T. Umeno (Yokogawa Electric Corporation, Japan); N. Takeuchi (Yokogawa Electric Corporation, Japan);

00:00 Structural Health Monitoring Based on Strain Distributions Measured by Fiber-optic Sensors
Hideaki Murayama (The University of Tokyo, Japan); Daichi Wada (The University of Tokyo, Japan); Hirotaka Igawa (Japan Aerospace Exploration Agency, Japan);

00:00 Optic Fiber Sensors Fabricated by Laser-micromachining
Yun-Jiang Rao (University of Electronic Science and Technology of China, China); Zeng-Ling Ran (University of Electronic Science and Technology of China, China);

00:00 Technical Textiles Based on Fibre Optic Sensors for SHM
Katerina Krebber (Federal Institute for Materials Research and Testing (BAM), Germany);

00:00 From Structural Health Monitoring to Earth Crustal Deformation Monitoring
Zuyuan He (Shanghai Jiao Tong University, China); Qingwen Liu (Shanghai Jiao Tong University, China); Tomochika Tokunaga (The University of Tokyo, Japan);
Session 2P9b
SC3: Ultrasensitive Optical Sensors

Tuesday PM, August 26, 2014
Room I
Organized by Gilberto Brambilla, Wei Jin
Chaired by Wei Jin

00:00 Distributed Measurement of Intense Magnetic Fields by Means of Optical Fibers
Luca Palmieri (University of Padua, Italy); Andrea Galtarossa (University of Padua, Italy);
00:00 Surface Roughness and Plasmon Excitation in Metal Films
John Canning (The University of Sydney, Australia);
00:00 Pd/Ag Coated Photonic Crystal Fiber Hydrogen Sensor
Yuanhong Yang (Beihang University, China); Fuling Yang (Beihang University, China); Huan Wang (Beihang University, China); Qirong Liu (Beihang University, China); Xungang Diao (Beihang University, China);
00:00 Microfiber-based Ultra-sensitive Refractive Index Sensors
Bai-Ou Guan (Jinan University, China); Li-Peng Sun (Jinan University, China); Long Jin (Jinan University, China);
00:00 High Sensitivity Elastic Wave Sensing Using Fabry-Perot Filters Based on Fiber Bragg Gratings
Balaji Srinivasan (Indian Institute of Technology Madras, India);
00:00 High-sensitive Optical Sensors Based on In-fiber Air Bubbles
Yiping Wang (Shenzhen University, China); Changrui Liao (Shenzhen University, China); Shen Liu (Shenzhen University, China);
00:00 A Plasmonic Nano-resonator in Nano-structured Metal-coated Fiber Taper
Ming Ding (Beihang University, China); Wei Quan (Beihang University, China); Gilberto Brambilla (University of Southampton, UK);
00:00 Optical Spectroscopy for Food Applications: A Photonic Tasting
Anna Grazia Mignani (CNR Istituto di Fisica Applicata “Nello Carrara”, Italy); Leonardo Ciocchetti (CNR Istituto di Fisica Applicata “Nello Carrara”, Italy); Andrea Azelio Mencaglia (Istituto di Fisica Applicata “Nello Carrara”, Italy);

00:00 Design of All-fiber Coupled Electro-optic Sensors for High Power Microwave
Lili Song (National University of Defense Technology, China); Juntao He (National University of Defense Technology, China); Junpu Ling (National University of Defense Technology, China); Tao Jiang (National University of Defense Technology, China); Danni Zhu (National University of Defense Technology, China);
00:00 High Sensitivity Sensors Based on Air-mode Photonic Crystal Nanobeam Cavities
Yuqiang Zhang (Zhejiang University, China); Yaocheng Shi (Zhejiang University, China);

Session 2P10a
SC2,3&4: Electronics and Optoelectronics Using Two-dimensional Materials and Their Heterostructures

Tuesday PM, August 26, 2014
Room J
Organized by Han Zhang, Fengnian Xia
Chaired by Han Zhang

00:00 Variation of Sintering Temperature in Addition of Pb with Bi2Te3 Superconductor Sample Bi1.7-Pb0.3-Sr2-Ca2-Cu3-0δ at 158 K
Muntaz Humayun (Mohammad Ali Jinnah University, Pakistan); M. T. A. Rana (Mohammad Ali Jinnah University, Pakistan); M. M. Ahmed (Mohammad Ali Jinnah University, Pakistan);
00:00 Two-dimensional Semiconductors for Versatile Photonic Applications
Jun Wang (Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China);
00:00 Vector Soliton Operation of Graphene Mode Locked Fiber Lasers
Dingyuan Tang (Jiangsu Normal University, China); Y. F. Song (Nanyang Technological University, Singapore); L. M. Zhao (Jiangsu Normal University, China); D. Y. Shen (Jiangsu Normal University, China);
00:00 Graphene, Topological Insulator and Other 2-dimensional Layered Materials for Ultra-fast Laser Photonics
Han Zhang (Shenzhen University, China);
00:00 Coupling Light with Supramolecular Systems
Jialiang Xu (Radboud University Nijmegen, The Netherlands); Sergey Semin (Radboud University Nijmegen, The Netherlands); Alan E. Rowan (Radboud University Nijmegen, The Netherlands); Theo Rasing (Radboud University Nijmegen, The Netherlands);
00:00 Phase Noise Performance in the Mode-locked Fiber Lasers with Carbon Nanotubes and Graphene Oxide Thin Films as Mode Locker
Kan Wu (Shanghai Jiao Tong University, China); Xiaohai Li (Nanyang Technological University, Singapore); Jianping Chen (Shanghai Jiao Tong University, China);

00:00 Modulating the Optical and Optoelectronic Properties of MoS2
Haiyan Nan (Southeast University, China); Zheng Liang (Taizhou Sunano New Energy Co., Ltd., China); Zhenhua Ni (Southeast University, China);

00:00 Photonic of Two-dimensional Materials Beyond Graphene
Qiaoliang Bao (Monash University, Australia); Yanzhou Xue (Monash University, Australia); Shenghuang Lin (Monash University, Australia); Shaoyuan Li (Monash University, Australia);

00:00 2 μm Passively Q-switched Double-clad Fiber Laser Based on Few-layer MoS2 Saturable Absorber
Zhengqian Luo (Xiamen University, China); Jianyu Wu (Xiamen University, China); Yizhong Huang (Xiamen University, China);

00:00 Passive Q-switched Linear-cavity Erbium-doped Fiber Laser with MoS2 Saturable Absorber
Yizhong Huang (Xiamen University, China); Zhengqian Luo (Xiamen University, China);

00:00 Chip-integrated Graphene Optoelectronic Devices
Xuetao Gan (Northwestern Polytechnical University, China); Ren-Jye Shue (Massachusetts Institute of Technology, USA); Dirk Englund (Massachusetts Institute of Technology, USA);

00:00 One-way Slow-light Waveguide by Gyromagnetic Photonic Crystals
Rui-Xin Wu (Nanjing University, China); Yan Yang (Nanjing University, China); Yin Poo (Nanjing University, China);

00:00 From Microfiber Bragg Gratings to Microfiber Photonic Crystal Devices
Wei Ding (Institute of Physics, Chinese Academy of Sciences, China); Yang Yu (Institute of Physics, Chinese Academy of Sciences, China); Zhi-Yuan Li (Institute of Physics, Chinese Academy of Sciences, China);

00:00 Metal-ferroelectric Photonic Crystal All-optical Switching
Xiaoyong Hu (Peking University, China);

00:00 Design and Fabrication of Silicon-polymer Hybrid Photonic Crystal Nanobeam Structures for Achieving Integrated Ultrafast All-optical Switching
Zi-Ming Meng (Guangdong University of Technology, China); Zhi-Yuan Li (Institute of Physics, Chinese Academy of Sciences, China);

00:00 Tunable Photonic Band Gaps for Strong 1-D Light-matter Interaction
Rong-Juan Liu (University of Toronto, Canada); Wah Tung Lau (University of Toronto, Canada); Sajeev John (University of Toronto, Canada); Zhi-Yuan Li (Institute of Physics, Chinese Academy of Sciences, China);

00:00 Ab Initio Determination of Local Coupling Interaction between Quantum Dots and Photons in Arbitrary Nanostructures
Geng-Yan Chen (Sun Yat-Sen University, China); Jing-Feng Liu (Sun Yat-Sen University, China); Yi-Cong Yu (Sun Yat-Sen University, China); Xue-Hua Wang (Sun Yat-Sen University, China);

00:00 The Localization Study around Weyl Point in Photonic Crystals
Xunya Jiang (Fudan University, China); Lin Wang (Fudan University, China); Wei Li (Fudan University, China); Yushen Dou (Fudan University, China); Haiwen Fan (Fudan University, China);

00:00 Interesting Periodic and Quasiperiodic Photonic Band Gap Networks
Xiangbo Yang (South China Normal University, China); Zhenyu Wang (South China Normal University, China); Jian Lu (South China Normal University, China);
00:00 Negative Optical Scattering Force in Photonic Crystal Background
Weiqiang Ding (Harbin Institute of Technology, China); Tongtong Zhu (Harbin Institute of Technology, China); Yongyin Cao (Harbin Institute of Technology, China);

00:00 Nonreciprocal Perfect Absorber Consisting of Nonlinear Plasma and Matching Metamaterials
Xiang-Kun Kong (Nanjing University of Aeronautics and Astronautics, China); Shaobin Liu (Nanjing University of Aeronautics and Astronautics, China); Hai Feng Zhang (Nanjing University of Aeronautics and Astronautics, China); Bo-Rui Bian (Nanjing University of Aeronautics and Astronautics, China); Jia-Lin Yuan (Nanjing University of Aeronautics and Astronautics, China);

Session 2P_11a
SC1: Computational Techniques in Electromagnetics and Applications

Tuesday PM, August 26, 2014
Room K
Organized by Yoichi Okuno, Tsuneki Yamasaki
Chaired by Tsuneki Yamasaki, Yoichi Okuno

00:00 Energy Distribution of Dielectric Waveguides by Various Circular Cylinder Array with Defect Layers
Ryosuke Ozaki (Nihon University, Japan); Tsuneki Yamasaki (Nihon University, Japan);

00:00 Fractal Labyrinths: The Matrices of the Path and Topology Borders
Vladimir I. Grachev (Kotel’nikov Institute of Radio Engineering and Electronics, Russian Academy of Sciences, Russia);

00:00 Radiation Directivity of an Antenna Installed in an Automobile
Zicai Zheng (Chuo University, Japan); Hiroshi Shirai (Chuo University, Japan);

00:00 Kd-tree Based Shooting and Bouncing Ray Method for Fast Computation of Near Field Scattering
Pengcheng Gao (Science and Technology on Electromagnetic Scattering Laboratory, China); Zichang Liang (Science and Technology on Electromagnetic Scattering Laboratory, China); Wei Gao (Science and Technology on Electromagnetic Scattering Laboratory, China);

00:00 Analysis of the Fluorescence Imaging of Surface Plasmon-coupled Emission Microscopy
Xiaowei Ji (Kumamoto University, Japan); Taikei Suyama (Akashi National College of Technology, Japan); Akira Matsushima (Kumamoto University, Japan); Yaoju Zhang (Wenzhou University, China); Yoichi Okuno (Kumamoto University, Japan);

00:00 Analysis of Plasmon Resonance in a Multilayer-coated Bigrating
Xun Xu (Kyushu Sangyo University, Japan); Yoichi Okuno (Kumamoto University, Japan); Taikei Suyama (Akashi National College of Technology, Japan);

00:00 Wavelet Decomposition of Surface Refractivity
Samuel Toluwalope Ogunjo (Federal University of Technology, Nigeria); K. D. Adedayo (Federal University of Technology, Nigeria);

00:00 Solar Cells Efficiency Improvement by Forming a Periodic Structure on the Surface
Masaji Tomita (University of Electro-Communications, Japan); Yoichi Okuno (Kumamoto University, Japan); Taikei Suyama (Akashi National College of Technology, Japan); M. Tanigawa (The Kansai Electric Power Co., Inc., Japan); Xun Xu (Kyushu Sangyo University, Japan);

00:00 Electromagnetic Behaviour of Carbon Fibre Composite Airfoils
Xuesong Meng (The University of Nottingham, UK); Phillip Donald Sewell (The University of Nottingham, UK); Ana Vukovic (The University of Nottingham, UK); Trevor Mark Benson (The University of Nottingham, UK);

00:00 RCS Computation of 3D-wake Vortex Using Method of Moments
Venkat Prasad Padhy (Indian Institute of Science, India); N. Balakrishnan (Indian Institute of Science, India); P. Srinivasa Murthy (Aeronautical Development Establishment (ADE), India);

Session 2P_11b
Oral Presentations for Best Student Paper Award 2

Tuesday PM, August 26, 2014
Room K
Session 2P.12
SC4: Compact Microwave Filters

Tuesday PM, August 26, 2014
Room L
Organized by Qing-Xin Chu, Lei Zhu
Chaired by Qing-Xin Chu, Lei Zhu

00:00 Synthesis of Dual-wideband Bandpass Filters with Transversal Structure
Runqi Zhang (Nanyang Technological University, Singapore); Lei Zhu (University of Macau, China);

00:00 Dual-band Planar Microwave Bandpass Filter with $\lambda/4$ Stepped Impedance Resonators
Songbai Zhang (Nanyang Technological University, Singapore); Lei Zhu (University of Macau, China);

00:00 A Compact Diplexer Composed of Quarter-wavelength Resonators for Ultra-wideband (UWB) System
Kai Wang (South China University of Technology, China); Zai-Cheng Guo (South China University of Technology, China); Yu-Fa Zheng (South China University of Technology, China); Jing-Yu Lin (Southwest Jiaotong University, China); Sai Wai Wong (South China University of Technology, China); Qing-Xin Chu (South China University of Technology, China);

00:00 Synthesis of Phasers for Real-time Signal Processing Using Filter Techniques
Qingfeng Zhang (South University of Science and Technology of China, China); Christophe Caloz (Ecole Polytechnique de Montreal, Canada);

00:00 Design of High Isolation Diplexer with Source-load Coupling
Fu-Chang Chen (South China University of Technology, China); Hao-Tao Hu (South China University of Technology, China); Fu-Xiang Guo (South China University of Technology, China); Qing-Xin Chu (South China University of Technology, China);

00:00 A Bandpass Filter Using HMSIW-DGS Cell
Yongmao Huang (University of Electronics Science and Technology of China, China); Z.-S. He (University of Electronic Science and Technology of China, China); P.-K. Li (University of Electronic Science and Technology of China, China); Z.-H. Shao (University of Electronic Science and Technology of China, China); C.-J. You (University of Electronic Science and Technology of China, China); D. Jiang (University of Electronic Science and Technology of China, China);

00:00 Compact and Sharp-rejection Dual-band Bandstop Filter Based on Transversal Signal-interaction Concept
Lei-Lei Qiu (South China University of Technology, China); Qing-Xin Chu (South China University of Technology, China);

00:00 Wide-stopband Millimeter-wave Bandpass Filter Based on Discriminating Coupling on GaN MMIC
Jie Kai Lin (South China University of Technology, China); Xi-Yin Zhang (South China University of Technology, China); Qing Yi Guo (South China University of Technology, China); Hsuan-Ling Kao (Chang Gung University, Taiwan);

00:00 Hybrid Microstrip/Slotline Bandpass Filter with Dual-wideband Characteristics
Xuehui Guan (East China Jiaotong University, China); Tao Xiong (East China Jiaotong University, China); Lei Zhu (University of Macau, China); Hai-Wen Liu (East China Jiaotong University, China);

00:00 Reconfigurable WIFI Filter with Isolation Enhancement
Yuan Jiang (University of Electronic Science and Technology of China, China); Jia Wei Yu (University of Electronic Science and Technology of China, China); Xia Qi Lin (University of Electronic Science and Technology of China, China); Fei Cheng (University of Electronic Science and Technology of China, China); Yong Fan (University of Electronic Science and Technology of China, China);

00:00 Reconfigurable Substrate Integrated Waveguide
Yue Feng Hou (University of Electronic Science and Technology of China, China); Yuan Jiang (University of Electronic Science and Technology of China, China); Xian Qi Lin (University of Electronic Science and Technology of China, China); Fei Cheng (University of Electronic Science and Technology of China, China); Yong Fan (University of Electronic Science and Technology of China, China);

00:00 A Compact Substrate Integrated Waveguide Diplexer Using Dual-mode Filters
Fei Cheng (University of Electronic Science and Technology of China, China); Xian Qi Lin (University of Electronic Science and Technology of China, China); Yuan Jiang (University of Electronic Science and Technology of China, China); Kaijun Song (University of Electronic Science and Technology of China, China); Yong Fan (University of Electronic Science and Technology of China, China);
00:00 Ka-band Wideband Filter with a Reconfigurable Mode of Bandpass-bandstop Switching
Yuan Jiang (University of Electronic Science and Technology of China, China); Jia Wei Yu (University of Electronic Science and Technology of China, China); Xian Qi Lin (University of Electronic Science and Technology of China, China); Fei Cheng (University of Electronic Science and Technology of China, China); Yong Fan (University of Electronic Science and Technology of China, China);

00:00 Microstrip Filters with Adjustable Transmission Zeros Using Inductive-coupled Open Stub-loaded Resonators
Fei Cheng (University of Electronic Science and Technology of China, China); Xian Qi Lin (University of Electronic Science and Technology of China, China); Yuan Jiang (University of Electronic Science and Technology of China, China); Kainun Song (University of Electronic Science and Technology of China, China); Yong Fan (University of Electronic Science and Technology of China, China);

00:00 Design of Wideband Non-equiripple Filtering Response Using Genetic Algorithm Based Neural Network
Shiqing Cui (The University of Hong Kong, China); Sheng Sun (The University of Hong Kong, China); Shan Shan Gao (Chengdu University, China); Lei Zhu (The University of Macau, China);

00:00 A Compact Filter with Parasitic Passband Suppression
Junjie Zeng (Being University of Posts and Telecommunications, China); Xiuping Li (Beijing University of Posts and Telecommunications, China);

00:00 Synthesis of Dual Behavior Resonator (DBR) Filter with Short-circuited Stubs and Π-Network for Spurious Responses Suppression
Tao Su (Xidian University, China);

00:00 High Performance RF Front-End Devices/Circuits on VLSI-standard Si Substrate
Albert Chin (National Chiao Tung University, Taiwan);

00:00 4-way Power Divider Using Common DGS and Stacked-substrate Structure
Jongsik Lim (Soomchunhyang University, Republic of Korea); Junhyung Jeong (Chonbuk National University, Republic of Korea); Phirun Kim (Chonbuk National University, Republic of Korea); Yongchae Jeong (Chonbuk National University, South Korea); Sang-Min Han (Soomchunhyang University, Korea); Dal Ahn (Soomchunhyang University, Korea);

00:00 HBT PA MMIC for WCDMA/LTE Applications
Bumman Kim (Pohang University of Science and Technology (POSTECH), Korea); Yunsung Cho (Pohang University of Science and Technology, Korea); Jooseung Kim (Pohang University of Science and Technology, Korea); Kyungkoon Moon (Pohang University of Science and Technology, Korea);

00:00 Multilayer Thick-film and Next Generation Millimetre-wave Embedded Components and System Integration
Kamal Kumar Samanta (M/s Milmega/Teseq Ltd., UK);

00:00 Compact Microstrip Patch Antenna with Parasitic Loading for X & Ku Band Applications
Mohit Barthwal (Amity University, India); Sohaib Abbas Zaidsi (Amity University, India); Malay Ranjan Tripathy (Amity University, India); Shyam Sundar Pattnaik (National Institute of Technical Teachers Training and Research Chandigarh, India);

00:00 Microwave and Millimeter Wave 2D and 3D Integration
Tauno Vahaskikala (VTT Technical Research Centre of Finland, Finland);

00:00 Multilayered Integration of Microwave Components by Substrate Integrated Waveguide Technology
Maurizio Bozzi (University of Pavia, Italy); Riccardo Moro (University of Pavia, Italy); Stefano Moscato (University of Pavia, Italy); Luca Perugini (University of Pavia, Italy);

00:00 Recent Developments in Microwave and Millimeter-wave Integrated Circuits (MMICs) and Systems
Xin Jiang (Southeast University, China); Wei Hong (Southeast University, China); Jizin Chen (Southeast University, China); Debin Hou (Southeast University, China); Zhe Chen (Southeast University, China);
00:00 CMOS Terahertz Synthesized Left-handed Transmission Lines
Hsien-Shun Wu (Tianjin University, China); Ching-Kuang C. Tzuan (National Taiwan University, Taiwan);

Session 2P_13b
SC4: Reconfigurable Antennas

Tuesday PM, August 26, 2014
Room M
Organized by Yingjie Jay Guo, Ying Liu
Chaired by Ying Liu

00:00 Magnetically Tunable Dual-polarized Dual-band SIW Slot Antenna
Li-Rong Tan (Nanjing University, China); Rui-Xin Wu (Nanjing University, China);
00:00 Dual-polarized Unit-cell of Continuous Reflective Phase-shift for Reconfigurable Reflectarrays
Ming-Tao Zhang (Xidian University, China); Steven Gao (University of Kent, UK); Jizhang Wan (Xi’an Institute of Space Radio Technology, China); Buning Tian (Xi’an Institute of Space Radio Technology, China); Chuanbang Wu (Xi’an Institute of Space Radio Technology, China);
00:00 A Reconfigurable Folded Antenna for Mobile Phone Applications
Liu Hu (Xidian University, China); Ying Liu (Xidian University, China); Cao Yu (Xidian University, China); Shuxi Gong (Xidian University, China);
00:00 Pattern Reconfigurable Printed Antennas with High Gain and Broadband
Xue-Xia Yang (Shanghai University, China); Zhongliang Lu (Shanghai University, China); Guannan Tan (Shanghai University, China); Yong Jin Zhou (Shanghai University, China);
00:00 A Thin Planar Antenna Based on Gradient Metasurface
Bo Chen (Xi’an Jiaotong University, China); Hongyu Shi (Xi’an Jiaotong University, China); Anxue Zhang (Xi’an Jiaotong University, China); Juan Chen (Xi’an Jiaotong University, China);
00:00 Radiation Pattern Reconfigurable Antenna for LTE Wireless Communication System
Wei Wang (Alcatel-Lucent Shanghai Bell, China); Chaojun Xu (Alcatel-Lucent Shanghai Bell Co., Ltd., China); Gang Shen (Alcatel-Lucent Shanghai Bell, China); Jinxing Lu (Alcatel-Lucent Shanghai Bell Co., Ltd., China);
00:00 Wideband RCS Reduction of Microstrip Antenna by Frequency Reconfigurable Electromagnetic Band Gap
Ying Liu (Xidian University, China); Y.-W. Hao (Xidian University, China); Yongtao Jia (Xidian University, China); S.-X. Gong (Xidian University, China);
00:00 Frequency Reconfigurable Narrow-frame Antenna for WWAN/LTE Smartphone Applications
Zhong-Xiang Chen (University of Electronic Science and Technology of China, China); Yong-Ling Ban (University of Electronic Science and Technology of China, China);

Session 2P_14a
SC5: Remote Sensing of the Atmosphere, Ocean, Hydrology and Cryosphere

Tuesday PM, August 26, 2014
Room N
Organized by Shuanggen Jin

00:00 Numerical Simulation of Scattering from Rough Surface/Subsurface and Inversion Application for Extra-planetary Exploration
Ya-Qiu Jin (Fudan University, China);
00:00 Estimation of Wind-direction Using the Bayesian Approach Retrieved from Marine Radar-image Sequences
Ketao Ma (Wuhan University, China); Xiongbin Wu (Wuhan University, China); Li Wang (Wuhan University, China); Xiaofeng Chen (Wuhan University, China); Jianfei Liu (Wuhan University, China);
00:00 Theoretical Analysis and Experimental Verification of Microwave Radiation Features of Fractured Rock
Shanjun Liu (Northeastern University, China); Zhongyin Xu (Northeastern University, China); Lixin Wu (Northeastern University, China); Bo Tang (Northeastern University, China);
00:00 Surface Scattering Characteristics and Snow Accumulating-melting Behaviors from GNSS Reflectometry
Shuanggen Jin (Shanghai Astronomical Observatory, Chinese Academy of Sciences, China); Nasser Najibi (Shanghai Astronomical Observatory, Chinese Academy of Sciences, China);
00:00 Study on Microwave Radiation Variation of Typical Ground Features in Yushu
Xiaoqing Liu (Northeastern University, China); Shanjun Liu (Northeastern University, China); Lixin Wu (Northeastern University, China);
00:00 Application of Computational Electromagnetics to Quantitative Interpretation of Observations with a Polarimetric Weather Radar
Djordje Mirkovic (University of Oklahoma CIMMS, USA); Dusan Zrnic (NOAA, USA); Alexander Ryzhkov (University of Oklahoma CIMMS, USA);

00:00 A Novel Keystone Transform Based Algorithm for Moving Target Imaging with Radon Transform and Fractional Fourier Transform Involved
Jiefang Yang (The Key Laboratory of Microwave Remote Sensing, Chinese Academy of Sciences, China); Yunhua Zhang (The Key Laboratory of Microwave Remote Sensing, Chinese Academy of Sciences, China);

00:00 Why Optical Images are Easier to Understand Than Radar Images? — From the Electromagnetic Scattering and Signal Point of View
Yunhua Zhang (Center for Space Science and Applied Research, Chinese Academy of Sciences, China); Jingshan Jiang (Center for Space Science and Applied Research, Chinese Academy of Sciences, China);

00:00 Landslide Displacement Monitoring Using Multi-aperture InSAR and D-InSAR
Liming He (Northeastern University, China); Lixin Wu (Northeastern University, China); Shanjun Liu (Northeastern University, China); Chang Su (Northeastern University, China);

00:00 COSMO-SkyMed Mission: Applications and Accomplishments
Maria Virelli (Italian Space Agency (ASI), Italy); Patrizia Sacco (Italian Space Agency (ASI), Italy); Maria Girolamo Daraio (Italian Space Agency (ASI), Italy); Maria Libera Battaglione (Italian Space Agency (ASI), Italy); Alessandro Coletta (ASI — Italian Space Agency, Italy);

00:00 A PolSAR Classification Method Based on Scattering Model and Polarization Correlation Coefficient
Jianbo Wang (Institute of Remote Sensing and Digital Earth, CAS, China); Chaow Wang (Institute of Remote Sensing and Digital Earth, CAS, China); Hong Zhang (Institute of Remote Sensing and Digital Earth, CAS, China); Fan Wu (Institute of Remote Sensing and Digital Earth, CAS, China); Bo Zhang (Institute of Remote Sensing and Digital Earth, CAS, China);

00:00 A Case Study of Precursor Aspects of L’Aquila Earthquake Using Spaceborne InSAR Data
Kamel Hasni (Beihang University, China); Jie Chen (Beijing University of Aeronautics and Astronautics, China); Nabil Hamdadou (Beihang University, China);

00:00 FPGA-based Real-time Generator of Combination Chaotic Frequency-modulated Signal for Noise Radar
Qilun Yang (University of Chinese Academy of Sciences, China); Yunhua Zhang (Center for Space Science and Applied Research, Chinese Academy of Sciences, China); Bingjie Li (University of Chinese Academy of Sciences, China);

00:00 Analysis of Optimal Panel Geometry for Self-illustration Corner Reflector
Chuanrong Li (Academy of Opto-Electronics, Chinese Academy of Sciences, China); Yong-Sheng Zhou (Academy of Opto-Electronics, Chinese Academy of Sciences, China); Lingling Ma (Academy of Opto-Electronics, Chinese Academy of Sciences, China);

00:00 Remote Detection of Human Vital Sign with SFCW Radar
Sixin Liu (Jilin University, China); Lanbo Liu (University of Connecticut, USA);

00:00 Backscatter Radar Cross Section by a Perfectly Conducting Sphere
Andrew. O. Akala (University of Lagos, Nigeria); E. O. Somoye (Lagos State University, Nigeria); A. O. Adewale (University of Lagos, Nigeria);

00:00 Beam Pattern Reconfiguration Based on Fourier Constrained Rotman Lenses
Yunhua Zhang (Wuhan University, China); Vincent Fusco (Queen’s University of Belfast, UK); Guoqiang Zhu (Wuhan University, China);
**Session 2P_15a**

**SC1&3: Physics and Applications of Photonic Crystals, Materials, and Nanostructures**

**Tuesday PM, August 26, 2014**

Room O

Organized by Tzong-Jer Yang, Chien-Jang Wu

Chaired by Chien-Jang Wu, Yuan-Fong Chau

00:00 Structural Features of Magnetic Fluid in Electrooptical Converters
V. M. Koshelevikov (The North Caucasus Federal University, Russia); Y. A. Larionov (The North Caucasus Federal University, Russia); I. Y. Chaenkoa (The North Caucasus Federal University, Russia);

00:00 A New Kind of Leaky Wave Antenna Based on Low Frequency Surface Plasmon Polaritons
Jin-Jei Wu (Chung Hua University, Taiwan, R.O.C.); Chien-Jang Wu (National Taiwan Normal University, Taiwan); Her-Lih Chiueh (Lunghua University of Science and Technology, Taiwan); Tzong-Jer Yang (Chung-Hua University, Taiwan, R.O.C.); Yao-Huang Kao (Chung-Hua University, Taiwan, R.O.C.);

00:00 Phase Modulation and Refraction of Bloch Surface Waves: A Rigorous Theoretical Analysis
Evgeni A. Bezus (Image Processing Systems Institute of the Russian Academy of Sciences, Russia); L. L. Doskolovich (Image Processing Systems Institute of the Russian Academy of Sciences, Russia);

00:00 Supercontinuum Generation at 1.55 um in a Silicon Nanowire Embedded Photonic Crystal Fiber
E. Gunasundari (VIT University, India); Abdoslam M. Abohaker (Collage of Electronic Technology, Libya); K. Senthilnathan (VIT University, India); S. Sivabalan (VIT University, India); Kalyaperumal Nakkeeran (University of Aberdeen, UK); P. Ramesh Babu (VIT University, India);

00:00 Study of Tunable Negative Refraction in a Doped and Lossy Semiconductor
Yi Min Zeng (National Taiwan Normal University, Taiwan, R.O.C.); Jin-Jei Wu (Chung Hua University, Taiwan, R.O.C.); Tzong-Jer Yang (Chung-Hua University, Taiwan, R.O.C.); Chien-Jang Wu (National Taiwan Normal University, Taiwan);

00:00 Fluorescence from a Gaussian Atom Distribution in a Coherent Two-band Photonic Crystal
Jing-Nuo Wu (Chinese Culture University, Taiwan); Hsin-Chien Huang (Chinese Culture University, Taiwan); Wen-Feng Hsieh (National Chiao Tung University, Taiwan, R.O.C.); Szu-Cheng Cheng (Chinese Culture University, China);

00:00 Coherent Control of Photon-atom Bound State outside Photonic Band Gap
Szu-Cheng Cheng (Chinese Culture University, China); Jing-Nuo Wu (Chinese Culture University, Taiwan); Hsin-Chien Huang (Chinese Culture University, Taiwan); Wen-Feng Hsieh (National Cheng Kung University, Taiwan);

00:00 Simulation Analysis of a Dielectric Hole Plasmonic Nanoantenna
Gung Jing He (Chien Hsin University of Science and Technology, Taiwan, R.O.C.); Wayne Yang (Chien Hsin University of Science and Technology, Taiwan, R.O.C.); Yuan-Fong Chau (Chien Hsin University of Science and Technology, Taiwan, R.O.C.);

00:00 Analysis of Nanoinprinted TiO$_2$ Sol-gel Guided-mode Resonance Sensors
Wen-Kai Kuo (National Formosa University, Taiwan, R.O.C.); Ning-Chi Huang (National Formosa University, Taiwan, R.O.C.);

00:00 Numerical Investigation of a High-birefringence Photonic Crystal Fiber by Asymmetric Defect Structures
Wayne Yang (Chien Hsin University of Science and Technology, Taiwan, R.O.C.); Yuan-Fong Chau (Chien Hsin University of Science and Technology, Taiwan, R.O.C.);

00:00 Guiding Properties of the Wedge Plasmon Polaritons
Tzong-Jer Yang (Chung-Hua University, Taiwan, R.O.C.); Jin-Jei Wu (Chung Hua University, Taiwan, R.O.C.); Da Jun Hou (Chung-Hua University, Taiwan, R.O.C.); Linfang Shen (Zhejiang University, China); Her-Lih Chiueh (Lunghua University of Science and Technology, Taiwan); Chien-Jung Wu (National Taiwan Normal University, Taiwan);

**Session 2P_15b**

**SC4: Antennas and RF Devices Based on Superconductors and Other Advanced Materials**

**Tuesday PM, August 26, 2014**

Room O

Organized by Malay Ranjan Tripathy

00:00 Design of CPW Fed Hexagonal Fractal Micro Strip Antenna for UWB Communications
Kailas Kantilal Sawant (Institute of Armament Technology, India); Sujit Bhaskar Dharmpatre (MIT, India);
00:00 Pentagonal Shape Antenna with Fractal Slots for Wireless Communication Applications
Sohaib Abbas Zaidi (Amity University Noida, India); Mohit Barthwal (Amity University Noida, India); Malay Ranjan Tripathy (Amity University, India); Shyam Sundar Pattnaik (NITTTR, India);

00:00 A Compact Microstrip Patch Antenna Loaded with Parasitic Elements for X & Ku Band Applications
Mohit Barthwal (Amity University, India); Sohaib Abbas Zaidi (Amity University Noida, India); Malay Ranjan Tripathy (Amity University, India); Shyam Sundar Pattnaik (NITTTR, India);

00:00 Design and Implementation of an UWB Printed Monopole Antenna for Portable Devices
Jamal Nasir (CIHT, Pakistan); Mohd Haizal Jamaluddin (Universiti Teknologi Malaysia, Malaysia); Indad Khan (Institute of Information Technology, Pakistan); Muhammad Ramlee Kamarudin (Universiti Teknologi Malaysia, Malaysia); Muzammil Hussain (Institute of Information Technology, Pakistan);

00:00 Dual Band Rectangular Dielectric Resonator Antenna Design
Raghuraman Selvaraju (Universiti Teknologi Malaysia, Malaysia); Mohsen Khalily (Universiti Teknologi Malaysia, Malaysia); Muhammad Ramlee Kamarudin (Universiti Teknologi Malaysia, Malaysia); Mohd Haizal Jamaluddin (Universiti Teknologi Malaysia, Malaysia); Jamal Nasir (CIHT, Pakistan);

00:00 Gain Enhanced UWB Dielectric Resonator Antenna
Mohsen Khalily (Universiti Teknologi Malaysia, Malaysia); Jamal Nasir (CIHT, Pakistan); Muhammad Ramlee Kamarudin (Universiti Teknologi Malaysia, Malaysia); Raghuraman Selvaraju (Universiti Teknologi Malaysia, Malaysia); Mohd Haizal Jamaluddin (Universiti Teknologi Malaysia, Malaysia);

00:00 Modified Inverted Fork Patch Antenna
Ragini Sharma (Madhav Institute of Technology and Science, India); Mahesh Kumar Agawariya (Madhav Institute of Technology and Science, India); Abhisar Khokhar (MITS, India);

00:00 Tunable S-band RF Front End Receiver for LEO Mission
Geetanjali Sharma (Amity University, India); Viral Degareula (Amity University, India); Malay Ranjan Tripathy (Amity University, India);

00:00 Coplanar Waveguide-fed Hilbert Curve Fractal Antenna for UWB Applications
Bonula Rama Rao (AITAM, INDIA); P. V. Sridevi (A.U. College of Engineering, India);

00:00 Switching Voltage Simulation on RF MEMS Switch
Norshahida Saba (MARA, Japan Industrial Institute, Malaysia); Norhayati Soin (University Malaya, Malaysia); Abdul Basit Zia (University Malaya, Malaysia);

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**Session 3A0**
**Poster Session 4**

**Wednesday AM, August 27, 2014**

9:00 AM - 12:00 AM

**Room FOYER**

00:00 Electromagnetic Force in the Complex Quaternion Space
Zi-Hua Weng (Xiamen University, China);

00:00 Computing Illuminated Area and Scattering for Double-bounce for SAR Manmade Target’s Characteristic Modeling
Kai Yang (National University of Defense Technology, China); Kefeng Ji (National University of Defense Technology, China); Huaxin Zou (National University of Defense Technology, China);

00:00 Target Angular Scintillation Measurement of Wide-band Range Comparison Monopulse Radar in Anechoic Chamber
Yang Bai (Science and Technology on Electromagnetic Scattering Laboratory, China); Chao Ning (Science and Technology on Electromagnetic Scattering Laboratory, China); Ming Jin (Science and Technology on Electromagnetic Scattering Laboratory, China); Chao Guo (Science and Technology on Electromagnetic Scattering Laboratory, China); Yanjie Cui (Science and Technology on Electromagnetic Scattering Laboratory, China);

00:00 Effective Implementation of the CFS-PML Using DSP Techniques for Truncating Dispersive Medium FDTD Domains
Naixing Feng (Xiamen University, China); Yongqing Yue (Xiamen University, China); Chunhui Zhu (Xiamen University, China); Qinghuo Liu (Duke University, USA);

00:00 Continuously Moving Target Simulator Design
Deping Zhang (National University of Defense Technology, China); Chao Wang (National University of Defense Technology, China); Chang Zhu (National University of Defense Technology, China); Naichang Yuan (National University of Defense Technology, China);
00:00 Accurate Statistical Modeling Method for Dynamic RCS
Yu-Qiang Zhuang (Air Force Engineering University, China); Chen-Xin Zhang (Air Force Engineering University, China); Xiao-Kuan Zhang (Xidian University, China);

00:00 A Method for Predicting Far Field Radar Cross-section from Near Field Measurements on Cylindrical Scanning Mode
Chao Gao (Science and Technology on Electromagnetic Scattering Laboratory, China); J. W. Chen (Communication University of China, China); Yang Bai (Science and Technology on Electromagnetic Scattering Laboratory, China); Ming Jin (Science and Technology on Electromagnetic Scattering Laboratory, China);

00:00 Relationships between Surface Wave Attenuation and the Reflection Properties of Thin Surface Wave Absorbing Layer
Hai-Yan Chen (University of Electronic Science and Technology of China, China); Li-Juan Lu (University of Electronic Science and Technology of China, China); Dong-Jiao Guo (University of Electronic Science and Technology of China, China); Hapeng Lu (University of Electronic Science and Technology of China, China); Pei-Heng Zhou (University of Electronic Science and Technology of China, China); Jianliang Xie (University of Electronic Science and Technology of China, China); Long-Jiang Deng (University of Electronic Science and Technology of China, China);

00:00 The RF Immunity Characteristics Analysis of SSD Performance due to Wireless Communications Emission in Proximity
Han-Nien Lin (Feng-Chia University, Taiwan, R.O.C.); Po-Yan Wang (Feng-Chia University, Taiwan, R.O.C.); Hung-Yun Tsai (Feng-Chia University, Taiwan, R.O.C.); Yang-Chi Tung (M.O.E.A, Taiwan, R.O.C.);

00:00 Modified 2D-Luneburg Lens Using Metamaterials
Haijing Chen (Southeast University, China); Qiang Cheng (Southeast University, China); Ai-hua Huang (Southeast University, China); Jun-yuan Dai (Southeast University, China); Huiying Lu (Southeast University, China);

00:00 A Simple High-resolution Imaging System Made of Metamaterials
Shuo Ge (Southeast University, China); Wei-Xiang Jiang (Southeast University, China);

00:00 A Metasurface for RCS Reduction in X Band
Di Shao Dong (Southeast University, China); Qiang Cheng (Southeast University, China); Jie Chen (Southeast University, China); Jie Zhao (Southeast University, China); Li Hua Gao (Southeast University, China);

00:00 Polarization Conversion and Splitting by Using Thin Reflective Anisotropic Metasurface
Gui Zhen Wang (Southeast University, China); Huijeng Ma (Southeast University, China); Gu Sheng Kong (Southeast University, China);

00:00 Variable Gravitational Mass in the Electromagnetic Field Described with the Complex Quaternion
Zi-Hua Weng (Xiamen University, China);

00:00 Study on Barium Strontium Titanium (BST)-based Metamaterial
Jun Yuan (Zhejiang University, China); Ge Yin (Zhejiang University, China); Guan-Bo Yin (Zhejiang University, China); Y. G. Ma (Zhejiang University, China);

00:00 Near-infrared Virtual Intraoperative Surgical Photoacoustic Microscopy for Needle Image Guiding Surgery
Changho Lee (Pohang University of Science and Technology, Korea); Mansik Jeon (Pohang University of Science and Technology, Korea); Jihoon Kim (Kyungpook National University, South Korea); Chul-hong Kim (Pohang University of Science and Technology, Korea);

00:00 Propagation of Surface Plasmons at Semiconductor/Dielectric Interfaces
Dalibor Blažek (VŠB — Technical University of Ostrava, Czech Republic); Michael Cada (Dalhousie University, Canada); Jaromír Pištora (VŠB — Technical University of Ostrava, Czech Republic);

00:00 Perovskite Sensitized Mesoporous NiO Based P-type Solar Cells
Xianwei Zeng (Huazhong University of Science and Technology, China); Huan Wang (Huazhong University of Science and Technology, China); Wenjun Zhang (Huazhong University of Science and Technology, China); Wei Chen (Huazhong University of Science and Technology, China);

00:00 30 x 100 GHz Digitally Wavelength Switchable V-coupled-cavity Laser with Cleaved Facets
Yuan Zhuang (Zhejiang University, China); Xin Zhang (Zhejiang University, China); Jian-Jun He (Zhejiang University, China);
00:00 Experimental Characterization of the Distortion of Signal Propagating with Negative Group Velocity
Dexin Ye (Zhejiang University, China); Yannick Salamin (Zhejiang University, China); Qinyi Lu (Zhejiang University, China); Qingyang Meng (Zhejiang University, China); Shan Qiao (Zhejiang University City College, China); Lizin Ran (Zhejiang University, China);

00:00 Attaining Higher Mobility IGZO-TFT by Annealing
Mohsen Abdolahi (Isfahan University of Technology (IUT), Iran); Gholamreza Askari (Isfahan University of Technology (IUT), Iran); Hamid Mirmohammadm Sadeghi (Isfahan University of Technology (IUT), Iran); Mehdi Fadaei (Isfahan University of Technology (IUT), Iran);

00:00 Radiation of Inverted Pendulum with Hysteretic Nonlinearity
Yanzia Cui (Taiyuan University of Technology, China); Shou Zhang (Taiyuan University of Technology, China); Yuanyao Hao (Taiyuan University of Technology, China); Furong Zhu, (Hong Kong Baptist University, China);

00:00 Attaining Higher Mobility IGZO-TFT by Annealing Than by Quenching
Peng Xiao (South China University of Technology, China); Linfeng Lan (South China University of Technology, China); Zhenguo Lin (South China University of Technology, China); Junbiao Peng (South China University of Technology, China);

00:00 Signals Propagating with Negative Group Velocity
Mikhail E. Semenov (Zhukovsky-Gagarin Air Force Academy, Russia); Peter A. Meleshenko (Voronezh State University, Russia); Hang T. T. Nguyen (Vietnam National University — Ho Chi Minh City, Vietnam); Alexander F. Klinskikh (Voronezh State University, Russia); Anton G. Rukavitsyn (Voronezh State University, Russia);

00:00 Aharonov-Bohm Control of Optical Properties in System of Parallel Coupled Quantum Wells
Peter A. Meleshenko (Voronezh State University, Russia); Hang T. T. Nguyen (Vietnam National University — Ho Chi Minh City, Vietnam); Alexander F. Klinskikh (Voronezh State University, Russia);

00:00 Broadband Coaxial Spatial Power Combiner Formed by Tapered Slot Antenna
Mehdi Fadaei (Isfahan University of Technology (IUT), Iran);

00:00 Broadband Coaxial Spatial Power Combiner Formed by Tapered Slot Antenna
Hang T. T. Nguyen (Vietnam National University — Ho Chi Minh City, Vietnam); Xiong Zou (Air Force Engineering University, China); Tong Wang (Air Force Engineering University, China);

00:00 Small Design for Wireless Antenna Used by Ultrawideband Systems
Rashid Ali Payagh (Universiti Malaysia Perlis (UniMAP), Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia); Hilal Adnan Fadhill (University Malaysia Perlis (UniMAP), Malaysia); Sameer Akram Dawood (Universiti Malaysia Perlis (UniMAP), Malaysia); Farah Salwani Abdullah (Universiti Malaysia Perlis (UniMAP), Malaysia); Ihsan Jabar Hasan (Universiti Teknikal Malaysia (UTeM), Malaysia);

00:00 Spurious Modes Reduction in a Patch Antenna Using HMC500LP3 Chip
Qan Xu (Beihang University, China); Jie Zhang (Beihang University, China); Chen Chen (Beihang University, China);

00:00 Application of Artificial Magnetic Conductor in Aperture-coupled Microstrip Antenna
Chao Fang (Communication University of China, China); Guizhen Lu (Communication University of China, China);

00:00 Design of Broadband Vector Modulator Based on HMC500LP3 Chip
Qian Xu (Beihang University, China); Jie Zhang (Beihang University, China); Chen Chen (Beihang University, China);

00:00 A Novel Substrate Integrated Waveguide Back-cavity Antenna with Bow-tie Shaped Slot
Chuang-Ming Tong (Air Force Engineering University, China); Wei-jian Pang (Air Force Engineering University, China); Xiouqiang Xu (Air Force Engineering University, China); Tong Wang (Air Force Engineering University, China);

00:00 A Novel UWB Antenna with Dual-band Notched Characteristics
Yongfan Lin (Air Force Engineering University, China); Jian-Gang Liang (Air Force Engineering University, China); Zi-Mu Yang (Air Force Engineering University, China); Zhiyong Xu (Air Force Engineering University, China); Rui Wu (Air Force Engineering University, China);

00:00 Spurious Modes Reduction in a Patch Antenna Using a Novel DP-EBG Structure
Zhiyong Xu (Air Force Engineering University, China); Hou Zhang (Air Force Engineering University, China); Rui Wu (Air Force Engineering University, China); Yongfan Lin (Air Force Engineering University, China);
00:00 A Novel DP-EBG Structure for Low-pass Filter of Wide Stopband
Hou Zhang (Air Force Engineering University, China); Zhiqiong Xu (Air Force Engineering University, China); Yongfan Lin (Air Force Engineering University, China); Rui Wu (Air Force Engineering University, China);

00:00 A Novel Method for Sparse Array Antenna Through-the-wall Imaging Radar Wall Clutter Elimination Using Independent Component Analysis
Chi Zhang (National University of Defense Technology, China); Yue Li (National University of Defense Technology, China); Zhi-Min Zhou (National University of Defense Technology, China);

00:00 Improve the Performance of Multi-users MC-CDMA Based on Critically Sampling Multi-wavelet Transform over Wireless Propagation Channel
Sameer Akram Dawood (Universiti Malaysia Perlis (UniMAP), Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia); M. S. Anuar (Universiti Malaysia Perlis, Malaysia); Rashid Ali Fayadh (Universiti Malaysia Perlis (UniMAP), Malaysia); M. H. F. Mohd Fakri (Universiti Malaysia Perlis (UniMAP), Malaysia);

00:00 A Dual Band U-shaped Slot Antenna for WLAN and WiMAX Applications
Zi-Mu Yang (Air Force Engineering University, China); Hou Zhang (Air Force Engineering University, China); Ning Zhou (Electronic Systems Engineering Corporation of China (ESECC), China); Biao Wu (Electronic Systems Engineering Corporation of China (ESECC), China);

00:00 Study on the Propagation Characteristics of Ultrawideband Signal Waveform Distortion
Yuan-Jian Liu (Nanjing University of Posts and Telecommunications, China); Feng Chen (Nanjing University of Posts & Telecommunications, China); Fu-Rong Yin (Nanjing University of Posts & Telecommunications, China);

00:00 Novel Design of H-plane Bandpass Waveguide Filters Using Complementary Split Ring Resonators
S. Stefanovski (University of Belgrade, Serbia); Djordje Mirkovic (University of Oklahoma, USA); Milka M. Potrebic (University of Belgrade, Serbia); D. Tosic (University of Belgrade, Serbia);

00:00 Two Miniaturized Microstrip Patch Antenna for Chinese Compass Navigation Satellite System Based on High-permittivity Substrate
Hangying Yuan (Air Force Engineering University, China); Shaobo Qu (Air Force Engineering University, China); Jieqiu Zhang (Air Force Engineering University, China); Jiafu Wang (Air Force Engineering University, China); Hua Ma (Air Force Engineering University, China); Lin Zheng (Air Force Engineering University, China); Mingbao Yan (Air Force Engineering University, China);

00:00 Investigating the Dual-passbands Frequency Selective Surface with Complementary Structure
Lin Zheng (Air Force Engineering University, China); Shaobo Qu (Air Force Engineering University, China); Jieqiu Zhang (Air Force Engineering University, China); Jiafu Wang (Air Force Engineering University, China); Hang Zhou (Air Force Engineering University, China); Mingbao Yan (Air Force Engineering University, China); Zhiyuan Zhang (Air Force Engineering University, China); Hangying Yuan (Air Force Engineering University, China); Yongfeng Li (Air Force Engineering University, China); Yongqiang Pang (National University of Defense Technology, China);

00:00 An Ultra Wideband Printed Helical Antenna with Low Profile
Xihui Tang (Shenzhen University, China); Ruirui Li (Shenzhen University, China); Yunliang Long (Sun Yat-Sen University, China);

00:00 Discussions on the FSS Transmitted Beam Shift in Quasi-optic Instruments
Ming Jin (Science and Technology on Electromagnetic Scattering Laboratory, China); Yang Bai (Science and Technology of Electromagnetic Scattering Laboratory, China); Chao Gao (Science and Technology of Electromagnetic Scattering Laboratory, China);

00:00 Retrieval of Bare-surface Soil Moisture from Simulated Brightness Temperature Using Least Squares Support Vector Machines Technique
Fei Xu (Three Gorges University, China); Qinghe Zhang (Three Gorges University, China); Qiyuan Zou (Three Gorges University, China);

00:00 A Method of Two-dimensional MIMO Planar Array Design Based on Sub-array Segmentation for Through-wall Imaging
Pengfei Liu (National University of Defense Technology, China); Bi Ying Lu (National University of Defense Technology, China); Xin Sun (National University of Defense Technology, China);
00:00 Analysis of the Low Intensity Terahertz Radiation Influence on Lymphocyte Early Activation Markers
Maria V. Duka (Tsurkan) (National Research University of Information Technologies, Mechanics and Optics, Russia); M. K. Serebryakova (Saint-Petersburg State University, Russia); I. V. Kudryavtsev (Saint-Petersburg State University, Russia); A. S. Trulioff (Far Eastern Federal University, Russia); O. A. Smolyanskaya (National Research University of Information Technologies, Mechanics and Optics, Russia);

00:00 Influence of Terahertz Radiation with a Frequency Range 0.05 ÷ 1.7 THz on Mitochondrial Membrane Potential of Tumor Cells
Maria V. Duka (Tsurkan) (National Research University of Information Technologies, Mechanics and Optics, Russia); M. K. Serebryakova (Saint-Petersburg State University, Russia); I. V. Kudryavtsev (Saint-Petersburg State University, Russia); A. S. Trulioff (Far Eastern Federal University, Russia); A. S. Nazarova (Institute of Experimental Medicine of the North-West Branch of the Russian Academy of Medical Sciences, Russia); O. A. Smolyanskaya (National Research University of Information Technologies, Mechanics and Optics, Russia);

00:00 The Baroque Music's Influence on Learning Efficiency Based on the Research of Brain Cognition
Rong Gu (Tongji University, China); Jie Zhang (Tongji University, China); Junhe Zhou (Tongji University, China); Mei Song Tong (Tongji University, China);

00:00 Analysis of Spectral Characteristics and Optical Properties of the Human Cornea Obtained in the Terahertz Frequency Range
Max I. Sulatsky (ITMO University, Russia); Mikhail Konstantinovich Khodzitsky (ITMO University, Russia); E. L. Odyanatskiy (ITMO University, Russia); I. A. Geiko (IRTC “Eye Microsurgery” of the Russian Ministry of Health Krasnodar Branch, Russia); A. G. Zabolotniy (IRTC “Eye Microsurgery” of the Russian Ministry of Health Krasnodar Branch, Russia); Igor V. Prozheev (ITMO University, Russia); Evgenii A. Streptov (National Research University of Information Technologies, Mechanics and Optics, Russia); O. A. Smolyanskaya (National Research University of Information Technologies, Mechanics and Optics, Russia);

00:00 Study of Penetration Depth Dispersion of THz Radiation in Human Pathological Tissues
Igor V. Prozheev (ITMO University, Russia); O. A. Smolyanskaya (National Research University of Information Technologies, Mechanics and Optics, Russia); M. V. Duka (ITMO University, Russia); Anna A. Ezerskaya (National Research University of Information Technologies, Mechanics and Optics, Russia); V. V. Orlov (Saint Petersburg, Russia); Evgenii A. Streptov (National Research University of Information Technologies, Mechanics and Optics, Russia); N. S. Balbekin (National Research University of Information Technologies, Mechanics and Optics, Russia); M. K. Khodzitsky (ITMO University, Russia);

00:00 Pedagogical Design and Experimental Study of a Microwave 3-port PBG Circulator
Jose Luis Arrieta (School of Electrical and Computer Engineering, UNICAMP, Brazil); Hugo Enrique Hernandez-Figueroa (University of Campinas, Brazil);

00:00 A Comparative Study of Analytical and Numerical Analysis for Coaxial Probe Aperture in a Dissipative Media
Kok Yeow You (University Teknologi Malaysia, Malaysia); Chia Yew Lee (Universiti Teknologi Malaysia, Malaysia); Chia Wui Lee (Universiti Teknologi Malaysia, Malaysia);

00:00 Time-frequency Spectrum and Path Loss by Wind Turbine Forward Scattering
Muhammad Bilal Raza (Helmut Schmidt University/University of the Federal Armed Forces, Germany); Thomas Heinrich Fickenscher (Helmut Schmidt University/University of the Federal Armed Forces, Germany);

00:00 A Robust Technique for Conductivity-depth Imaging of Large Loop TEM Sounding Data
Ashish Kumar Tiwari (Banaras Hindu University, India); N. P. Singh (Banaras Hindu University, India);

00:00 Bistatic RCS Prediction Parallel Technique of Complex Electrically Large Targets with the Finite Difference Time Domain (FDTD) Combined with Improved Graphical Electromagnetic Computing (GRECO)
Yunping Qi (Northwest Normal University, China); Yulong Bai (Northwest Normal University, China); Bingzhou Mi (Northwest Normal University, China);

00:00 Bistatic RCS Computation of Electrically Large Targets Based on Improved GRECO
Peng Yin (Northwest Normal University, China); Yunping Qi (Northwest Normal University, China); Kaiman Li (Northwest Normal University, China);
00:00 Estimation of Moving Targets Based on Time Domain Integral Equation Method
Zhenhui Kang (Northwest Normal University, China); Yunping Qi (Northwest Normal University, China);

00:00 An Interdigital Slots Loaded Directional Coupler Based on Substrate Integrated Waveguide
Lu Fu (East China Normal University, China); Jie Cao (East China Normal University, China);
Shouzheng Zhu (East China Normal University, China);

00:00 High-power All-fiber CW-pumped Supercontinuum Source
Chun-Yu Guo (Shenzhen University, China); Yi-Ming Wu (Shenzhen University, China); Hua-Qin Lin (Shenzhen University, China); Shuang-Chen Ruan (Shenzhen University, China); Wei-Qi Liu (Shenzhen University, China); Jun Yu (Shenzhen University, China); Liang Wen (Shenzhen University, China); Ru-Hua Wen (Shenzhen University, China); Pei-Guang Yan (Shenzhen University, China); Hui-Feng Wei (R&I Center, China);

00:00 Multiple Control System Design for Superconducting Power Supply Based on RST Algorithm
Minhui Song (High Magnetic Field Laboratory, Chinese Academy of Sciences, China); Xiaoning Liu (High Magnetic Field Laboratory, Chinese Academy of Sciences, China);

00:00 Study on a Waveguide-to-microstrip Probe-array for Millimeter Wave Spatial Power Combining
Kang Yin (Southeast University, China); Jinping Xu (Southeast University, China);

00:00 Experimental the Microwave Absorption of Rice Husk/Ash Mixture
Yeng Seng Lee (University Malaysia Perlis (UniMAP), Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia); Ee Meng Cheng (Universiti Malaysia Perlis (UniMAP), Malaysia); Wei Wen Liu (Universiti Malaysia Perlis (UniMAP), Malaysia); Noor Azlanti Binti Che Ali (Universiti Malaysia Perlis (UniMAP), Malaysia); F. H. Wee (Universiti Malaysia Perlis (UniMAP), Malaysia); Muhamad Nadeem Iqbal (University Malaysia Perlis (UniMAP), Malaysia); Liyana Binti Zahid (Universiti Malaysia Perlis, Malaysia); Farah Salwani Abdullah (Universiti Malaysia Perlis (UniMAP), Malaysia); Mardianaliza Othman (Universiti Malaysia Perlis (UniMAP), Malaysia);

00:00 A Full Polarized Portable Step Frequency Virtual Aperture Radar
Jian Wang (National University of Defense Technology, China); Yanghuan Li (National University of Defense Technology, China); Hanhua Zhang (National University of Defense Technology, China); Bi Ying Lu (National University of Defense Technology, China); Qun Song (National University of Defense Technology, China); Zhimin Zhou (National University of Defense Technology, NUDT, China);

00:00 Broadband Printed Planar Dipole Antenna Using Metamaterial Structure
Zain Ul Islam (National University of Sciences and Technology, Pakistan); Omar Masood Khan (National University of Sciences and Technology, Pakistan); Farooq Ahmad Bhatti (National University of Sciences and Technology (NUST), Pakistan);

00:00 Investigation of Reflector Shape Effect to the Dual Band Monopole Antenna
Mohamad Hafize Ramli (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); M. Z. A. Abd Aziz (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); A. H. Dahalan (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); M. A. Othman (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia);

00:00 Design of a Dual and Wideband Monopole Antenna with Flattened Ground Plane
T. K. Ong (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Badrul Hisham Ahmad (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Mohamad Zainol Abidin Abd Aziz (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); M. A. Othman (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Mohd Kadim Suaidi (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia);

00:00 LNA Design Based on ADS
Kainan Li (Northwest Normal University, China); Peng Yin (Northwest Normal University, China); Zhenhui Kang (Northwest Normal University, China);

00:00 Research on Cascaded Active Power Filter for AC Side of High Power Supply of Superconducting Magnet
Siming Chen (University of Science and Technology of China, China); Xiaoning Liu (High Magnetic Field Laboratory, Chinese Academy of Sciences, China);
00:00 The Performances of Sugarcane Bagasse (SCB) — Rubber Tire Dust Composite as Microwave Absorber in X-Band Frequency
Liyana Binti Zahid (Universiti Malaysia Perlis, Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia); Ee Meng Cheng (Universiti Malaysia Perlis (UniMAP), Malaysia); Wei Wen Liu (Universiti Malaysia Perlis (UniMAP), Malaysia); Yeng Seng Lee (University Malaysia Perlis (UniMAP), Malaysia); Muhammad Nadeem Iqbal (University Malaysia Perlis (UniMAP), Malaysia);

00:00 Investigation of Combination Circle Loop for Frequency Selective Surface at 5.2 GHz
N. A. Md Fauzi (Universiti Teknikal Malaysia Melaka, Malaysia); Mohamad Zoinol Abidin Abd Aziz (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Maizatul Alice Meer Said (Universiti Teknikal Malaysia Melaka, Malaysia); Mohd Azlishah Othman (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia);

00:00 Wide Band Uniform Gain Low Power Amplifier for Radio Over Fiber Based Networks
Niaz Muhammad (The Military College of Signals, Pakistan); Zar Khatib (The Military College of Signals, Pakistan); Farooq Ahmad Bhatti (National University of Sciences and Technology (NUST), Pakistan);

00:00 Covering the Whole LTE Spectrum (400–3500) MHz by Employing One Reconfigurable Inverted F-antenna inside Mobile Handsets
Jehad Mahmoud (Texas A&M University, Qatar); Qammar Hussain Abbasi (Texas A&M University, Qatar); Erchin Serpedin (Texas A&M University, Qatar); Mohamed Abdallah (Texas A&M University, Qatar); Khalid Qaraqe (Texas A&M University, Qatar);

00:00 A Target Tracking Algorithm Based on Imaging Platform Seeker
Dong-Yan Han (No. 203 Research Institute of China Ordnance Industries, China); Guo-He Duan (No. 203 Research Institute of China Ordnance Industries, China);

00:00 Study on the Relationship between the Size of Resin Sprue on GIS and Intensity of UHF Electromagnetic Waves Radiated from Partial Discharge
Xinquang Li (Electric Power Research Institute of Guangdong Power Grid Corporation, China); Siyang Wu (Huazhong University of Science and Technology, China); Qizheng Ye (Huazhong University of Science and Technology, China); Chu Yang (Huazhong University of Science and Technology, China);

00:00 HALT Test of Tower Mounted Amplifier (TAM) Module Used in 4G Communication
Soon-Mi Huang (Korea Electronics Technology Institute (KETI), Korea); Chul-Hee Kim (Korea Electronics Technology Institute (KETI), Korea); Kwan-Hun Lee (Korea Electronics Technology Institute (KETI), Korea);

00:00 Failure Mechanisms Analysis of Metal-tag Used in 900 MHz
Soon-Mi Huang (Korea Electronics Technology Institute (KETI), Korea); Kwan-Hun Lee (Korea Electronics Technology Institute (KETI), Korea);

00:00 Printed Inverted-F MIMO Antenna for TD-LTE Mobile Terminal
Hui Liu (South China Normal University, China); Youhuang Guo (Guangdong Peizheng College, China); Te Pan (South China Normal University, China); Zhabin He (South China Normal University, China); Sailing He (Zhejiang University, China);

00:00 Compact Circularly Polarized RFID Tag Antenna with an Embedded U-shaped Feedline for Metallic Surfaces
Te Pan (South China Normal University, China); Shuai Zhang (KTH Royal Institute of Technology, Sweden); Zhabin He (South China Normal University, China); Lui Hui (South China Normal University, China); Sailing He (Zhejiang University, China);

00:00 The Research and Application of Array Antenna Element Detecting System
Wentao Zhu (China Mobile Group Design Institute, China); Feng Gao (China Mobile Group Design Institute, China); Zhiyuan Song (China Mobile Group Design Institute, China); Kai He (China Mobile Group Design Institute, China);

00:00 Theoretical Analysis and Test of EMF in TDFI Bus
Wentao Zhu (China Mobile Group Design Institute, China); Feng Gao (China Mobile Group Design Institute, China); Zhiyuan Song (China Mobile Group Design Institute, China); Kai He (China Mobile Group Design Institute, China);
00:00 Body Channel Study for Wearable Devices at 2.4 GHz
Kun Zhao (KTH-Royal Institute of Technology, Sweden); Zhinong Ying (Sony Mobile Communications AB, Sweden); Sailing He (Zhejiang University, China);

00:00 Conical Beam Leaky-wave Antenna Using Subwave-length Grooved Metal Structure
Ben Geng Cai (Southeast University, China); Yunbo Li (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 Measurement Uncertainty Introduced by Measurement Instruments in a Channel Measurement System
Xin Zhou (National Institute of Metrology, China); Duizhong Zhang (Beijing Jiaotong University, China); Xin Bian (Beijing Jiaotong University, China); Ke Liu (Beijing Jiaotong University, China);

00:00 Design Optimization and Large-signal Simulation of Double Low-High-Low Si IMPATT Diode at 60 GHz
Suranjana Banerjee (West Bengal University of Technology, India); Aritra Acharyya (University of Calcutta, India); Monojit Mitra (Bengal Engineering and Science University, India); Joyoti Prasad Banerjee (University of Calcutta, India);

00:00 Dynamic Modeling of IDVR Utilizing Fuzzy Control Method and Space Vector Modulation (SVPWM) and Its Comparison with PI Control Method and Sinusoidal Pulse Width Modulation (SPWM)
Aziz Hashemi (Islamic Azad University, Iran); Darush Nazarpour (Islamic Azad University, Iran);

00:00 Analysis of EMF and Interference in the Wireless Charging Robot System
Jung-Ick Moon (Electronics and Telecommunications Research Institute, South of Korea); In-Kui Cho (Electronics and Telecommunications Research Institute, South of Korea); Seong-Min Kim (Electronics and Telecommunications Research Institute, South of Korea); Jae-Hun Yun (Electronics and Telecommunications Research Institute, South of Korea); Woo-Jin Byun (Electronics and Telecommunications Research Institute, South Korea);

00:00 Design of Wireless Power Charging Using Coupled Magnetic Resonance to 12 V, 20 Ah LiFePO4 Battery
Seong-Min Kim (Electronics and Telecommunications Research Institute, South of Korea); Jung-Ick Moon (Electronics and Telecommunications Research Institute, South of Korea); In-Kui Cho (Electronics and Telecommunications Research Institute, South of Korea); Jae-Hun Yun (Electronics and Telecommunications Research Institute, South of Korea); Woo-Jin Byun (Electronics and Telecommunications Research Institute, South Korea);

00:00 Study of UWB On-body Radio Channel for Ectomorphic, Mesomorphic, and Endomorphic Body Types
Mohammad Monirujoaman Khan (University of Liberal Arts Bangladesh, Bangladesh); Qammer Husain Abbasi (Queen Mary University of London, United Kingdom);

00:00 A Rigorous Study of Planar Microstrip Lines by a New Formulation of the MoM Method
Nefla Oueslati (National Engineering School of Tunis, Tunisia); Taoufik Agouli (National Engineering School of Tunis, Tunisia);

00:00 High Performance Silicon Nanohole Array Photoelectrochemical Solar Cells
Xin Wang (South China Normal University, China);

00:00 Theoretical Investigation on Metallic Nanowire Network as Transparent Conductive Electrodes for Optoelectronic Devices
Han Bing (South China Normal University, China); Ke Pei (South China Normal University, China); Qiang Peng (South China Normal University, China); Ruopeng Li (South China Normal University, China); Krzysztof Kempa (Boston College, USA); Jinwei Gao (South China Normal University, China);

00:00 Solar Thermoelectric Co-generators Comprising Parabola trough Collectors and Thermoelectric Modules
Lei Miao (Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, China); Chao Li (Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, China); Yi Pu Kang (Nagoya Institute of Technology, Japan); Ming Zhang (Yokohama National University, Japan); Jianhua Zhou (Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, China);
**Session 3A1**

**FocusSession: Sesquicentennial Commemoration Session for Maxwell’s Equations 1**

**Wednesday AM, August 27, 2014**

**Room A**

Organized by Weng Cho Chew

Chaired by Weng Cho Chew

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00:00 Transformation Optics — Part of Maxwell’s Enduring Legacy

*John B. Pendry (Imperial College London, UK)*

00:00 Representing Maxwell’s Equations in Vector Diagram Form

*Donald R. Wilton (University of Houston, USA)*;  
*R. M. Nevels (Texas A&M University, USA)*;  
*K. Svanberg (St. Ambrose University, USA)*

00:00 Complete Construction of EM Green’s Dyadics from Maxwell’s Equations and Their Subsequent Asymptotic HF Approximations

*Prabhakar H. Pathak (Ohio State University, USA)*

00:00 Maxwell’s Equations in the Daily Practice of Near-field Techniques

*Jean-Charles Bolomey (Supelec, France)*

00:00 The 150th Birthday of Maxwell Equations

*Giorgio Franceschetti (University of Naples “Federico II”, Italy)*

00:00 Maxwell-like Equations for Gravitational Fields from the Linearized Theory of General Relativity: Are There Experimental Tests of These Equations?

*R. W. Chiao (University of California, Merced, USA)*;  
*N. Inan (University of California, Merced, USA)*;  
*D. Singleton (California State University, Fresno, USA)*;  
*L. Martinez (University of California, Merced, USA)*;  
*L. Martinez (University of California, Merced, USA)*;  
*S. Dunlap (University of California, Merced, USA)*;  
*A. Castelli (University of California, Merced, USA)*;  
*L. Sharping (University of California, Merced, USA)*

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00:00 Plasmon-enhanced Photovoltaics by Incorporating Metallic Nanostructures

*Annie Ng (The Hong Kong Polytechnic University, China)*;  
*Zhiwei Ren (The Hong Kong Polytechnic University, China)*;  
*Wai Kin Yiu (The University of Hong Kong, China)*;  
*Yishu Foo (City University of Hong Kong, China)*;  
*Qian Shen (The Hong Kong Polytechnic University, China)*;  
*Amina Bejaoui (City University of Hong Kong, China)*;  
*Yijing Zhao (The Hong Kong Polytechnic University, China)*;  
*Cem Gokkaya (The Hong Kong Polytechnic University, China)*;  
*Aleksandra Djurisic (The University of Konstanz, Germany)*;  
*K. Svanberg (The University of Konstanz, Germany)*;  
*T. Q. Li (The University of Konstanz, Germany)*;  
*G. Y. Zhao (The University of Konstanz, Germany)*;  
*K. Svanberg (The University of Konstanz, Germany)*;  
*S. Svanberg (The University of Konstanz, Germany)*

00:00 Optical Remote Sensing of Insects Using Passive Dark-field Techniques

*X. Wang (China Petroleum University, China)*;  
*B. Wei (China Petroleum University, China)*;  
*M. Li (China Petroleum University, China)*;  
*B. Kang (China Petroleum University, China)*;  
*A. Bejaoui (Islamic University of Gaza, Palestine)*;  
*E. Byndas (University of Nottingham, UK)*

00:00 Complete Construction of EM Green’s Dyadics from Maxwell’s Equations and Their Subsequent Asymptotic HF Approximations

*J. Bolomey (Supelec, France)*

00:00 The 150th Birthday of Maxwell Equations

*G. Franceschetti (University of Naples “Federico II”, Italy)*

00:00 Maxwell-like Equations for Gravitational Fields from the Linearized Theory of General Relativity: Are There Experimental Tests of These Equations?

*R. W. Chiao (University of California, Merced, USA)*;  
*N. Inan (University of California, Merced, USA)*;  
*D. Singleton (California State University, Fresno, USA)*;  
*L. Martinez (University of California, Merced, USA)*;  
*L. Martinez (University of California, Merced, USA)*;  
*S. Dunlap (University of California, Merced, USA)*;  
*A. Castelli (University of California, Merced, USA)*;  
*L. Sharping (University of California, Merced, USA)*

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**Energy Comparison of Different MPP Tracking Techniques for PV System**

*Khalid Mater (IUG, Palestine)*;  
*Hala Jarallah El-Khozondar (Islamic University of Gaza, Palestine)*;  
*N. Suntio (Tampere University of Technology, Finland)*
Session 3A2
MS-2.1: Focus Session on Microwave Photonics Components and Systems. Parts 1 & 2

Wednesday AM, August 27, 2014
Room B
Organized by Cyril C. Renaud, Lam Bui, Chao Wang
Chaired by Chao Wang

00:00 Terahertz Communications Based on Coherent Photonics
Tadao Nagatsuma (Osaka University, Japan); Yasuyuki Yoshimizu (Osaka University, Japan); Yu Yasuda (Osaka University, Japan); Kazuki Oogimoto (Osaka University, Japan); Shogo Horiguchi (Osaka University, Japan); Yusuke Minamikata (Osaka University, Japan); Shinitaro Hisatake (Osaka University, Japan); Kazutoshi Kato (Kyushu University, Japan);

00:00 Ultra-high-speed Fiber-wireless Transport Technology
Atsushi Kanno (National Institute of Information and Communications Technology, Japan); Tetsuya Kawanishi (National Institute of Information and Communications Technology, Japan);

00:00 Delay-stabilized Optical Fiber Link for Frequency and Signal Transfer
Yitang Dai (Beijing University of Posts and Telecommunications, China); Anzu Zhang (Beijing University of Posts and Telecommunications, China); Zhongze Jiang (Beijing University of Posts and Telecommunications, China); Zhongle Wu (Beijing University of Posts and Telecommunications, China); Feifei Yin (Beijing University of Posts and Telecommunications, China); Jianqiang Li (Beijing University of Posts and Telecommunications, China); Kun Xu (Beijing University of Posts and Telecommunications, China);

00:00 Fully Monolithic Photonic Integrated Circuits for Microwave and Millimeter Wave Signal Generation
Guillermo Carpintero (Universidad Carlos III de Madrid, Spain); K. Balakier (University College London, UK); C. Gordon (Universidad Carlos III de Madrid, Spain); G. Kervella (III-V Lab, France); R. Guzman (Universidad Carlos III de Madrid, Spain); A. Jimenez (Universidad Carlos III de Madrid, Spain); Martyn J. Fice (University College London, UK); M. Chitoui (III-V Lab, France); Frederic Van Dijk (III-V Lab, France); Xavier J. M. Leijtens (Eindhoven University of Technology, The Netherlands);

00:00 Dual-wavelength Semiconductor Laser with Two Asymmetric Phase-shifts
Xianfei Chen (Nanjing University, China);

00:00 Microwave Photonic Frequency Mixer for Distributed Antenna System
Shilong Pan (Nanjing University of Aeronautics and Astronautics, China); Zhenzhou Tang (Nanjing University of Aeronautics and Astronautics, China);

00:00 Time-frequency Manipulation in Real-time Instruments
Mohammad H. Asghari (University of California, Los Angeles, USA); Jacky Chan (University of California, Los Angeles, USA); Bahram Jalali (University of California at Los Angeles, USA);

00:00 Advances in Photonic-assisted Microwave Signals Measurement, Detection, and Analysis
Xiuhua Zou (Southwest Jiaotong University, China);

00:00 Linear Optical Filtering Techniques for Optical Signal Processing
Ming Li (Institute of Semiconductors, Chinese Academy of Sciences, China); Reza Ashrafi (Institut National de la Recherche Scientifique-Energie, Matériaux et Télécommunications (INRS-EMT), Canada); Ninghua Zhu (Institut National de la Recherche Scientifique-Energie, Matériaux et Télécommunications (INRS-EMT), Canada); Tae-Jung Ahn (Chosun University, Korea); Sophie Larochelle (Universite Laval, Canada); Jose Azana (Institut National de la Recherche Scientifique-Energie, Matériaux et Télécommunications (INRS-EMT), Canada);

00:00 Novel High Performance Microwave Photonic Phase Shifters Based on Stimulated Brillouin Scattering
Mattia Pagani (University of Sydney, Australia); Benjamin J. Eggleton (University of Sydney, Australia); David Marpaung (University of Sydney, Australia);

00:00 Using Single Dual-drive Modulator Generating Arbitrary Waveforms and UWB Signal
Bo Dai (Heriot-Watt University, UK); Zhensen Gao (Acalte-Luent Shanghai Bell, China); Satoshi Shimizu (National Institute of Information and Communications Technology (NICT), Japan); Naoya Wada (National Institute of Information and Communications Technology (NICT), Japan); Xu Wang (Heriot-Watt University, UK);

00:00 Photonic Time Stretch Channelizer for Broadband Microwave Spectrum Sensing
Chao Wang (University of Kent, UK);
Session 3A3a
MS-1.7: Light Emitting Diodes, Parts 1 & 2

Wednesday AM, August 27, 2014
Room C
Organized by Mario Dagenais, Nelson Tansu, Haiyan Ou

00:00 Fluorescent SiC for White Light-emitting Diodes
Mikael Syvajarvi (Linkoping University, Sweden);

00:00 Plasmon Enhanced Green GaN Light-emitting Diodes
Haiyan Ou (Technical University Denmark, Denmark);
Ahmed Fadil (Technical University Denmark, Denmark);
Daisuke Iida (Technical University Denmark, Denmark);
Yuntian Chen (Huazhong University of Science and Technology, China);
Motoaki Iwaya (Meijo University, Japan);
Tetsuya Takeuchi (Meijo University, Japan);
Satoshi Kamiyama (Meijo University, Japan);
Isamu Akasaki (Meijo University, Japan);

00:00 Future Solid State Lighting Based on Light Emitting Laser Diodes
Paul Michael Petersen (Technical University of Denmark, Denmark);
Ole Bjarlin Jensen (Technical University of Denmark, Denmark);

00:00 Plasmonic Control of Quantum-well Luminescence for Enhanced Efficiency and Beam Shaping
Roberto Paiella (Boston University, USA);

00:00 Ion Implantation Technology for the Fabrication of GaN-based LEDs
Shoou-Jinn Chang (National Cheng Kung University, Taiwan, R.O.C.);
J. K. Sheu (National Cheng Kung University, Taiwan);
W. C. Lai (National Cheng Kung University, Taiwan);

00:00 Physics of High Efficiency and Efficiency-droop in III-Nitride Light-emitting Diodes
Nelson Tansu (Lehigh University, USA);
Chee-Keong Tan (Lehigh University, USA);
Peifen Zhu (Lehigh University, USA);
Wei Sun (Lehigh University, USA);

00:00 Characterization of InGaN-LEDs
Nazir A. Naz (Federal Urdu University of Arts, Science and Technology Islamabad, Pakistan);
M. Imran (Federal Urdu University of Arts, Science and Technology Islamabad, Pakistan);
Akbar Ali (Quaid-i-Azam University, Pakistan);

00:00 Room-temperature Near-infrared/Wide-band Perovskite Whispering-gallery Planar Nanolasers
Qing Zhang (Nanyang Technological University, Singapore);
Son Tung Ha (Nanyang Technological University, Singapore);
Xinfeng Liu (Nanyang Technological University, Singapore);
Tze Chien Sum (Nanyang Technological University, Singapore);
Qihua Xiong (Nanyang Technological University, Singapore);

Session 3A3b
MS-1.6: Organic Light Emitting Diodes 1

Wednesday AM, August 27, 2014
Room C
Organized by Jwo-Huei Jou, Jiun-Haw Lee
Chaired by Jiun-Haw Lee

00:00 Universal Bipolar Host Materials and Exciplex for White OLEDs
Ken-Tsung Wong (National Taiwan University, Taiwan);

00:00 High Performance, Single Phosphorescence Dopant, Hybrid White or Multi-color OLEDs Based on Platinum Complexes and a New Host Material
Anurach Poloek (TIGP, Academia Sinica, Taiwan);
Chieh Wang (Institute of Chemistry, Academia Sinica, Taiwan);
Chao-Tsen Chen (National Taiwan University, Taiwan);
Chin-Ti Chen (Institute of Chemistry, Academia Sinica, Taiwan);

00:00 Device Engineering for High Efficiency Blue Phosphorescence Organic Light-emitting Diode
Tien-Lung Chiu (Yuan Ze University, Taiwan);
Hsin-Jen Chen (Yuan Ze University, Taiwan, R.O.C.);
Man-Kit Leung (National Taiwan University, Taiwan);
Yu-Hsuan Hsieh (National Taiwan University, Taiwan);
Session 3A4  
2. FocusSession.SC2: Tunable and Reconfigurable Metamaterials and Plasmonics  

Wednesday AM, August 27, 2014  
Room D  
Organized by Yongmin Liu, Ranjan Singh

00:00 Probing Local Conductivity at Atomic-scale Graphene Defects by Near-field Plasmon Interferometry  
Jianing Chen (Institute of Physics, Chinese Academy of Science, China); M. L. Nesterov (CSIC-Universidad de Zaragoza, Spain); A. Yu. Nikitin (CIC nanoGUNE Consolider, Spain); S. Thongrattanasiri (IQFR-CSIC, Spain); P. Alonso-Gonzalez (CIC nanoGUNE Consolider, Spain); T. M. Slpchenko (CSIC-Universidad de Zaragoza, Spain); M. Ostler (Universität Erlangen-Nürnberg, Germany); Th. Seyller (Universität Erlangen-Nürnberg, Germany); I. Crassee (Université de Genève, Switzerland); F. Koppens (Mediterranean Technology Park, Spain); L. Martin-Moreno (CSIC-Universidad de Zaragoza, Spain); J. G. Abajo (IQFR-CSIC, Spain); A. B. Kuzmenko (Université de Genève, Switzerland); R. Hillenbrand (CIC nanoGUNE Consolider, Spain);

00:00 Single Nanoparticle Couplers for Plasmonic Nanocircuits  
Shunping Zhang (Wuhan University, China); Hongxing Xu (Institute of Physics, Chinese Academy of Sciences, China);

00:00 Strong Confinement of Flexible Graphene Plasmons and Its Application  
Jian Wang (Southeast University, China); Wei Bing Lu (Southeast University, China); Xiaobing Li (Southeast University, China); J. Hu (Southeast University, China); Xiaofeng Gu (Southeast University, China);

00:00 Modular Assembly of Optical Nanocircuits  
Jinwei Shi (Beijing Normal University, China);

00:00 Excitation of Surface Plasmon Polaritons at Terahertz Superconducting Hole Array  
J. B. Wu (Nanjing University, China); X. Zhang (Nankai University, China); Biaobing Jin (Nanjing University, China); H. Liu (Nankai University, China); Y. H. Chen (Institute of Physics, Chinese Academy of Science, China); Z. Y. Li (Institute of Physics, Chinese Academy of Science, China); L. Kang (Nanjing University, China); W. W. Xu (Nanjing University, China); J. Chen (Nanjing University, China); P. H. Wu (Nanjing University, China);

00:00 Graphene Metamaterials and Couplers  
Ilya V. Shadrivov (Australan National University, Australia); Daria A. Smirnova (Australian National University, Australia); Ivan V. Jorsh (National Research University for Information Technology, Mechanics and Optics, Russia); Andrey V. Gorbach (University of Bath, UK); Ivan S. Mukhin (National Research University for Information Technology, Mechanics and Optics, Russia); Pavel A. Belov (National Research University for Information Technology, Mechanics and Optics, Russia); Yuri S. Kusyar (Australian National University, Australia);

00:00 The Transport Properties of a Topological Insulator and Its Potential Applications in Plasmonics  
Xiaobing Li (Southeast University, China); Wei Bing Lu (Southeast University, China); J. Wang (Southeast University, China); X. F. Gu (Southeast University, China); Jun Hu (Southeast University, China);

00:00 Plasmonic Ring Resonators Based on Topological Insulators  
X. F. Gu (Southeast University, China); Wei Bing Lu (Southeast University, China); J. Wang (Southeast University, China); Xiao Bing Li (Southeast University, China); Jun Hu (Southeast University, China);

00:00 Active THz Plasmonic Metamaterials: From Metals to Superconductors  
Ranjan Singh (Nanyang Technological University, Singapore);

00:00 Light Trapping Using Two-dimensional Hybrid Plasmonic-photonic Microstructures  
Z. Q. Liu (Nanjing University, China); Peng Zhan (Nanjing University, China); Z. L. Wang (Nanjing University, China);

00:00 Nonlinear Terahertz Transmission Change with Controllable Graphene Devices  
Bumki Min (KAIST, South Korea);
00:00 Investigation on Excitation of Graphene Plasmons by Two-dimensional Periodic Structure
Jun Hu (Southeast University, China); Qi Zhan (Southeast University, China); Jian Wang (Southeast University, China); Xiaobing Li (Southeast University, China); Xiaofeng Gu (Southeast University, China); Wei Bing Lu (Southeast University, China);

Session 3A5a
SC3: Nanoimprint and Applications

Wednesday AM, August 27, 2014
Room E
Organized by Wei Wu, L. Jay Guo
Chaired by Wei Wu, L. Jay Guo

00:00 Nanoimprint on a Curved Surface
Xin Hu (Nanjing University, China); Yushang Cui (Nanjing University, China); Changsheng Yuan (Nanjing University, China); Haiziong Ge (Nanjing University, China);

00:00 High Contrast Gratings Fabricated Using Nanoimprint Lithography for Full Color Reflective Display
He Liu (University of Southern California, USA); Yuhuan Yao (University of Southern California, USA); Shujin Huang (University of Southern California, USA); Yifei Wang (University of Southern California, USA); Wei Wu (University of Southern California, USA);

00:00 Beyond Conventional Nanoimprint — New Methods and Observations
Xing Cheng (South University of Science and Technology of China, China); Zhong Zhang (South University of Science and Technology of China, China); Bingbing Luo (Texas A&M University, USA); Yunbum Jung (Texas A&M University, USA); Yoowei Jiang (Texas A&M University, USA); Yi-Chen Lo (Texas A&M University, USA);

00:00 Strategy of High Aspect Ratio Structure Fabrication by Nanoimprint for Sub-wavelength Optical Elements
Yoichi Hirai (Osaka Prefecture University, Japan);

00:00 Nanoimprint Lithography Using Hydrogen Silsesquioxane Templates Fabricated by Helium Ion Beam Lithography
Wen-Di Li (The University of Hong Kong, China); Jingquan Cai (The University of Hong Kong, China); Wei Wu (University of Southern California, USA); Paul Alkemade (Delft University of Technology, Netherlands); Emile van Veldhoven (TNO, Netherlands);

00:00 Fabrication and Integration of Memristive Nanodevices with Nanoimprint Lithography
Qiangfei Xia (University of Massachusetts, USA);

00:00 Continuous Fabrication of Bio-inspired Dry Adhesives via Roll-to-roll Imprint Lithography
Hoon Eui Jeong (Ulsan National Institute of Science and Technology, South Korea); Moon Kyu Kwak (Kyungpook National University, South Korea);

Session 3A5b
2. FocusSession.SC2: Transformation Optics 1

Wednesday AM, August 27, 2014
Room E
Organized by Hongsheng Chen, Hui Liu, Jensen Li
Chaired by Hongsheng Chen, Hui Liu

00:00 Controlling Spontaneous Emission Using Coordinate Transformations
Jingjing Zhang (Technical University of Denmark, Denmark); Anatoly V. Zayats (King’s College London, UK);

00:00 Controlling Transformation Optics through Enhanced Photon Thermal Effect
Hui Liu (Nanjing University, China);

00:00 Conformal Transformation Optics
Huanyang Chen (Soucho University, China);

00:00 Artificial Riemann Sheets: When the Two Science Work Meet
Lin Xu (Soucho University, China); Huanyang Chen (Soucho University, China);

00:00 Manipulating Electromagnetic Energy Flux via Transformation Devices and Metasurfaces
Bo Hou (Soucho University, China);

Session 3A6
3. FocusSession.SC3: Laser Spectroscopy for Sensing and Environmental Monitoring 1

Wednesday AM, August 27, 2014
Room F
Organized by Sune Svanberg, Heping Zeng
Chaired by Sune Svanberg
Spectroscopic Techniques for Air Quality Monitoring in China
Wenqing Liu (Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China); Pinhua Xie (Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China); Jianguo Liu (Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China);

Laser Remote Sensing for Environmental Monitoring — From Scandinavia to China
Zuguang Guan (Sailhero Environmental Technology Co., Ltd., China);

LED Mini-lidar and Its Applications
Tatsuo Shiina (Chiba University, Japan);

Lidar Monitoring of Atmospheric Atomic Mercury and Sulfur Dioxide in Guangzhou City, China
Guangyu Zhao (South China Normal University, China); Xiujiang Wu (South China Normal University, China); Ming Lian (South China Normal University, China); Sune Svanberg (Lund University, Sweden);

Ultraviolet Plasma Grating Triggered Enhancement of Filament-induced Remotely Nonlinear Spectroscopy
Heping Zeng (East China Normal University, China);

Femtosecond Laser Filamentation for Remote Sensing
Huailiang Xu (Jilin University, China);

Mid-IR Laser-spectroscopic Sensing of Gases
Markus W. Sigrist (ETH Zürich, Switzerland);

Photonic Monitoring of NO₃, N₂O₅ and NO₂ in VOC Oxidation Process by Long Optical Pathlength Absorption Spectroscopy
Hongming Yi (Université du Littoral Cote d’Opale, France); Tao Wu (Nanchang Hangkong University, China); Amelie Lauraguais (Université du Littoral Cote d’Opale, France); Vladimir Semenov (General Physics Institute, Russia); Cecile Coeur-Tourneur (Université du Littoral Cote d’Opale, France); E. Ferstein (University of the Littoral Opal Coast, France); Xiaoming Gao (Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China); Wei Dong Chen (University of the Littoral Opal Coast, France);

Spectral Reference Data for Environmental Monitoring
Markku Vainio (Centre for Metrology and Accreditation, Finland); J. Peltola (Centre for Metrology and Accreditation, Finland); T. Fordell (Centre for Metrology and Accreditation, Finland); T. Hieta (Centre for Metrology and Accreditation, Finland); Mikko Merimaa (Centre for Metrology and Accreditation, Finland); Lauri Halonen (University of Helsinki, Finland);

Pathlength Evaluation and Gas Concentration Measurements in Porous Scattering Media
Liang Mei (Zhejiang University, China); Gabriel Somesfalean (Lund University, Sweden); Sune Svanberg (Lund University, Sweden);

Development of Advanced Laser-based Concepts for Diagnostic Challenges in Combustion Research
Joakim Bood (Lund University, Sweden);

Large Scale Carbon Nanodots Based Remote Phosphor for White-light Light-emitting Diodes
Wenfei Zhang (The Hong Kong Polytechnic University Shenzhen Research Institute, China); Siu Fung Yu (The Hong Kong Polytechnic University, China);

The Right Way to Dope ZnO p-type, for Lasing
Lei Liu (State Key Laboratory of Luminescence and Applications, China); De Zhen Shen (State Key Laboratory of Luminescence and Applications, China);
00:00 Electrical and Optical Probing of Extremely Large Planar Polymer Light-emitting Electrochemical Cells
Yufeng Hu (Beijing Jiaotong University, China); Jun Gao (Queen’s University, Canada); Yanhing Hou (Beijing Jiaotong University, China); Zhidong Lou (Beijing Jiaotong University, China); Zhenbo Deng (Beijing Jiaotong University, China); Feng Teng (Beijing Jiaotong University, China);

00:00 Plasmon Enhanced Whispering-gallery Mode Lasing from ZnO Microrod
Chunxiang Xu (Southeast University, China); Junfeng Lu (Southeast University, China); Yi Lin (Southeast University, China); Jitao Li (Southeast University, China); Yueyue Wang (Southeast University, China);

00:00 Rational Tuning the Optical Properties of Colloidal II-VI Semiconductor Nanowires
Gaoling Yang (Beijing Institute of Technology, China); Ruibin Liu (Beijing Institute of Technology, China); Bingzuo Zou (Beijing Institute of Technology, China); Haizheng Zhong (Beijing Institute of Technology, China);

00:00 Electron-Hole Plasma Induced Band Gap Renormalization in ZnO Microlaser Cavities
Jun Dai (Southeast University, China); Chunxiang Xu (Southeast University, China); Yueyue Wang (Southeast University, China); Jitao Li (Southeast University, China); Yi Lin (Southeast University, China);

00:00 Transparent SnO2 QDs-based Multifunctional Glass for Ultraviolet-blocking and Enhanced Hydrophobicity
Shendong Zhuang (Yangzhou University, China); Xiaoyong Xu (Yangzhou University, China); Bing Feng (Yangzhou University, China); Gang Zhou (Yangzhou University, China); Wei Xu (Yangzhou University, China); Jingguo Hu (Yangzhou University, China);

00:00 Upconverting Fluorescent Nanoparticles with NIR Excitation for Bioimaging and Photoactivation
Yong Zhang (National University of Singapore, Singapore); Kai Huang (National University of Singapore, Singapore);

00:00 First-principles Studies on Structural and Electronic Properties of Si4+/N3−-incorporated YAG:Ce3+
Lixin Ning (Anhui Normal University, China); Cuicui Zhou (Anhui Normal University, China); Weiping Cheng (Anhui Normal University, China); Yucheng Huang (Anhui Normal University, China);

00:00 Highly Luminescent Carbon Dots: Multi-color Composites Anion Sensors
Xiaoming Li (Nanjing University of Science and Technology, China); Haibo Zeng (Nanjing University of Science and Technology, China);

00:00 Plasmon Enhanced F-P Lasing from Flower-like ZnO Microsphere
Jitao Li (Southeast University, China); Yi Lin (Southeast University, China); Chunxiang Xu (Southeast University, China); Yueyue Wang (Southeast University, China); Junfeng Lu (Southeast University, China);

00:00 Effect of Tm2O3 Addition on the Spectral Properties of Bismuth Containing Alumino-borosilicate Glasses
Dong Hoon Son (Gwangju Institute of Science and Technology, South Korea); Bok Hyeon Kim (Gwangju Institute of Science and Technology, South Korea); Seung Ho Lee (Gwangju Institute of Science and Technology, South Korea); Won-Taek Han (Gwangju Institute of Science and Technology, South Korea);

00:00 An Assembly Based on Dual-emission Quantum Dots Hybrid for Quadruple-channel Sensing of Telomeric G-quadruplex DNA
Kao Zhu (Southeast University, China); Qingsheng Guo (Southeast University, China); Yuqian Liu (Southeast University, China); Xiangyu Hu (Southeast University, China); Liang Wu (Southeast University, China); Qingjiang Sun (Southeast University, China);

00:00 Interface Engineering and Hybrid Structure for Graphene Transistors and Photodetectors in the Vicinity of Substrates
Jianbin Xu (The Chinese University of Hong Kong, China); Xi Wan (The Chinese University of Hong Kong, China); Kun Chen (The Chinese University of Hong Kong, China); Xiao-Mu Wang (The Chinese University of Hong Kong, China); Zhenzhou Cheng (The Chinese University of Hong Kong, China); Hon Kin Tsang (The Chinese University of Hong Kong, China);

00:00 Luminescence and Doping of Lanthanides in Quantum Dots
Rosa Martin Rodriguez (Utrecht University, The Netherlands); Robin Geitenbeek (Utrecht University, The Netherlands); Yiming Zhao (Utrecht University, The Netherlands); Freddy Rabouw (Utrecht University, The Netherlands); Cees Van Walree (Utrecht University, The Netherlands); Celso De Mello Donega (Utrecht University, The Netherlands); Andries Meijerink (Utrecht University, The Netherlands);

00:00 Polymer Light-emitting Electrochemical Cells: Operating and Degradation Mechanisms
Jun Gao (Queen’s University, Canada); Yufeng Hu (Queen’s University, Canada); Faleh AlTal (Queen’s University, Canada); Xiaoyu Li (Queen’s University, Canada); Guojian Liu (Queen’s University, Canada);
00:00 Electrically Pumped Homojunction ZnO Nanowire Lasers
Jianlin Liu (University of California Riverside, USA);

Session 3A9

3. FocusSession.SC3: Ultrafast Optics

Wednesday AM, August 27, 2014
Room I
Organized by Oliver D. Mücke, Zhiyi Wei

00:00 Ultrabroadband Infrared Spectroscopy by Chirped Pulse Upconversion
Takao Fuji (Institute for Molecular Science, Japan); Yutaka Nomura (Institute for Molecular Science, Japan); Hideto Shirai (Institute for Molecular Science, Japan);

00:00 Passively Mode-locked Lasers at Around 2μm with Optical Superlattice
Xiao Peng Hu (Nanjing University, China); Huan Cheng (Nanjing University, China); Jiong Zou (Nanjing University, China); Shi-Ning Zhu (Nanjing University, China);

00:00 All-optical Ultrafast Control of SOI Waveguide Elements Employing Localized Absorption
Roman Bruck (University of Southampton, UK); Otto L. Muskens (University of Southampton, UK);

00:00 Pulse Slice Elongating and Pulse Broadening in a Homogeneous Medium with Only Third Order Susceptibility
Lizhong Wang (Hebei University of Technology, China); Jing Zhang (Hebei University of Technology, China); Wenzia Bao (Nankai University, China); Yong Zhang (Hebei University of Technology, China); Zhengji Fang (Hebei University of Technology, China); Peide Zhao (Hebei University of Technology, China); Xiaomong Zhu (Nankai University, China);

00:00 Attosecond-Jitter Fiber Lasers and Their Microwave Photonic Applications
Jungwon Kim (MIT, USA);

00:00 Present Status and Prospects of the High-spatiotemporal-quality Petawatt-class J-KAREN Laser Facility
Hiromitsu Kiriyama (Kansai Photon Science Institute, Japan); M. Mori (Kansai Photon Science Institute, Japan); A. Kon (Kansai Photon Science Institute, Japan); M. Nishiuchi (Kansai Photon Science Institute, Japan); H. Sukaki (Kansai Photon Science Institute, Japan); K. Ogura (Kansai Photon Science Institute, Japan); Y. Fukuda (Kansai Photon Science Institute, Japan); A. Siqisaka (Kansai Photon Science Institute, Japan); T. Zh. Esirkepov (Kansai Photon Science Institute, Japan); James K. Koga (Kansai Photon Science Institute, Japan); Yukio Hayashi (Kansai Photon Science Institute, Japan); H. Kotaki (Kansai Photon Science Institute, Japan); M. Kanasaki (Kansai Photon Science Institute, Japan); Y. Mashiba (Kansai Photon Science Institute, Japan); M. Kando (Kansai Photon Science Institute, Japan); Sergei V. Bulanov (Kansai Photon Science Institute, Japan); K. Kondo (Kansai Photon Science Institute, Japan); P. R. Bolton (Kansai Photon Science Institute, Japan); M. R. Asakawa (Kansai University, Japan); O. Slezak (Institute of Physics ASCR, Czech Republic); D. Vojna (Institute of Physics ASCR, Czech Republic); M. Sawicka-Chyla (Institute of Physics ASCR, Czech Republic); V. Jambunathan (Institute of Physics ASCR, Czech Republic); A. Lucianetti (Institute of Physics ASCR, Czech Republic); T. Mooek (Institute of Physics ASCR, Czech Republic);

00:00 Multicore Large-mode Area Photonic-crystal-fiber Platform for High-power Ultrashort-pulse Sources
Ming-Lie Hu (Tianjin University, China);

00:00 Attosecond Control of Electronic Dynamics with Intense Laser Fields
Yong Ju Chen (Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, China); Chuan Liang Wang (Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, China); Song Bo Xu (Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, China); Xuan Yang Lai (Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, China); Wei Quan (Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, China); Xiao Jun Liu (Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, China);

00:00 Pulsed Fiber Lasers by Incorporating Graphene/Graphene Oxide Saturable Absorbers
Shuang-Chen Ruan (Shenzhen University, China);
Session 3A_10a
SC3: Advanced Display Technologies

Wednesday AM, August 27, 2014
Room J
Organized by Guofu Zhou

00:00 Electronic Paper Displays: Status and the Trend
Guofu Zhou (South China Normal University, China); Robert A. Hayes (South China Normal University, China);

00:00 Nanofluidics and Optics: Some Experiments
Jan Eijkel (Twente University, The Netherlands);

00:00 Industrialisation of Electrofluidic Display Technology in China
Robert A. Hayes (South China Normal University, China); Guofu Zhou (South China Normal University, China); Biao Tang (South China Normal University, China); Yuanquan Guo (South China Normal University, China); Hao Wu (South China Normal University, China); Yingying Dou (South China Normal University, China); Mingliang Jin (South China Normal University, China); Xiao Zhang (South China Normal University, China); Yuan Dong (South China Normal University, China);

00:00 Microfluidic Behavior in Micro-pixels of Electrowetting-based Displays
Lingling Shui (South China Normal University, China); Tao He (South China Normal University, China);

00:00 Simple Dynamic Model to Describe the Optical Response in an Electrofluidic Based Display Pixel
Jan Groenevold (South China Normal University, China); Biao Tang (South China Normal University, China); Robert A. Hayes (South China Normal University, China); Guofu Zhou (South China Normal University, China);

00:00 Microfluidics for Electrophoretic Display Technology
Yunfei Zhu (South China Normal University, China); Mingliang Jin (South China Normal University, China); Lingling Shui (South China Normal University, China);

00:00 Use of Electro-osmotic Flow in Electrophoretic Displays
Alex Henzen (IRX Innovations B. V., The Netherlands);

Session 3A_10b
SC3: Heterogeneous Photonic Integration Technologies and Devices on Silicon

Wednesday AM, August 27, 2014
Room J
Organized by Liu Liu, Daoshe Cao

00:00 Selective Epitaxial Growth of III-Vs on Patterned 300mm Si Substrate
Zhechao Wang (Ghent University-IMEC, Belgium); Clement Merckling (IMEC, Belgium); Bin Tian (Ghent University-IMEC, Belgium); Weiming Guo (IMEC, Belgium); Marianna Pantouvaki (IMEC, Belgium); Joris Van Campenhout (IMEC, Belgium); Dries Van Thourhout (Ghent University-IMEC, Belgium);

00:00 Hybrid InGaAsP-Si Distributed Feedback Laser Based on Selective-area Metal Bonding
Li Tao (Peking University, China); Lijun Yuan (Institute of Semiconductor, Chinese Academy of Science, China); Yanping Li (Peking University, China); Hongyan Yu (Institute of Semiconductor, Chinese Academy of Science, China); Weizi Chen (Peking University, China); Jiaoping Pan (Institute of Semiconductors, Chinese Academy of Science, China); Guangzhao Ran (Peking University, China);

00:00 Graphene-based Transparent Nano-heater for Thermally-tuning Silicon Nanophotonic Integrated Devices
Longhai Yu (Zhejiang University, China); Yaling He (Zhejiang University, China); Jiayung Zheng (Zhejiang University, China); Daoxin Dai (Zhejiang University, China);

00:00 Ultracompact Adiabatic Tapered Coupler for the Si/III-V Heterogeneous Integration
Qiangsheng Huang (Zhejiang University, China); Jianxin Cheng (South China Normal University, China); Liu Liu (South China Normal University, China); Yongbo Tang (ArtIC Photonics, Inc., Canada); Sailing He (Zhejiang University, China);

00:00 Nanoscale Integrated Photonic Devices Based on Plasmonic Microstructures
Xiaoyong Hu (Peking University, China);
**Session 3A_11**  
**SC1: Advanced Mathematical and Computational Methods in Electromagnetic Theory and Their Applications**  

**Wednesday AM, August 27, 2014**  
**Room K**  
Organized by Georgi Nikolov Georgiev, Mariana Nikolova Georgieva-Grosse  
Chaired by Mariana Nikolova Georgieva-Grosse  

00:00 On an Application of the Hypothesis for the Identity of the $L_2(c, \rho, n)$ and $\hat{L}_2(\hat{c}, \hat{\rho}, \hat{n})$ Numbers  
Mariana Nikolova Georgieva-Grosse (Consulting and Researcher in Physics and Computer Sciences, Germany); Georgi Nikolov Georgiev (University of Veliko Tarnovo “St. St. Cyril and Methodius”, Bulgaria);  

00:00 Electromagnetic Heat-induced of Nanowire in Liquid: Computation of the Bubble Shape  
Anis Chaari (University of Technology of Troyes, France); Thomas Grosjes (University of Technology of Troyes, France); Laurence Giraud-Morvaux (University of Technology of Troyes, France); Dominique Barchiesi (University of Technology of Troyes, France);  

00:00 Design Leaky Mode Antenna and Effective Radiation Analysis of Plasma Tube Waveguide  
Rasila Rameshbhai Hirani (Sardar Vallabhbhai National Institute of Technology, India); V. Mishra (Sardar Vallabhbhai National Institute of Technology, India); Surya Kumar Pathak (Institute for Plasma Research, India);  

00:00 Numerical Analysis of the Plane Wave Scattering by the End-face of a Waveguide System  
Akira Komiyama (Osaka Electro-Communication University, Japan);  

00:00 Synthesis of the Sparse Conformal Arrays with Convex Optimal Method  
Xiaowen Zhao (Center for Space Science and Applied Research, Chinese Academy of Sciences, China); Qingshan Yang (Center for Space Science and Applied Research, Chinese Academy of Sciences, China); Yinhua Zhang (Center for Space Science and Applied Research, Chinese Academy of Sciences, China);  

00:00 EM Scattering Computation of Electric-large Lossy Dielectric Target Based on Ray Tracing  
Hao Zheng (Fudan University, China); Hongxia Ye (Fudan University, China);  

00:00 Solving Nonlinear Helmholtz Equation via Fourier Series  
Mery S. Sautbekova (Eurasian National University, Kazakhstan); Seil S. Sautbekov (Eurasian National University, Kazakhstan);  

00:00 Numerical Solution of the Helmholtz Equation with Nonlinearity  
Oleg V. Krawchenko (Bauman Moscow State Technical University, Russian Federation); Yaroslav Yu. Konovalov (Bauman Moscow State Technical University, Russia);  

00:00 Airy Beams and an Analysis of Ray Superposition  
Yuanhui Wen (Sun Yat-sen University, China); Jiangbo Zhu (Sun Yat-sen University, China); Yujie Chen (Sun Yat-sen University, China); Yanfeng Zhang (Sun Yat-sen University, China); Hui Chen (Sun Yat-sen University, China); Siyuan Yu (Sun Yat-sen University, China);  

00:00 Computation of the Field Enhancement by Small Facet Angles of Metallic Nanoparticles: Adaptive Remeshing for Finite Element Method  
Padhil Mezghani (University of Technology of Troyes, France); Dominique Barchiesi (University of Technology of Troyes, France); Abel Cherouat (University of Technology of Troyes, France); Thomas Grosjes (University of Technology of Troyes, France); Houman Borouchaki (University of Technology of Troyes, France);  

00:00 Modeling of Electrical Contact with Dissimilar Materials  
Y. Y. Lau (University of Michigan, USA); Peng Zhang (University of Michigan, USA); Ronald M. Gilgenbach (University of Michigan, USA);  

**Session 3A_12**  
**SC4: Novel Frequency Selective Structures**  

**Wednesday AM, August 27, 2014**  
**Room L**  
Organized by Zhongxiang Shen, Nader Behdad  
Chaired by Zhongxiang Shen  

00:00 Challenges in Designing Frequency Selective Surfaces to Yield Wide-angle Response over a Wide Frequency Band  
Raj Mittra (The Pennsylvania State University, USA); Chiara Pelletti (The Pennsylvania State University, USA);  

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00:00 Design and Optimization of a Wideband Circular Polarization Selective Structure
Andreas Ericsson (Lund University, Sweden); Daniel Sjoberg (Lund University, Sweden);

00:00 Three-dimensional Loaded Dipoles for Applications in Frequency Selective Structures
Amir Khurrum Rashid (Namal College Mianwali, and National University of Computer and Emerging Sciences (NUCES-FAST), Pakistan); Shan Ullah (National University of Sciences and Technology (NUST), Pakistan); S. Abdullah Nauroze (National University of Computer and Emerging Sciences, Pakistan);

00:00 Split Ring Resonator Based Bandstop Frequency Selective Surface for Antenna RCS Reduction
Jia Wei Yu (University of Electronic Science and Technology of China, China); Jin Zhang (University of Electronic Science and Technology of China, China); Yuan Jiang (University of Electronic Science and Technology of China, China); Fei Cheng (University of Electronic Science and Technology of China, China); Xian Qi Lin (University of Electronic Science and Technology of China, China);

00:00 A Printed Collinear Antenna with a Controllable Main Beam
Radwan J. Mahmoud (The University of Sheffield, United Kingdom); Jonathan M. Rigelsford (The University of Sheffield, United Kingdom);

00:00 3D Frequency Selective Absorbers: Concept, Design and Application
Bo Li (Nanyang Technological University, Singapore); Zhongxiang Shen (Nanyang Technological University, Singapore); Yuping Shang (Nanyang Technological University, Singapore);

00:00 Semi Analytical Model for Non Resonant Layered Frequency Selective Surfaces (FSS)
Poojali Jayaprakash (IIT Madras, India); Kavitha Arunachalam (ITT Madras, India);

00:00 Ultra-wide Tuning Frequency Range Active Frequency Selective Surface Based on Enhanced Magnetic Coupling
Liang Zhang (Xiamen University, China); Yanhui Liu (Xiamen University, China); Longfang Ye (Xiamen University, China); Qing Huo Liu (Duke University, USA);

00:00 Slanted-comb Frequency Selective Surfaces for Passive Reduction in Specular Scatter
Christopher J. Davenport (The University of Sheffield, United Kingdom); Jonathan M. Rigelsford (The University of Sheffield, United Kingdom);

00:00 A Novel Miniaturized and Multiband Frequency Selective Surface
Mingbao Yan (Air Force Engineering University, China); Shaobo Qu (Air Force Engineering University, China); Jiafa Wang (Air Force Engineering University, China); Hongyu Chen (Air Force Engineering University, China); Yongqiang Pang (Air Force Engineering University, China); Yongfeng Li (Air Force Engineering University, China); Lin Zheng (Air Force Engineering University, China); Wenjie Wang (Air Force Engineering University, China);

Session 3A_13a
SC4&2: Graded Index Structures and Metamaterials for Antenna Applications

Wednesday AM, August 27, 2014
Room M
Organized by Oscar Quevedo-Teruel, Qiang Cheng
Chaired by Oscar Quevedo-Teruel, Qiang Cheng

00:00 Index Profiles with Zero Reflection over a Wide Range of Angles
Simon A. R. Horsley (University of Exeter, UK);
00:00 Anisotropic Metamaterials for Polarization-controlled Devices
Hufeng Ma (Southeast University, China); Wen Xuan Tang (Southeast University, China); Di Bao (Southeast University, China); Tie Jun Cui (Southeast University, China);
00:00 Conformal Surface Wave Luneburg Lenses
Rhianon C. Mitchell-Thomas (University of Exeter, UK); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden);
00:00 GRIN Fractal Metamaterial and Its Applications in Novel Broadband High-directive Emission System
He-Xiu Xu (Air Force Engineering University, China); Guangming Wang (Air Defence and Anti-Missile Institution, China);
00:00 Making Geometrical Optics Exact
Thomas G. Philbin (University of Exeter, UK);
00:00 Removing Singular Refractive Indices with Sculpted Surfaces
Simon A. R. Horsley (University of Exeter, UK); Ian R. Hooper (University of Exeter, UK); Rhianon C. Mitchell-Thomas (University of Exeter, UK); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden);
A Novel Tri-band Patch Antenna Based on Complementary Triangle Split Ring Resonator Pair
Jian-Gang Liang (Air Force Engineering University, China); Zhi Jie Song (Air Force Engineering University, China); L. J. Yu (Shandong University, China); X. F. Zhang (Air Force Engineering University, China);

Session 3A_13b
Antenna and Array 1
Wednesday AM, August 27, 2014
Room M

Antenna Pattern Reconstruction Using Deconvolution Based Method from Non-anechoic Measurements
Jinhwan Koh (Gyeongsang National University, South Korea);

Discovery and Theory of Small Antenna Near-field Dissipation and Frequency Conversion with Implications for Antenna Efficiency, Beverage Antenna Noise Reduction, Maxwell’s Equations and the Chu Criterion
Michael James Underhill (Underhill Research Ltd., UK);

Compact Triple-band Planar Monopole Antenna with Single Metamaterial Unit
Jian Li (University of Electronic Science and Technology of China, China); Guangjun Wen (University of Electronic Science and Technology of China, China); Yongjun Huang (University of Electronic Science and Technology of China, China); Kaimin Wu (University of Electronic Science and Technology of China, China); Weijian Chen (University of Electronic Science and Technology of China, China);

Broadband Circularly Polarized Loop Antenna Based on High-pass and Low-pass Filters for Handheld RFID Reader Applications
Bo Xu (Zhejiang University, China); Qi Liu (Zhejiang University, China); Yusha Liu (Zhejiang University, China);
Session 3P0
Poster Session 5

Wednesday PM, August 27, 2014
14:00 PM - 17:00 PM
Room FOYER

00:00 The Analysis of Receiving SensitivityDegradation of WLAN Performance due to EMI Noise from SSD Module
Han-Nien Lin (Feng-Chia University, Taiwan, R.O.C.); Po-Yu Chang (Feng-Chia University, Taiwan, R.O.C.); Wang-Chuen Tsai (Feng-Chia University, Taiwan, R.O.C.); Cheng-Chang Chen (MOEA, Taiwan, R.O.C.);

00:00 Research in Modeling and Dynamic Simulation of Linear Eddy Current Braking Force of High-speed Train
Xiurong Zhang (Tongji University, China); Qiyi Guo (Tongji University, China); Jie Zhang (Tongji University, China); Meisong Tong (Tongji University, China);

00:00 Enhancement of Magnetic Properties of Fe-Si-Al-Cr Flaky Particles by Annealing
Nan Zhang (University of Electronic Science and Technology of China, China); Xin Wang (University of Electronic Science and Technology of China, China); Pei-Heng Zhou (University of Electronic Science and Technology of China, China); Jianxiang Xie (University of Electronic Science and Technology of China, China); Long-Jiang Deng (University of Electronic Science and Technology of China, China);

00:00 Elimination of a Fire through Shock Wave Interference
KTH Royal Institute of Technology, Sweden; Martin Karl Norgren (KTH Royal Institute of Technology, Sweden);

00:00 Scattering Analysis of Reflectarray Antennas Illuminated by a Point Source for Near Field Focus Applications
Shih-Chung Tuan (Oriental Institute of Technology, Taiwan); Hsi-Tseng Chou (Yuan Ze University, Taiwan);

00:00 Nonlocal Theory for Charged Metallic Nanoparticle
Hung-Yi Chung (Research Center for Applied Sciences, Academia Sinica, Taiwan); P. T. Leung (Research Center for Applied Sciences, Academia Sinica, Taiwan); D. P. Tsai (Research Center for Applied Sciences, Academia Sinica, Taiwan);

00:00 Non Destructive Method for Detection Wood-destroying Insects
Pavel Fiala (Brno University of Technology, Czech Republic); Martin Friedl (Brno University of Technology, Czech Republic); Martin Cap (Brno University of Technology, Czech Republic); Petr Konas (Brno University of Technology, Czech Republic); Pavel Smira (Thermo Sanace s.r.o., Czech Republic); Andrea Nasswettrova (Thermo Sanace s.r.o., Czech Republic);

00:00 Design of Controlling Edge Scattering Based on Tapered Periodic Surfaces Loading
Lijuan Lu (University of Electronic Science and Technology of China, China); Hai-Yan Chen (University of Electronic Science and Technology of China, China);

00:00 Shock Wave Dynamics in the Cleaning of Container Surfaces
Miroslav Janicek (Brno University of Technology, Czech Republic); Pavel Fiala (Brno University of Technology, Czech Republic); Radim Kadlec (Brno University of Technology, Czech Republic);

00:00 Elimination of a Fire through Shock Wave Interference: The Numerical Model and Application Scenarios
Miroslav Janicek (Brno University of Technology, Czech Republic); Pavel Fiala (Brno University of Technology, Czech Republic); Radim Kadlec (Brno University of Technology, Czech Republic);

00:00 Scattering Analysis of Reflectarray Antennas Illuminated by a Point Source for Near Field Focus Applications
Shih-Chung Tuan (Oriental Institute of Technology, Taiwan); Hsi-Tseng Chou (Yuan Ze University, Taiwan);
00:00 A Novel Miniaturized Frequency Selective Surface with Stable Performances
Rui Wu (Air Force Engineering University, China); Hou Zhang (Air Force Engineering University, China); Zhiqiong Xu (Air Force Engineering University, China); Zimu Yang (Air Force Engineering University, China); Yongfan Lin (Air Force Engineering University, China);

00:00 Metamaterials-based High-gain Antenna with Wide Viewing Angle
Yongfeng Li (Air Force University of Engineering, China); Shaobo Qu (Air Force Engineering University, China); Jieqiu Zhang (Air Force Engineering University, China); Jiafu Wang (Air Force Engineering University, China); Hongya Chen (Air Force Engineering University, China); Mingbao Yan (Air Force Engineering University, China); Hang Zhou (Air Force Engineering University, China); Hangying Yuan (Air Force Engineering University, China); Lin Zheng (Air Force Engineering University, China); Yongqiang Pang (Air Force Engineering University, China);

00:00 Temperature Dependence of Amplified Spontaneous Emission (ASE) Peak Position Shift of MEH-PPV
Liang Qin (Beijing Jiaotong University, China); Yufeng Hu (Beijing Jiaotong University, China); Zhidong Lou (Beijing Jiaotong University, China); Yanbing Hou (Beijing Jiaotong University, China); Feng Teng (Beijing Jiaotong University, China);

00:00 Organic Bistable Devices Based on Poly- (N-vinylcarbazole)/zinc Sulfide Nanocomposites
Yapeng Cao (Beijing Jiaotong University, China); Jiatao Li (Beijing Jiaotong University, China); Haihang Ye (Beijing Jiaotong University, China); Xu Li (Beijing Jiaotong University, China); Yufeng Hu (Beijing Jiaotong University, China); Aiwei Tang (Beijing Jiaotong University, China); Feng Teng (Beijing Jiaotong University, China);

00:00 Light Emission from Pentacene/Tris-(8-hydroxyquinolinate) Bilayer Transistors
Shaobo Cui (Beijing Jiaotong University, China); Yufeng Hu (Beijing Jiaotong University, China); Zhidong Lou (Beijing Jiaotong University, China); Yanbing Hou (Beijing Jiaotong University, China); Feng Teng (Beijing Jiaotong University, China);

00:00 EMI Study of Transformerless Photovoltaic Array System
Wenjie Chen (Xi’An Jiaotong University, China); Xiaomei Song (Xi’An Jiaotong University, China); Hao Huang (Xi’An Jiaotong University, China); Xu Yang (Xi’An Jiaotong University, China);

00:00 Demonstration of Polarization Multiplexed Signals Division Using a Fiber Optical Parametric Amplifier
Sergejs Olonkins (Riga Technical University, Latvia); Ilja Lyashuk (Riga Technical University, Latvia); Juris Porins (Riga Technical University, Latvia);

00:00 Photoelectrochemical Water Splitting Enhanced by Plasmon Resonance under Visible Light Illumination
Yuqing Zhong (Hokkaido University, Japan); Yuko Mori (Hokkaido University, Japan); Kohei Ueno (Hokkaido University, Japan); Tomoya Oshikiri (Hokkaido University, Japan); Hiroaki Misawa (Hokkaido University, Japan);

00:00 Dipolar Metastability Progression
Karl F. Kaspareck (Consulenze Tecniche Energia, Italy);

00:00 Design of 90°-switched-line Phase Shifter with Constant Phase Shift Using CRLH TL
Jun Zhang (Tongyu Communication Inc., China); Sing Wai Cheung (The University of Hong Kong, China);

00:00 Design of Oscillator Using Zeroth-order Resonator Based on Composite Right/left-handed Transmission Line
Gao Juanjuan (Communication University of China, China); Guizhen Lu (Communication University of China, China);

00:00 Transponder Impact on Power and Spectral Efficiencies in WDM Links Based on 10–40–100 Gbps Mixed-line Rates
Vjaceslavs Bobrovs (Riga Technical University, Latvia); Peteris Gavars (Riga Technical University, Latvia); Girts Ivanovs (Riga Technical University, Latvia); Ilja Trifonovs (Riga Technical University, Latvia); Aleksejs Udalcovs (Riga Technical University, Latvia);
00:00 Cooperative Opto-electrical Operation of Parallel Photonic Devices for Broadening Optical Transport Capacity
Naoukatu Yamamoto (National Institute of Information and Communications Technology, Japan); Toshi-masa Umezawa (National Institute of Information and Communications Technology, Japan); Atsushi Kanno (National Institute of Information and Communications Technology, Japan); Tetsuya Kawanishi (National Institute of Information and Communications Technology, Japan);

00:00 Suspended Stripline Bandpass Filter with Very Wide Stop-band
Atallah Balalem (Palestine Technical University, Palestine); Moayyad M. Abu Khmish (Palestine Technical University, Palestine); Zekrayat Badras (Palestine Technical University, Palestine); Oday H. Sabi (Palestine Technical University, Palestine);

00:00 Efficiency Measurement of Antenna with Lumped Elements Based on Improved Wheeler Cap Method
Alexander S. Rusakov (LG Electronics, Russia R&D Lab, Russia); Roman V. Salimov (LG Electronics, Russia R&D Lab, Russia); D. V. Vasilyev (LG Electronics, Russia R&D Lab, Russia); R. I. Tikhonov (LG Electronics, Russia R&D Lab, Russia);

00:00 Calculation of RFID Antenna Characteristic Parameters under the Condition of Near-field Coupling
Guochun Wan (Tongji University, China); Dongjie Lu (Tongji University, China); Jie Zhang (Tongji University, China); Mei Song Tong (Tongji University, China);

00:00 An Electrically Small Circular Polarization Radiator with Coupling Feed
Lidong Huang (University of Electronic Science and Technology of China, China); Jiang Xiong (University of Electronic Science and Technology of China, China); Yufeng Yu (China Jiangnan Electronics Communication Institute, China);

00:00 A More Practical Patch Used in Microstrip Antenna at Ku-band
Chuang Wei (Beihang University, China); Dawei Liu (Beihang University, China); Chen Zhu (Beihang University, China); Jindong Yu (Beihang University, China); Jungang Miao (Beihang University, China);

00:00 Wideband Antenna for Microwave Imaging
Roshayati Yahya (Universiti Tun Hussein Onn Malaysia (UTHM), Malaysia); Muhammad Ramlee Kamarudin (Universiti Teknologi Malaysia, Malaysia); Norhudah Seman (Universiti Teknologi Malaysia, Malaysia);

00:00 High-Q Weakly Modulated Nanobeam Cavity Based on a Suspended Silicon Dioxide Waveguide
Senlin Zhang (Zhejiang University, China); Sailing He (Zhejiang University, China);

00:00 Design and Analysis of Miniature Fractal Antenna
Ying Suo (Harbin Institute of Technology, China); Jingyu Han (Harbin Institute of Technology, China); Wei Li (Harbin Institute of Technology, China); Weibo Deng (Harbin Institute of Technology, China);

00:00 An X-band Substrate Integrated Waveguide Vivaldi Array Antenna
Wei Li (Harbin Institute of Technology, China); Ying Suo (Harbin Institute of Technology, China); Jingyu Han (Harbin Institute of Technology, China); Xiaowei Liu (Harbin Institute of Technology, China);

00:00 An Omni-directional Circularly Polarized Helical Antenna with an Inductive Feed
Yufeng Yu (China Jiangnan Electronics Communication Institute, China); Xiaoyi He (China Jiangnan Electronics Communication Institute, China); Qi Liu (Zhejiang University, China); Yufeng Wang (China Jiangnan Electronics Communication Institute, China);

00:00 A Shared Aperture Millimeter Wave Antenna Using 3D SIW Technology
Zeyang Tian (University of Electronic Science and Technology of China, China); Jun Ouyang (University of Electronic Science and Technology of China, China); Yu Long (University of Electronic Science and Technology of China, China);

00:00 Target Detection Algorithm for SAR Image Based on Visual Saliency
Huijie Xie (National University of Defense Technology, China); Tao Tang (National University of Defense Technology, China); Deliang Xiang (National University of Defense Technology, China); Yi Su (National University of Defense Technology, China);

00:00 A Wide Tuning-range CMOS VCO with a Tunable Active Inductor
Hsuang-Ling Kao (Chang Gung University, Taiwan); Ping-Che Lee (Chang Gung University, Taiwan);

00:00 A New Local Feature Descriptor for SAR Image Matching
Tao Tang (National University of Defense Technology, China); Deliang Xiang (National University of Defense Technology, China); Yi Su (National University of Defense Technology, China);
00:00 A Dual-band Dual-polarized Antenna and a Switchable Multi-beam Antenna Array
Yu Long (University of Electronic Science and Technology of China, China); Jun Ouyang (University of Electronic Science and Technology of China, China); Zeyang Tian (University of Electronic Science and Technology of China, China); Yuan Zhang (University of Electronic Science and Technology of China, China);

00:00 Design and Analysis of Planner Phased MIMO Antenna
Noar El-Din Ismail (Alexandria University, Egypt); Sherif Hanafy Mahmoud (Alexandria University, Egypt); Ahmed Hamed (Alexandria University, Egypt); Alaa El-Din Sayed Hafez (Alexandria University, Egypt);

00:00 Non Simultaneous-conjugate-match Technique for S-band Low Noise Amplifier Design
Achmad Munir (Institut Teknologi Bandung, Indonesia); Yana Taryana (Indonesian Institute of Sciences, Indonesia);

00:00 Characterization of Narrowband Hairpin Bandpass Filter Composed of Fractal Koch Geometry
Achmad Munir (Institut Teknologi Bandung, Indonesia); Teguh Praludi (Indonesian Institute of Sciences, Indonesia); Mohammad Ridwan Effendi (Institut Teknologi Bandung, Indonesia);

00:00 The Human Body Can Be Mounted Wearable Antenna
Ho-Jun Lee (Korea Electronics Technology Institute, Korea);

00:00 Memristor-based UWB Antenna with Reconfigurable Notched Band
Kaida Xu (University of Electronic Science and Technology of China, China); Yonghong Zhang (University of Electronic Science and Technology of China, China); Ronald J. Spiegel (Duke University, USA); William Thomas Joines (Duke University, USA); Qing Hao Liu (Duke University, USA);

00:00 Biodegradable Passive RFID Tag for Subcutaneous Implant
Christopher J. Davenport (The University of Sheffield, United Kingdom); Baraa F. Al-Azzawi (The University of Sheffield, United Kingdom); Peter Novodvorsky (Royal Hallamshire Hospital, United Kingdom); Jonathan M. Rigelsford (The University of Sheffield, United Kingdom);

00:00 The Influence of a Magnetic Field on the Behaviour of the Quantum Mechanical Model of Matter
Eliska Vlachova Hutova (Brno University of Technology, Czech Republic); Karel Bartusek (Institute of Scientific Instruments of the ASCR, Czech Republic); Pavel Fiala (Brno University of Technology, Czech Republic);

00:00 Optimized Theoretical Analysis of Antimony Selenide (Sb2Se3) Chalcogenide Thin Film
Emmanuel Ifeanyi Ugwu (Ebonyi State University, Nigeria);

00:00 Matlab Extension for 3DSlicer: A Robust MR Image Processing Tool
Jan Mikulka (Brno University of Technology, Czech Republic);

00:00 Multiparametric Biological Tissue Analysis: A Survey of Image Processing Tools
Jan Mikulka (Brno University of Technology, Czech Republic);

00:00 Automatic Segmentation of Multi-contrast MRI Using Statistical Region Merging
Pavel Doorak (Institute of Scientific Instruments of the ASCR, Czech Republic); Karel Bartusek (Institute of Scientific Instruments of the ASCR, Czech Republic); Eva Gescheidtova (Brno University of Technology, Czech Republic);

00:00 The Optical Angular Momentum in a Vector Vortex Optical Field
Rui Pin Chen (Zhejiang A & F University, China);

00:00 Efficient Two-photon Sensitized Luminescence of Europium (III) Complex Based on Hypersensitive Transitions
Meng Shi (Qufu Normal University, China); Fufang Su (Qufu Normal University, China); Peigao Han (Qufu Normal University, China);

00:00 Polarization-dependent Enhanced Photoluminescence and Polarization-independent Emission Rate of Quantum Dots on Gold Elliptical Nanodisc Arrays
Qiangzhong Zhu (Sun Yat-sen University, China); Shupei Zheng (Sun Yat-sen University, China); Shijie Lin (Sun Yat-sen University, China); Tianran Liu (Sun Yat-sen University, China); Chongjun Jin (Sun Yat-Sen University, China);

00:00 Refraction of Obliquely Incident Electromagnetic Wave by Inhomogeneous Collisional Plasmas Based on Effective Refractive Indices
Jia-Ming Shi (Hefei Electronic Engineering Institute, China); Zhong-Cai Yuan (Hefei Electronic Engineering Institute, China); Jia Chun Wang (Hefei Electronic Engineering Institute, China); Da-Peng Zhao (Hefei Electronic Engineering Institute, China);
00:00 Photon Management in Optoelectronic and Photonics Devices
Jr-Hau He (National Taiwan University, Taiwan);

00:00 Theoretical and Experimental Research on the Influence of Temperature Variation on Localized Surface Plasmon Resonance of Gold Nanoparticles
Xiaogang Wen (Wuhan University of Technology, China); Chujia Huang (Wuhan University of Technology, China); Minghong Yang (Wuhan University of Technology, China);

00:00 Polarized Gain-switched Tm Fiber Laser with Core-pumped MOPA Structure
Baofu Zhang (Sun Yat-Sen University, China); Zhongxing Jiao (Sun Yat-Sen University, China); Biao Wang (Sun Yat-Sen University, China);

00:00 A Dual-emission QDs Hybrid for Simultaneous Determination of Zn$^{2+}$ and Cd$^{2+}$
Liang Wu (Southeast University, China); Kao Zhu (Southeast University, China); Xianyun Hu (Southeast University, China); Yuquan Liu (Southeast University, China); Qingsheng Guo (Southeast University, China); Qingjiang Sun (Southeast University, China);

00:00 A “Sesame Ball”-like Nanostructure Based on Quantum Dots for Selective Detection of Barium Ions
Yuquan Liu (Southeast University, China); Lu Zhang (Southeast University, China); Qingsheng Guo (Southeast University, China); Xianyun Hu (Southeast University, China); Qingjiang Sun (Southeast University, China);

00:00 Improvement on Optical Microfiber Fabrication Control Technique by Monitoring Mode Cutoff Position
Yang Yu (National University of Defense Technology, China); Xuejiang Zhang (National University of Defense Technology, China); Zhangqi Song (National University of Defense Technology, China); Jianfei Wang (National University of Defense Technology, China); Zhou Meng (National University of Defense Technology, China);

00:00 Tunable Filter Using Defect in One-dimensional Plasma Photonic Crystals
Jia-Ming Shi (Hefei Electronic Engineering Institute, China); Zhong-Cai Yuan (Hefei Electronic Engineering Institute, China); Da-Peng Zhao (Hefei Electronic Engineering Institute, China); Zhi-Dan Lin (Hefei Electronic Engineering Institute, China);

00:00 Design of an Ultra-fast, Wideband Digital Frequency Instantaneous Frequency Measurement Receiver
Shaoqi Xie (National University of Defense Technology, China); Xiaofu Zhang (National University of Defense Technology, China); Yu-Jian Pan (National University of Defense Technology, China); Jun Yang (National University of Defense Technology, China); Jingqun Huang (National University of Defense Technology, China); Nai-Chang Yuan (National University of Defense Technology, China);

00:00 Intracavity MgO:PPLN Optical Parametric Oscillator near Degeneracy with High Beam Quality and Narrow Bandwidth
J. Guo (Sun Yat-Sen University, China); G. Y. He (Sun Yat-Sen University, China); Zhongxing Jiao (Sun Yat-Sen University, China); Biao Wang (Sun Yat-Sen University, China);

00:00 Path Loss of Radio Propagation in an Aircraft Cabin
Wen-Chung Liu (National Formosa University, Taiwan); Kuang-Yang Chou (National Formosa University, Taiwan, R.O.C.); Chao-Ming Wu (National Formosa University, Taiwan, R.O.C.);

00:00 Design of Broadband S Shape Microstrip Antenna Using Slotting Technique
Lalit Mohan Sharma (RBS Engineering Technical Campus, India); Robin Singhal (RBS Engineering Technical Campus, India); Karan Kumar (RBS Engineering Technical Campus, India);

00:00 A Dual-band Sing-feed Circular-shaped Microstrip Patch Antenna for Navigation Terminal Devices
Jie Cao (East China Normal University, China); Zhigang Liu (East China Normal University, China); Lu Fu (East China Normal University, China); Shouzheng Zhu (East China Normal University, China);

00:00 Compact Band-notchted UWB Monopole Antenna with High Selectivity and Controllable Bandwidth
Xian-Ping Xiong (University of Electronic Science and Technology of China, China); Yong-Lun Luo (University of Electronic Science and Technology of China, China);

00:00 Dual-band Bandpass Filter Based on Quadrupole-mode Resonator and Source-load Coupling Structure
Bo Zhang (Beijing University of Posts and Telecommunications, China); Shao-Sheng Li (Beijing University of Posts and Telecommunications, China); Jianming Huang (Beijing University of Posts and Telecommunications, China);
00:00 A Wideband and High Rejection Bandpass Filter Based on Stub-loaded Multi-mode Resonator
Bo Zhang (Beijing University of Posts and Telecommunications, China); Shao-Sheng Li (Beijing University of Posts and Telecommunications, China); Jianming Huang (Beijing University of Posts and Telecommunications, China);

00:00 Analytical Solution to Time-harmonic Electromagnetic Field of Misalignment Solenoidal Coils
Xianjin Song (Institute of Microelectronics, Chinese Academy of Sciences, China); Guoqiang Liu (Institute of Microelectronics, Chinese Academy of Sciences, China); Chao Zhang (Institute of Microelectronics, Chinese Academy of Sciences, China); Xiaoyu Xu (Institute of Microelectronics, Chinese Academy of Sciences, China);

00:00 A Design Method of Miniaturized Conical Helix Antenna
Xi Chen (Xidian University, China); Guang Fu (Xidian University, China); Chaohui Xi (Xidian University, China);

00:00 Study of a Microstrip Patch Antenna with Multiple Circular Slots
Waqas Farooq (University of Bedfordshire, UK); Maasood Ur-Rehman (University of Bedfordshire, UK); Qammar Hussain Abbasi (Texas A & M University, Qatar); Khawaja Qasim Maqbool (Bahrain University, Pakistan);

00:00 Comparison of Hourly Variations of Radio Refractivity on Magnetically Quiet and Disturbed Days in Nsukka-Nigeria
Godwin Amachi Agbo (Ebonyi State University, Nigeria);

00:00 TEC Variability and Comparison with NeQuick Model during Low Solar Activity Phase
Shengguo Wang (National Space Science Center, CAS, China); J. K. Shi (National Space Science Center, CAS, China); G. J. Wang (Center for Space Science and Applied Research, CAS, China); X. Wang (Center for Space Science and Applied Research, CAS, China); L. R. Xu (Beijing Institute of Applied Meteorology, China); R. Q. Chen (Beijing Institute of Applied Meteorology, China); Z. B. Zhang (Beijing Institute of Applied Meteorology, China); H. Y. Sun (Beijing Institute of Applied Meteorology, China); X. T. Su (Beijing Institute of Applied Meteorology, China);

00:00 The Design of Band-pass Frequency Selective Surface with All Dielectric Metamaterial
Fei Yu (Air Force Engineering University, China); Shaobo Qu (Air Force Engineering University, China); Jiafu Wang (Air Force Engineering University, China); Hao Huang (Air Force Engineering University, China); Jun Wang (Air Force Engineering University, China);

00:00 Automatic Extraction of Pathological Area in 2D MR Brain Scan
Pavel Dvorak (Institute of Scientific Instruments of the ASCR, Czech Republic); Karel Bartusek (Institute of Scientific Instruments of the ASCR, Czech Republic); Eva Gescheidtova (Brno University of Technology, Czech Republic);

00:00 Numerical Modeling of Electromagnetic Field in the Biological Cell
Eliska Vlachova Hutova (Brno University of Technology, Czech Republic); Tomas Kriz (Brno University of Technology, Czech Republic); Eva Gescheidtova (Brno University of Technology, Czech Republic); Karel Bartusek (Institute of Scientific Instruments of the ASCR, Czech Republic);

00:00 Study of Electrical Effects of Charged Nanoparticles on a Small Vesicle Using Coarse-grained Molecular Dynamics Simulations
Lingling Liu (Xiamen University, China); Jianhua Zhang (Xiamen University, China); Xiaowei Zhao (Xiamen University, China); Qing Huo Liu (Xiamen University, China);

00:00 The Connection of a Micro-hydropower Plant to an Experimental Electrical Network
Petr Marcon (Brno University of Technology, Czech Republic); Zoltan Szabo (Brno University of Technology, Czech Republic); Zdenek Roubal (Brno University of Technology, Czech Republic); Frantisek Zezulka (Brno University of Technology, Czech Republic);
00:00  The Statistical Evaluation of Data Obtained via the Manual Segmentation of MRI Images of a Pathological Tissue
Petr Marcon (Brno University of Technology, Czech Republic); Jan Mikulka (Brno University of Technology, Czech Republic); Eva Gescheidtova (Brno University of Technology, Czech Republic); Karel Bartusek (Institute of Scientific Instruments of the ASCR, Czech Republic); Andrea Sprlakova (Masaryk University, Czech Republic);

00:00  Uncertainty Determination in Measurements Using a Gerdien Tube
Zdenek Roubal (Brno University of Technology, Czech Republic); Zoltan Szabo (Brno University of Technology, Czech Republic); Miloslav Steinbauer (Brno University of Technology, Czech Republic);

00:00  SAR Study on MIMO Wi-Fi Antennas in LTE Mobile Terminals
Kun Zhao (KTH-Royal Institute of Technology, Sweden); Shuai Zhang (KTH Royal Institute of Technology, Sweden); Zhinong Ying (Sony Mobile Communication AB, Sweden); Sailing He (Zhejiang University, China);

00:00  Detector for Nuclear Quadrupole Resonance Spectroscopy
Jiri Chytid (Brno University of Technology, Czech Republic); Radek Kubasek (Brno University of Technology, Czech Republic);

00:00  Plasmonic Antenna Enhanced Spin Rectification
Peng Gou (Fudan University, China); Fuchun Xi (Fudan University, China); Jie Xu (Fudan University, China); Qinbai Qian (Fudan University, China); Ziyi Zhao (Fudan University, China); Zhenghua An (Fudan University, China);

00:00  Design of Dual Cross Dipole Antennas with Dual Frequencies and Dual Circularly-polarized
Yu-Feng Wang (No. 36 Research Institute of CETC, China); Lei Chang (No. 36 Research Institute of CETC, China); Yufeng Yu (China Jiangnan Electronics Communication Institute, China);

00:00  Design and Study of Multiband Microstrip Antenna
Lei Chang (No. 36 Research Institute of CETC, China); Jian-Qiang Zhang (No. 36 Research Institute of CETC, China); Yu-Feng Wang (No. 36 Research Institute of CETC, China); Yufeng Yu (China Jiangnan Electronics Communication Institute, China);

00:00  A Polarization Insensitive and High Efficiency Schottky Photodetector Based on Si Ridge Waveguide
Liu Yang (Zhejiang University, China); Pengfei Kou (Zhejiang University, China);

00:00  Narrow-band Tunable Fiber Fabry-Perot Filter Based on Laser Heated Fiber Bragg Gratings
Ying Li (Zhejiang University, China); Liang Zhang (Zhejiang University, China); Yebin Zhang (Zhejiang University, China); Shaorui Gao (Zhejiang University, China); Guofeng Yan (Zhejiang University, China); Bin Zhou (South China Normal University, China);

00:00  Coupled Retrieval of Surface Reflectance and Aerosol Optical Depth from Hyperspectral Remote Sensing Data
Yaokai Liu (Academy of Opto-Electronics, Chinese Academy of Sciences, China); Ning Wang (Academy of Opto-Electronics, Chinese Academy of Sciences, China); Lingling Ma (Academy of Opto-Electronics, Chinese Academy of Sciences, China); Lingqi Tang (Academy of Opto-Electronics, Chinese Academy of Sciences, China); Chuanrong Li (Academy of Opto-Electronics, Chinese Academy of Sciences, China);

00:00  Control of Preferential Orientation (c-axis) of Piezoelectric ALN Film for NEMS Applications
Shahid Imran (South China Normal University, China); Guan-Bo Yin (Zhejiang University, China); Yangui Ma (Zhejiang University, China); Sailing He (Zhejiang University, China);

00:00  5d-4f Luminescence of Rare Earth Ions in New Oxide Hosts
Mattia Trevisani (Department of Biotechnology, Italy); Konstantin V. Ivanovskikh (Ural Federal University, Russia); Fabio Piccinelli (Department of Biotechnology, Italy); Irene Carrasco (Department of Biotechnology, Italy); Marco Bettinelli (Department of Biotechnology, Italy);

00:00  Design and Analysis of Band-pass Frequency Selective Surface for Terahertz (THz) Communication
Umair Rafique (Mohammad Ali Jinnah University, Pakistan); Ali Imram Najam (National Electronics Complex, Pakistan);

00:00  Design and Development of Phased Array for Beamforming with FSS
Muhammad Haroon Tariq (National University of Sciences and Technology (NUST), Pakistan);
00:00 Preliminary Study of Embedded Structural Anomalies in Architectural Structures by Microwave Subsurface Tomography
Samuele Beni (Institute for Applied Physics — National Research Council (IFAC-CNRC), Italy); Roberto Olmi (Institute for Applied Physics — National Research Council (IFAC-CNRC), Italy); Filippo Michelelli (Institute for Applied Physics — National Research Council (IFAC-CNRC), Italy); Cristiano Riminesi (Institute for Applied Physics — National Research Council (IFAC-CNRC), Italy);

00:00 A Nondestructive Electromagnetic-based Model for Detecting Water Pollution in Underground Pipelines
Ahmad Hamdy Abdelgwad (Fayoum University, Egypt); Tarek M. Saad (Fayoum University, Egypt); Amr M. Gody (Nanjing University of Posts & Telecommunications, China);

00:00 Theoretical Study on Negative Refraction at a Lossy Interface
Jiangwei Chen (Nanjing University of Posts & Telecommunications, China); Nan Sun (Nanjing University of Posts & Telecommunications, China); Yang Zang (Nanjing University of Posts & Telecommunications, China); Zhikuo Tao (Nanjing University of Posts & Telecommunications, China); Guozhi Xie (Nanjing University of Posts & Telecommunications, China);

00:00 High Gain Electromagnetically Coupled Stacked Circular Disk Patch Antenna for Widband Application
Nagendra Prasad Yadav (University of Allahabad, India); Wen Wu (Nanjing University of Science & Technology, China); Daqiang Fang (Nanjing University of Science and Technology, China);

00:00 Change of Electromagnetic Response in the Distortion of Metasurface
Tian Zhou (Kuang-Chi Research Institute of Advanced Technology, China); Wan Lung Lee (Kuang-Chi Research Institute of Advanced Technology, China); Zhong Jie Li (Kuang-Chi Research Institute of Advanced Technology, China); Chunlin Ji (Shenzhen Kuang-Chi Institute of Advanced Technology, China); Zhi Ya Zhao (Kuang-Chi Research Institute of Advanced Technology, China); Ruow Peng Liu (Southeast University, China);

00:00 A Compact Dual Band Band-pass Filter Using a New Topology of Transmission Line Metamaterial
Akram Boubakri (Innov’Com Laboratory, Tunisia); Fethi Choubani (University 7th November at Carthage, Tunisia); Tan Hoa Vuong (University of Toulouse, France); Jacques David (National Polytechnic Institute of Toulouse, France);

00:00 Design of High Gain Cavity Resonant Array Antenna Using FSS Superstrate Layer for Ku-band Application
Saba Rashid (National University of Sciences and Technology (NUST), Pakistan); M. Haroon Tariq (National University of Sciences and Technology (NUST), Pakistan); Farooq Ahmad Bhatti (National University of Sciences and Technology (NUST), Pakistan);

00:00 Design of the Substrate Integrated Waveguide Cavity-backed Wide Slot Antenna Array
Ke Gong (Xinyang Normal University, China); Yan Liu (Xinyang Normal University, China);

00:00 Increasing Frequency Range of the Reflectarray Antenna at X-band by Rotating the Antenna Plane
Ali Reza Bayat (Imam Khomeini International University (IKIU), Iran); Vahid Soofi Niyaraki (Imam Khomeini International University, Iran);

00:00 Improvement in Reflectarray Antenna Bandwidth with Changing the Geometrical Shape
Ali Reza Bayat (Imam Khomeini International University (IKIU), Iran); Vahid Soofi Niyaraki (Imam Khomeini International University, Iran);

00:00 Pattern Synthesis for Large Planar Arrays
Dan Hua (Xidian University, China); Wentao Li (Xidian University, China); Xiaowei Shi (Xidian University, China);

00:00 A Novel Wideband Wide-angle Frequency Selective Surface Composite Structure
Zhan-Bo Lu (AVIC LeiHua Electronic Technology Research Institute, China); Xuequan Yan (Radar and Avionics Institute of AVIC, China); Jian-Jian She (AVIC LeiHua Electronic Technology Research Institute, China);

00:00 Highly Birefringent Photonic Crystal Fibers with a High-index Doped Rod
Wei-Hsiang Chuang (National United University, Taiwan, R.O.C.); Che-Wei Yao (National United University, Taiwan, R.O.C.); Jui-Ming Hsu (National United University, Taiwan, R.O.C.);

00:00 Electromagnetic Field Fluctuations Near a Point-like and an Extended Field Source
Roberto Passante (Università degli Studi di Palermo, Italy); Lucia Rizzuto (Università degli Studi di Palermo, Italy); Salvatore Spagnolo (Università degli Studi di Palermo, Italy);
Session 3P1a
0. FocusSession: Sesquicentennial Commemoration Session for Maxwell’s Equations 2

Wednesday PM, August 27, 2014
Room A
Organized by Weng Cho Chew
Chaired by Weng Cho Chew

00:00 Casimir-Lifshitz Forces: Designer Quantum Fluctuations, Quantum Levitation and the Future of Nanomachines
Federico Capasso (Harvard University, USA);

00:00 Reflections on Maxwell’s Treatise
Arthur D. Yaghjian (Electromagnetics Research Consultant, USA);

00:00 Generalized Gauge for Multi-scale Inhomogeneous Media
Weng Cho Chew (University of Illinois, USA); Q. I. Dai (University of Illinois, USA); Ai Yin Sun (The University of Hong Kong, China); Sheng Sun (The University of Hong Kong, China); Christopher Jayun Ryu (University of Illinois, USA); Sheng Sun (The University of Hong Kong, China); Wei E. I. Sha (The University of Hong Kong, China);

Session 3P1b
1. FocusSession:SC1&2: Nonreciprocal Electromagnetics and Photonics

Wednesday PM, August 27, 2014
Room A
Organized by Lei Bi, Zheng Wang
Chaired by Lei Bi, Zheng Wang

00:00 Experimental Observation of Photonic Topological State in a Uniaxial Metacrystal Waveguide
Wen-Jie Chen (The Hong Kong University of Science and Technology, China); Shao-Ji Jiang (Sun Yat-Sen University, China); Xiao-Dong Chen (Sun Yat-Sen University, China); Jian-Wen Dong (Sun Yat-Sen (Zhongshan) University, China); Che Ting Chan (The Hong Kong University of Science and Technology, China);

00:00 Theoretical Study on the Optical Properties of Y₃Fe₅O₁₂ and CeₓY₃₋ₓFe₅O₁₂
Xiao Liang (University of Electronic Science and Technology of China, China); Long-Jiang Deng (University of Electronic Science and Technology of China, China); Jianliang Xie (University of Electronic Science and Technology of China, China); Lei Bi (University of Electronic Science and Engineering of China, China);

00:00 Tunable Nonreciprocity Based on Nonlinear Fano Resonance
Yi Xu (Australian National University, Australia); Andrey E. Miroshnichenko (Australian National University, Australia);

00:00 Feasibility of Fabrication of Plasmonic Optical Isolator for Photonic Integrated Circuits
Vadym Zayets (AIST, Japan); A. Baryshev (All-Russia Research Institute of Mathematics, Russia); H. Saito (AIST, Japan); K. Ando (AIST, Japan); S. Yuasa (AIST, Japan);

00:00 Optical Nonreciprocal Devices Based on Magnetooptical Phase Shift in Silicon Photonics
Tetsuya Mizumoto (Tokyo Institute of Technology, Japan); Yuya Shoji (Tokyo Institute of Technology, Japan);

00:00 Preparation of Large Size Magneto-optical Single-crystal Film by LPE
Huai-Wu Zhang (University of Electronic Science and Technology of China, China); Bing Mei (University of Electronic Science and Technology of China, China); Qing-Hui Yang (University of Electronic Science and Technology of China, China);

00:00 Faraday Polarisation Rotation in Semiconductor Waveguides Incorporating Periodic Garnet Clandings
David C. Hutchings (University of Glasgow, UK); C. Zhang (University of Glasgow, UK); B. M. Holmes (University of Glasgow, UK); P. Dulal (University of Minnesota, USA); A. D. Block (University of Minnesota, USA); Bethanie J. H. Stadler (University of Minnesota, USA);

00:00 Optical Forces in Photonic One-way Waveguides
Zheng Wang (The University of Texas at Austin, USA);
Session 3P2a
SC2: Plasmonics: Beyond Local-response Dynamics

Wednesday PM, August 27, 2014
Room B
Organized by Nicholas X. Fang, N. Asger Mortensen
Chaired by Nicholas X. Fang, Yu Luo

00:00 Electronic Tunneling Effects in Nanoplasmonic Structures
Joseph W. Haus (University of Dayton, USA); Domenico De Ceglia (Charles M. Bowden Research Center, USA); Maria Antonietta Vincenti (Charles M. Bowden Research Center, USA); Michael Scalora (Charles M. Bowden Research Center, AMRDEC, RDECOM, USA);

00:00 Nonlocal and Quantum Effects in Nanoplasmonics
Yu Luo (Imperial College London, UK);

00:00 Surface Effects in the Hydrodynamic Model
Giuseppe Toscano (Karlsruhe Institute of Technology, Germany); Carsten Rockstuhl (Karlsruhe Institute of Technology, Germany); Martijn Wubs (Technical University of Denmark, Denmark); N. Asger Mortensen (Technical University of Denmark, Denmark);

00:00 Generalized Nonlocal Optical Response
Soren Raza (Technical University of Denmark, Denmark); Thomas Sondergaard (Aalborg University, Denmark); Martijn Wubs (Technical University of Denmark, Denmark); Sergey I. Bozhevolnyi (University of Southern Denmark, Denmark); N. Asger Mortensen (Technical University of Denmark, Denmark);

00:00 The Impact of Nonlocality on Gap-plasmon Resonators and Multilayered Structures
Antoine Moreau (Clermont University, France); Cristian Ciraci (Duke University, USA); Jessica Benedicto (University Clermont Ferrand, France); M. Dchauz (Clermont University, France); Emmanuel Centeno (Universite Blaise Pascal, France); David R. Smith (Duke University, USA);

00:00 Topological Orders in Chiral Hyperbolic Metamaterials
Shuang Zhang (University of Birmingham, UK);

00:00 Experimental Observation of “Pseudospin” and Edge States in Structured “Photonic Graphene”
Daohong Song (Nankai University, China); Lsqin Tang (Nankai University, China); Jingjun Xu (Nankai University, China); Zhigang Chen (San Francisco State University, USA);

00:00 Structured Light in the Meta-world
Jiingbo Sun (University at Buffalo, The State University of New York, USA); Mikhail I. Shalaev (University at Buffalo, The State University of New York, USA); Jinwei Zeng (University at Buffalo, The State University of New York, USA); Natalia M. Litchinitser (University at Buffalo, The State University of New York, USA);

00:00 Separating and Transforming Arbitrary Orthogonal Beams Automatically — An Adaptive Universal Linear Optical Component
David A. B. Miller (Stanford University, USA);

00:00 Efficient Detection of Information Encoded in Orbital Angular Momentum of Light
Zhimin Shi (University of South Florida, USA); Mohammad Mirhosseini (University of Rochester, USA); Mehul Malik (University of Rochester, USA); Robert W. Boyd (University of Rochester, USA);

00:00 Propagation and Modulation of 1D Airy Beams
Fei Huang (Hangzhou Normal University, China); Yuanyuan Pan (Hangzhou Normal University, China); Yuquan Ye (Hangzhou Normal University, China); Xinyue Du (Zhejiang University, China); Xuan Li (Hangzhou Normal University, China); Zhimin Shi (University of South Florida, USA);

00:00 Structured Light Meets Structured Material: Concepts and Applications
Ebrahim Karimi (University of Ottawa, Canada);

00:00 Vectorial Modes in Continuous Variable Quantum Optics
Christoph Marquardt (Max Planck Institute for the Science of Light, Germany); I. Rigas (Max Planck Institute for the Science of Light, Germany); C. Gabriel (Max Planck Institute for the Science of Light, Germany); S. Berg-Johansen (Max Planck Institute for the Science of Light, Germany); Andrea Aiello (Max Planck Institute for the Science of Light, Germany); Peter van Loock (University of Mainz, Germany); U. L. Andersen (Max Planck Institute for the Science of Light, Germany); G. Leuchs (Max Planck Inst Phys Lichts, Germany);
00:00 Measuring a 27-dimensional Orbital Angular Momentum State with Quantum Weak Values
Mehul Malik (University of Rochester, USA); Mohammad Mirhosseini (University of Rochester, USA); Martin P. J. Lavery (University of Glasgow, UK); Jonathan Leach (University of Glasgow, UK); Miles J. Padgett (University of Glasgow, UK); Robert W. Boyd (University of Rochester, USA);

00:00 Regulating Carriers and Excitons in Simplified Hybrid WOLEDs by Using a Bipolar Interlayer Switch
Baiquan Liu (South China University of Technology, China); Jianhua Zou (South China University of Technology, China); Mao Xu (South China University of Technology, China); Lei Wang (South China University of Technology, China); Hong Tao (South China University of Technology, China); Yueju Su (New Vision Opto-Electronic Technology Co. Ltd., China); Dongyu Gao (New Vision Opto-Electronic Technology Co. Ltd., China); Linfeng Lan (South China University of Technology, China); Junbiao Peng (South China University of Technology, China);

00:00 Efficiency and Color-tunability of Fluorescent-phosphorescent Organic Light-emitting Diodes with Regular, Inverted, and Symmetrical Structures
Su-Hua Yang (National Kaohsiung University of Applied Sciences, Taiwan, R.O.C.); Po-Jen Shih (National Kaohsiung University of Applied Sciences, Taiwan, R.O.C.);

00:00 New AMOLED Pixel Circuits Based on a-IGZO TFTs Compensating for TFT $V_{TH}$ Shift and OLED Degradation
Chih-Lung Lin (National Cheng Kung University, Taiwan, R.O.C.); Chia-Che Hung (National Cheng Kung University, Taiwan, R.O.C.); Po-Chun Lai (National Cheng Kung University, Taiwan, R.O.C.); Po-Syun Chen (National Cheng Kung University, Taiwan, R.O.C.);

00:00 Localized Surface Plasmon Enhanced Luminance in Organic Light Emitting Diode
Bei Liu (Chang Gung University, Taiwan); Bo Liu (Chang Gung University, Taiwan); Kou-Chen Liu (Chang Gung University, Taiwan); Chao Sung Lai (Chang Gung University, Taiwan);

00:00 Optical Modeling in OLED Structures
Yih-Peng Chiou (National Taiwan University, Taiwan); Wen-Lan Yeh (National Taiwan University, Taiwan);

00:00 Efficient Light-extraction Microlens Arrays for Organic Light-emitting Devices
Mao-Kuo Wei (National Dong Hwa University, Taiwan, R.O.C.); Di-Hong Lin (National Dong Hwa University, Taiwan, R.O.C.); Yu-Lin Liao (National Dong Hwa University, Taiwan, R.O.C.); Jiun-Haw Lee (National Taiwan University, Taiwan, R.O.C.); Hoang-Yen Lin (National Taiwan University, Taiwan, R.O.C.);
00:00 Formation of Internal Micro-lens-like Structure for Organic Light Emitting Diodes
Ching-Ming Hsu (Southern Taiwan University of Science and Technology, Taiwan, R.O.C.); Ying-Xun Zeng (Southern Taiwan University of Science and Technology, Taiwan, R.O.C.); Bo-Ting Lin (Southern Taiwan University of Science and Technology, Taiwan, R.O.C.); Wei-Ming Lin (Southern Taiwan University of Science and Technology, Taiwan, R.O.C.); Wen-Tuan Wu (Southern Taiwan University of Science and Technology, Taiwan, R.O.C.);

00:00 Substrates for Organic Light Emitting Devices with Embedded Fluorescent and Scattering Structure
Li-Yin Chen (National Sun Yat-sen University, Taiwan, R.O.C.); Jin-Kai Chang (National Sun Yat-sen University, Taiwan, R.O.C.); Yi-Ru Wu (National Sun Yat-sen University, Taiwan, R.O.C.); Li-Zhong Cai (National Sun Yat-sen University, Taiwan, R.O.C.);

00:00 The Impurity Effect on OLED Via Transient Electroluminescence Analysis
Chi-Feng Lin (National United University, Taiwan); Chia-Cheng Jian (National United University, Taiwan); Tien-Lung Chiu (Yuan Ze University, Taiwan); Jian-Haw Lee (National Taiwan University, Taiwan, R.O.C.);

00:00 Blue Phosphorescent Organic Light-emitting Diode with Carbozole-triazole Host
Po-Sheng Wang (National Taiwan University, Taiwan); Bo-Yen Lin (National Taiwan University, Taiwan); Jian-Haw Lee (National Taiwan University, Taiwan, R.O.C.); Yu-Hsuan Hsieh (National Taiwan University, Taiwan); Man-Kit Leung (National Taiwan University, Taiwan); Tien-Lung Chiu (Yuan Ze University, Taiwan); Chi-Feng Lin (National United University, Taiwan);

00:00 Voltage Reduction of Blue Phosphorescent Organic Light-emitting Diode with Mixed Host
Chuan-En Lin (National Taiwan University, Taiwan); Bo-Yen Lin (National Taiwan University, Taiwan); Jian-Haw Lee (National Taiwan University, Taiwan, R.O.C.); Tien-Lung Chiu (Yuan Ze University, Taiwan); Chi-Feng Lin (National United University, Taiwan);

Session 3P4
SC2: Zero-index Media, Extremely Anisotropic Media, and Nonlocal Photonic Media

00:00 Mircowave Devices and Antennas Based on Zero-index Metamaterials
Qiang Cheng (Southeast University, China); Hui-feng Ma (Southeast University, China); Wen Xuan Tang (Southeast University, China); Nan Xiang (Southeast University, China); Bin Zhou (Southeast University, China); Li Hua Yuan (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 Optic-Null Transformation Optical Media: Realizations and Applications
Qiong He (Fudan University, China); Shi-qi Xiao (Fudan University, China); Xin Li (Fudan University, China); Lei Zhou (Fudan University, China);

00:00 Plasmonic Multilayers Realizing Zero-index Metamaterials
Alexey A. Orlov (St. Petersburg State University of Information Technologies, Mechanics and Optics, Russia); S. V. Zhukovsky (ITMO University, Russia); Ivan V. Iorsh (National Research University for Information Technology, Mechanics and Optics, Russia); Pavel A. Belov (National Research University for Information Technology, Mechanics and Optics, Russia);

00:00 Semi-Dirac Point in Anisotropic Photonic Crystals
Ying Wu (King Abdullah University of Science and Technology, Saudi Arabia);

00:00 Acoustic One-way Manipulation with Near-zero Index Metamaterials
Yong Li (Nanjing University, China); Bin Liang (Nanjing University, China); Jian-Chun Cheng (Nanjing University, China);

00:00 Broadband, Strong Diamagnetic Response of Structured Metallic Plates with Fractal Slits at Microwave Frequencies
Shahzad Anwar (Soochow University, China); Sucheng Li (Soochow University, China); Ruirui Chen (Soochow University, China); Shuo Li (Soochow University, China); Bo Hou (Soochow University, China);
The First Field Concentrator Using Fabry-Pérot Resonances
M. M. Sadeghi (Soochow University, China); Sucheng Li (Soochow University, China); Lin Xu (Soochow University, China); Bo Hou (Soochow University, China); Huanyang Chen (Soochow University, China);

Resonant Properties of Subwavelength Voids in Anisotropic Metamaterials
Ganna V. Vozianova (ITMO University, Russia); Pavel Ginzburg (King’s College London, UK); Alexander N. Poddubny (National Research University for Information Technology, Mechanics and Optics, Russia);

Realization of Photonic Functionality in Near-zero Photonic Crystals
Xin-Tao He (Sun Yat-Sen University, China); Jian-Wen Dong (Sun Yat-Sen University, China);

Design and Fabrication of Acoustic Rotator Based on Extremely-anisotropic Metamaterials
Xue Jiang (Nanjing University, China); Bin Liang (Nanjing University, China); Jian-Chun Cheng (Nanjing University, China);

Surface Mode Formation and Coupling in Honeycomb Lattice Photonic Crystals
Zhi Hong Hang (Soochow University, China); Jun Wang (Soochow University, China); Y. Shao (Soochow University, China);

Nontrivial Flat Bands in Photonic Crystals
Chang Qing Xu (Soochow University, China); Zhi Hong Hang (Soochow University, China); Yun Lai (Soochow University, China);

Some Comments and Applications for Zero-index Metamaterials
Yangyang Fu (Soochow University, China); Lin Xu (Soochow University, China); Zhuhong Hang (Soochow University, China); Huanyang Chen (Soochow University, China);

Electromagnetic Wavefront Control Using Subwavelength Dielectric Particles
Zongqi Xiao (Tsinghua University, China); Qian Zhao (Tsinghua University, China); Fuli Zhang (Northwestern Polytechnical University, China); Junming Ma (Tsinghua University, China); Ming Qiao (Tsinghua University, China); Yonggang Meng (Tsinghua University, China); Chuw en Lan (Tsinghua University, China); Bo Li (Tsinghua University, China); Ji Zhou (Tsinghua University, China);

Unusual Geometrical Optics and Geodesic Lenses
Aaron J. Danner (National University of Singapore, Singapore); Alireza Akbarzadeh (National University of Singapore, Singapore); H. L. Dao (National University of Singapore, Singapore); Tomas Tyc (Masaryk University, Czech Republic);

Optimization of Nanostructured Lüneburg Lens Based on the Transformation Optics Method
Yinghui Cao (Changchun Institute of Optics, Fine Mechanics and Physics, China); Yongmin Liu (Northeastern University, USA); Zhengu Liu (Changchun Institute of Optics, Fine Mechanics and Physics, China);

Phase Preservation in Transformation Optics. II
Baile Zhang (Nanyang Technological University, Singapore); Yuan Luo (National Taiwan University, Taiwan, R.O.C.);

Transformation Optics with Nonlocal Photonic Media
Jie Luo (Soochow University, China); Yu Ting Yang (Soochow University, China); Zhi Hong Hang (Soochow University, China); Yun Lai (Soochow University, China);

Broadband Collection and Concentration of Light: A Transformation Optics Approach
Yu Luo (Imperial College London, UK); John B. Pendry (Imperial College London, UK);

Electromagnetic Invisibility Cloaks Based on Inverse Design Methodology
Su Xu (Zhejiang University, China); Qinghui Yan (Zhejiang University, China); Xiangziang Cheng (Zhejiang University, China); Yuyu Jiang (Zhejiang University, China); Baile Zhang (Nanyang Technological University, Singapore); Hongsheng Chen (Zhejiang University, China);

Three Dimensional Carpet Cloak with Rigorous Transformation Optics
Runren Zhang (Zhejiang University, China); Hongsheng Chen (Zhejiang University, China);
00:00  Metamaterial Stacked Transformation Optics Lens for Subwavelength Imaging  
Lian Shen (Zhejiang University, China); Hongsheng Chen (Zhejiang University, China);

00:00  One-dimensional Full-parameter Cloak for TM Wave  
Yi Hao Yang (Zhejiang University, China); Hongsheng Chen (Zhejiang University, China);

00:00  Transformation Optics Manipulating the Momentum of Light  
Vincent Ginis (Vrije Universiteit Brussel, Belgium); J. Danckaert (Vrije Universiteit Brussel, Belgium);  
Irina Veretennicoff (Vrije Universiteit Brussel, Belgium); Costas M. Soukoulis (Iowa State University, USA); Philippe Tassin (Chalmers University, Sweden);

00:00  Transformation Thermodynamics: Heat Flux Control and Device Applications  
Yanqui Ma (Zhejiang University, China); Yichao Liu (Zhejiang University, China);

00:00  Transformation Optics: A Universal Design Tool  
John B. Pendry (Imperial College London, UK);

00:00  Control of Microwaves Using Metamaterials and Metasurfaces  
Tie Jun Cui (Southeast University, China);

00:00  Geometry, Topology and Transformation Optics  
Yongliang Zhang (Technical Institute of Physics and Chemistry, Chinese Academy of Science, China); Li-Na Shi (Institute of Microelectronics, Chinese Academy of Science, China); Xian-Zi Dong (Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, China); Zhen-Sheng Zhao (Technical Institute of Physics and Chemistry, Chinese Academy of Science, China); Xuan-Ming Duan (Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, China);

Session 3P6a
3. FocusSession.SC3: Photonics and Optoelectronics in Industry

Wednesday PM, August 27, 2014
Room F
Organized by Cees Ronda, Anhui Liang
Chaired by Cees Ronda

00:00  Design and Analysis of Multi-service Radio over Fiber System  
Wu Pan (Chongqing University of Posts and Telecommunications, China); Peng Dai (Chongqing University of Posts and Telecommunications, China); Huaquan Zhang (Chongqing University of Posts and Telecommunications, China); Hongwei Xia (Chongqing University of Posts and Telecommunications, China); Yuanbo Ma (Chongqing University of Posts and Telecommunications, China);

00:00  Optimization of Nonlinear Coefficient Map in Backpropagation  
Yanru Cao (Tongji University, China); Junhe Zhou (Tongji University, China);

00:00  Generic InP-based Integration Technology: RF Crosstalk in High-capacity Optical Transmitter PICs  
Weiming Yao (Technical University Eindhoven, The Netherlands); Giovanni Gilardi (Technical University of Eindhoven, The Netherlands); Meind K. Smit (Technical University of Eindhoven, The Netherlands); Michael J. Wale (Oclaro Technology Ltd., UK);

00:00  Design of an Efficient and a Compact Optical Pulse Comressor Using a Tapered Photonic Crystal Fiber  
A. Manimegalai (VIT University, India); D. R. Deva (Ganadipathy Tubi’s Jain Engineering College, India); Abdoslam M. Abobaker (Collage of Electronic Technology, Libya); K. Senthilnathan (VIT University, India); S. Sivabalan (VIT University, India); Kaliyaperumal Nakkeeran (University of Aberdeen, UK); P. Ramesh Babu (VIT University, India);

00:00  LD and LED Manufacture with Nanoimprint Process v1.0  
Wen Liu (University of Science and Technology of China, China);

00:00  Ultrashort Pulse Lasers and Applications  
Yatao Yang (Shenzhen Dade Laser Technologies Co., Ltd., China); Feng Gao (Shenzhen Dade Laser Technologies Co., Ltd., China);

00:00  Evolution of High Speed Pluggable Modules and the Enabling Optical and Electronic Technologies  
Xing Pan (JDS Uniphase Corporation, USA);

00:00  Applications of High Pulse Energy Femtosecond Fiber Lasers  
Xiangdong Cao (Huazhong University of Science and Technology, China);

00:00  Market Trends and Technology Evolution of the Optoelectronic Modules  
David Li (Hisense Broadband Multimedia Technologies, China);
CO₂ Laser Consisted of Parallel 4-glass Tubes Excited by Radio Frequency
Qing-Ming Chen (Wuhan Furen Photonics Co. Ltd., China);

Review of the Leaping Development of Chinese Optical Fiber Cables Industry
Liyong Zhang (Futong Group Co., Ltd., China);

Optical Network Upgrading for 4G Mobile Broadband in China Unicom
Xiongyan Tang (China Unicom Network Technology Research Institute, China);

History, Present and Future of High Speed Transponders and Systems
Anhui Liang (Nanjing University of Posts and Telecommunications, China);

Subwavelength Light Focusing and Imaging via Wavefront Shaping in Complex Media
Yong Keun Park (Korea Advanced Technology of Science and Technology (KAIST), South Korea);

Super Focusing with Electromagnetic Cavities and Subwavelength Gratings
Matthieu Dupre (ESPCI ParisTech & CNRS, France); Mathias Fink (ESPCI ParisTech & CNRS, France); Geoffroy Lerosey (ESPCI ParisTech & CNRS, France);

Electron Induced Near Field Optical Microscopy for Plasmonic Nanostructures
Nicholas X. Fang (Massachusetts Institute of Technology, USA);

Non-invasive Real-time Imaging through Scattering Layers and around Corners via Speckle Correlations
Ori Katz (ESPCI ParisTech and CNRS, France); Pierre Heidmann (ESPCI ParisTech and CNRS, France); Mathias Fink (ESPCI ParisTech and CNRS, France); Sylvain Gigan (ESPCI ParisTech and CNRS, France);

Beating the Diffraction Limit with Resonant Metalenses: Microwaves, Acoustics and Optics Demonstrations
Fabrice Lemoult (ESPCI ParisTech & CNRS, France); Mathias Fink (ESPCI ParisTech and CNRS, France); Geoffroy Lerosey (ESPCI ParisTech & CNRS, France);

Negative Refraction of Sub-wavelength Imaging
John B. Pendry (Imperial College London, UK);

Non-invasive Real-time Imaging through Scattering Layers and around Corners via Speckle Correlations
Ori Katz (ESPCI ParisTech and CNRS, France); Pierre Heidmann (ESPCI ParisTech and CNRS, France); Mathias Fink (ESPCI ParisTech and CNRS, France); Sylvain Gigan (ESPCI ParisTech and CNRS, France);
00:00 Some Tunable THz Devices Based on Liquid Crystals
Yan-Qing Lu (Nanjing University, China); Wei Hu (Nanjing University, China);

00:00 Liquid-crystal Displays Fabricated from AIE-active Luminogens
Ben Zhong Tang (The Hong Kong University of Science & Technology, China);

00:00 Multi-stable Optical Devices Based on Cholesteric Liquid Crystal
Tsung-Hsien Lin (National Sun Yat-Sen University, Taiwan);

00:00 Blue-phase Liquid-crystal Devices for 3D Applications
Yan Li (Shanghai Jiao Tong University, China); Yikai Su (Shanghai Jiao Tong University, China);
Shin-Tson Wu (University of Central Florida, USA);

00:00 Self-assembly of Gold Nanorods in Liquid Crystals Confined in a Curved Space and Electric Field for the Application of Optical Cloaking
Nan Wang (Zhejiang University, China); Qingkun Liu (University of Colorado at Boulder, USA); Shaowei Wang (Zhejiang University, China); Iam-Choon Khoo (The Pennsylvania State University, USA); Sailing He (Zhejiang University, China);

00:00 Parametric Phase-sensitive and Phase-insensitive All-optical Signal Processing on Multiple Nonlinear Platforms
Christophe Peucheret (University of Rennes 1, France); F. Da Ros (Technical University of Denmark, Denmark); D. Vukovic (Technical University of Denmark, Denmark); Yunhong Ding (Technical University of Denmark, Denmark); K. Dalgard (Technical University of Denmark, Denmark); M. Galil (Technical University of Denmark, Denmark); A. Gajda (Technische Universität Berlin, Germany); J. Xu (Huazhong University of Science and Technology, China); Y. Fukuchi (Tokyo University of Science, Japan); H. Hu (Technical University of Denmark, Denmark); L. Lei (Huazhong University of Science and Technology, China); Haigun Ou (Technical University of Denmark, Denmark); L. Zimmermann (IHP, Germany); Leif Katsuo Oxenlowe (Technical University of Denmark, Denmark); B. Tillack (IHP, Germany); K. Petermann (Technische Universität Berlin, Germany);

00:00 High-speed Silicon Photonic Devices for Photonic Signal Processing
Xi Xiao (Wuhan Research Institute of Posts and Telecommunications, China); Zhiyong Li (Institute of Semiconductors, Chinese Academy of Sciences, China); Yu Yu (Huazhong University of Science and Technology, China); Lei Wang (Wuhan Research Institute of Posts and Telecommunications, China); Anastasia Nemkova (Institute of Semiconductors, Chinese Academy of Sciences, China); Hao Xu (Institute of Semiconductors, Chinese Academy of Sciences, China); Xiaoyao Li (Institute of Semiconductors, Chinese Academy of Sciences, China); Miaofeng Li (Wuhan Research Institute of Posts and Telecommunications, China); Ying Qiu (Wuhan Research Institute of Posts and Telecommunications, China); Qi Yang (Wuhan Research Institute of Posts and Telecommunications, China); Shaohua Yu (Wuhan Research Institute of Posts and Telecommunications, China); Yude Yu (Institute of Semiconductors, Chinese Academy of Sciences, China); Jinzhong Yu (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Transmission Analysis of a Ternary Diversity Reception Based on OFDM FSO System over Correlated Log-normal Fading Channel
Yuwei Su (Waseda University, Japan); Fan Bai (Waseda University, Japan); Mitsuji Matsumoto (Waseda University, Japan);
00:00 The Principle of the Technology and Design of the Parabolic Strip Telescope
Jaroslav Cerney (Czech Technical University in Prague, Czech Republic); Vladislav Kosej (Czech Technical University in Prague, Czech Republic); Goce Chadzitaskos (Czech Technical University in Prague, Czech Republic);

00:00 A Filterless 12-tupling Optical Millimeter-wave Generation and Distribution
Xiaogang Chen (China Three Gorges University (CTGU), China);

00:00 1 Gbps Directed Optical Decoder Based on Two Cascaded Microring Resonators
Qiaoshan Chen (Institute of Semiconductors, Chinese Academy of Sciences, China); Fanfan Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Lei Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Yonghui Tian (Institute of Semiconductors, Chinese Academy of Sciences, China); Ping Zhou (Institute of Semiconductors, Chinese Academy of Sciences, China); Jianfeng Ding (Institute of Semiconductors, Chinese Academy of Sciences, China); Lin Yang (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Electro-optic OR/NOR Logic Gate at 10 Gbps Using Cascaded Micro-ring Resonators
Ping Zhou (Institute of Semiconductors, Chinese Academy of Sciences, China); Lei Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Jianfeng Ding (Institute of Semiconductors, Chinese Academy of Sciences, China); Lin Yang (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Applicable Signal Processing of EM Oscillation and Wave as Well as Two Beam Interference with Phase and Phase Difference Method
Ji Luo (Dalian University, China);

00:00 Advances of Ultra-narrow Photonic Filters and Their Applications in Optical/Microwave Signal Processing
Xihua Zou (Southwest Jiaotong University, China);

00:00 Spectrally Efficient FDM for Optical Communication System
Tao Gui (Jinan University, China); Yuan Bao (Jinan University, China); Zhaokui Li (Jinan University, China);

00:00 Research Progress of On-chip OFDM m-QAM Transmissions for Photonic Interconnections
Jian Wang (Huazhong University of Science and Technology, China);

00:00 Spatial Transformation of Optical Beams Using Phase-shifted Bragg Grating
Leonid Leonidovich Doskolovich (Image Processing Systems Institute of the Russian Academy of Sciences, Russia); Dmitry Alexandrovich Bykov (Image Processing Systems Institute of RAS and Samara State Aerospace University, Russia); N. V. Golovastikov (Image Processing Systems Institute of the Russian Academy of Sciences, Russia);

00:00 Microwave Optical Signal Fading for Chromatic Dispersion Measurement of Fibers
Shangjian Zhang (University of Electronic Science and Technology of China (UESTC), China); Xinghai Zhou (University of Electronic Science and Technology of China (UESTC), China); Heng Wang (University of Electronic Science and Technology of China (UESTC), China); Yali Zhang (University of Electronic Science and Technology of China (UESTC), China); Rongguo Lu (University of Electronic Science and Technology of China (UESTC), China); Yong Liu (University of Electronic Science and Technology of China (UESTC), China);

00:00 Optical Serial Coherent Analyzer of Radio-frequency (OSCAR)
Chaired by Sanshui Xiao, Weihua Wang
Zheng Lei (Tsinghua University, China); Hongwei Chen (Tsinghua University, China); Ruixue Li (Tsinghua University, China); Minghua Chen (Tsinghua University, China); Sigang Yang (Tsinghua University, China); Shizhong Xie (Tsinghua University, China);

00:00 Plasmonic Antenna Graphene Photodetector
Zhejiang University, China

00:00 Recent Developments in Graphene-based Optical Modulators
Ran Hao (Zhejiang University, China); Jia-Min Jin (Zhejiang University, China); Erping Li (Zhejiang University, China);

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**Session 3P8**

**SC2: Graphene for Plasmonics and Sensing**

**Wednesday PM, August 27, 2014**

**Room H**

Organized by Sanshui Xiao, Weihua Wang
Chaired by Sanshui Xiao, Weihua Wang
00:00 Design and Analysis of Tunable/Broadband Terahertz Absorbers Based on Graphene Metasurface
Xianjun Huang (University of Manchester, UK); Xiao Zhang (University of Manchester, UK); Zhirun Hu (University of Manchester, UK); Mohammed Ageel (University of Manchester, UK); Abdullah Albaruikan (University of Manchester, UK);

00:00 A New Modulator Based on Double-layer Graphene
Binggang Xiao (China Jiliang University, China); Runliang Sun (China Jiliang University, China); Zhiyi Xie (China Jiliang University, China);

00:00 Broadband Impedance Matching with Graphene Layers in Terahertz Region
Xinlong Xu (Northwest University, China);

00:00 Graphene on Ag Thin Films for Reliable Sensing
Zherui Zhao (The Hong Kong Polytechnic University, China); Yang Chai (The Hong Kong Polytechnic University, China);

00:00 Graphene-based THz Broadband Coplanar Waveguide (CPW) Fed Monopole Antenna
Xiao Zhang (University of Manchester, UK); Gregory Auton (University of Manchester, UK); Xianjun Huang (University of Manchester, UK); Zhirun Hu (University of Manchester, UK); Zeyu Long (University of Manchester, UK);

00:00 Controlling the Propagation of Graphene Plasmons with Nanoantennas
Pablo Alonso-Gonzalez (CIC nanoGUNE, Spain); Alexey Yu. Nikitin (CIC nanoGUNE Consolider, Spain); F. Golmar (CIC nanoGUNE, Spain); A. Centeno (Graphenea SA, Spain); A. Pesquera (Graphenea SA, Spain); S. Velez (CIC nanoGUNE, Spain); J. Chen (CIC nanoGUNE, Spain); F. Koppens (Mediterranean Technology Park, Spain); A. Zurutuza (Graphenea SA, Spain); F. Casanova (CIC nanoGUNE, Spain); L. E. Hueso (CIC nanoGUNE, Spain); R. Hillenbrand (CIC nanoGUNE Consolider, Spain);

00:00 Strong Light-matter Interaction in Graphene
Sanshui Xiao (Technical University of Denmark, Denmark);

00:00 Comparisons of Classical, Semiclassical, and Quantum Plasmonics in Graphene Nanodisks
Weihua Wang (Technical University of Denmark, Denmark); Thomas Christensen (Technical University of Denmark (DTU), Denmark); Martijn Wubs (Technical University of Denmark, Denmark); Antti-Pekka Jauho (Technical University of Denmark, Denmark); N. Asger Mortensen (Technical University of Denmark, Denmark);

00:00 Novel Tunable Mid-infrared Graphene Plasmonic Waveguide with a Trenched Structure
Jiajiu Zheng (Zhejiang University, China); Longhai Yu (Zhejiang University, China); Daoxin Dai (Zhejiang University, China);

00:00 Boosting Tunable Terahertz Absorption in a Monolayer Graphene
Yuancheng Fan (Northwestern Polytechnical University, China); Hongqiang Li (Tongji University, China);

00:00 Graphene-ferroelectric Nonvolatile Memory and Reconfigurable Logic Metadevices
Bumki Min (KAIST, South Korea);

00:00 Optical Properties of Graphene on Quartz and Polyethylene Substrates in Terahertz Frequency Range
Alaudi Khobaudeiekh Denisultanov (ITMO University, Russia); Solveyga Edvardo Azbite (ITMO University, Russia); Nikolay Sergeyevich Balbekin (ITMO University, Russia); Svyatoslav Igorevich Gusev (ITMO University, Russia); Mikhail Konstantinovich Khodzitsky (ITMO University, Russia);

00:00 Graphene Metamaterials and Plasmonics from Terahertz to Optical Frequencies
Philippe Tassin (Chalmers University, Sweden);

00:00 Plasmon-phonon Hybridization in Graphene Nanostructures on Hexagonal Boron Nitride
Xiaoxia Yang (National Center for Nanoscience and Technology, China); Mingju Liu (National Center for Nanoscience and Technology, China); Qing Dai (National Center for Nanoscience and Technology, China);

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**Session 3P9a**

**SC3: Photonic Crystal and Multi-material Fibers**

**Wednesday PM, August 27, 2014**

**Room I**

Organized by Alexander Argyros, Fabien Sorin

Chaired by Alexander Argyros
00:00 Dynamics of Synchronously Pumped Photonic Crystal Fiber Ring Cavities
Nicolas Y. Joly (University of Erlangen-Nuremberg, Germany); M. J. Schmidtberger (Max-Planck Institute for the Science of Light, Germany); David Novoa (Max-Planck Institute for the Science of Light, Germany); Fabio Biancalanaand (Max-Planck Institute for the Science of Light, Germany); P. St. J. Russell (Max Planck Institute for the Science of Light, Germany);

00:00 THz Waveguides, Devices and Hybrid Polymer-chalcogenide Photonic Crystal Fibers
Hualong Bao (Technical University of Denmark, Denmark); Christos Markos (Technical University of Denmark, Denmark); Kristian Nielsen (Technical University of Denmark, Denmark); Henrik K. Rasmussen (Technical University of Denmark, Denmark); Peter Uld Jepsen (Technical University of Denmark, Denmark); Ole Bang (Technical University of Denmark, Denmark);

00:00 Hybrid Fibers: A Base for Nanophotonic Devices in Fiber Form
Markus A. Schmidt (Max Planck Institute for the Science of Light, Germany);

00:00 Recent Progress in Multimaterial Fibers: From Nanofabrication to Novel Device Architectures
Lei Wei (Massachusetts Institute of Technology, USA); A. M. Stolyarov (Massachusetts Institute of Technology, USA); A. Gumennik (Massachusetts Institute of Technology, USA); C. Hou (Massachusetts Institute of Technology, USA); G. Leston (Massachusetts Institute of Technology, USA); X. Jia (Massachusetts Institute of Technology, USA); B. Grena (Massachusetts Institute of Technology, USA); A. F. Abouraddy (Massachusetts Institute of Technology, USA); John D. Joannopoulos (Massachusetts Institute of Technology, USA); Yoel Fink (MIT, USA);

00:00 Recent Development and Opportunities of Multi-material Optoelectronic Fibres
Dan Tung Nguyen (Ecole Polytechnique Federale de Lausanne, Switzerland); Wei Yan (Ecole Polytechnique Federale de Lausanne, Switzerland); Fabien Sorin (Ecole Polytechnique Federale de Lausanne, Switzerland);

00:00 Fiber Metamaterials for Subwavelength Imaging at Terahertz Frequencies and Beyond
Alessandro Tuniz (University of Sydney, Australia); Alexander Argyros (The University of Sydney, Australia); Simon C. Fleming (University of Sydney, Australia); Boris T. Kuhlme (University of Sydney, Australia);

00:00 Broadband Electrical Interconnects with Multi-electrode Composite Fibers
Zheng Wang (The University of Texas at Austin, USA);

00:00 The Study on Equivalent Models of Finite-size Carbon Fiber Composite Materials
Yi Liao (Shanghai Key Laboratory of Electromagnetic Environmental Effects for Aerospace Vehicle, China); Yuan Zhang (Shanghai Key Laboratory of Electromagnetic Environmental Effects for Aerospace Vehicle, China); Kun Cai (Shanghai Key Laboratory of Electromagnetic Environmental Effects for Aerospace Vehicle, China);

Session 3P9b
SC3: Fibers and Fiber Devices for Optical Communications
Wednesday PM, August 27, 2014
Room I
Organized by Xuewen Shu
Chaired by Xuewen Shu

00:00 Optical Switching in Nanomechanical Optical Fibers
Peter Horak (University of Southampton, UK); Zheng-gang Lian (University of Southampton, UK); M. Se-gura (University of Southampton, United Kingdom); N. Podolak (University of Southampton, United Kingdom); N. White (University of Southampton, United Kingdom); Xian Feng (University of Southampton, UK); Francesco Poletti (University of Southampton, UK);

00:00 Wavelength-tunable Dual-concentric-core Photonic Crystal Fibers
Che-Wei Yao (National United University, Taiwan, R.O.C.); Wei-Hsiang Chang (National United University, Taiwan, R.O.C.); Jui-Ming Hsu (National United University, Taiwan, R.O.C.);

00:00 Novel Tunable Multi-passband Microwave Photonic Filters Based on Fiber Mach-Zehnder Interferometer and Fiber Delay Lines
Hao Chen (Xiamen University, China); Zuowei Xu (Xiamen University, China); Hongyan Fu (Xiamen University, China); Dan Zhang (Xiamen University, China);
00:00 Multi-channel RZ to NRZ Format Conversion Based on a Single Fiber Bragg Grating  
Hui Cao (Foshan University, China); Javid Atai (The University of Sydney, Australia); Yu Yu (Huazhong University of Science and Technology, China); Qian Dong (Foshan University, China); Jun Zuo (Foshan University, China); Guojie Chen (Foshan University, China); Xuewen Shu (Huazhong University of Science and Technology, China);  

00:00 Recent Advances in Tilted Fibre Gratings and Their Application in Mode-locking Fibre Laser Systems  
Lin Zhang (Aston University, UK); Zhijun Yan (Aston University, UK); Chengbo Mou (Aston University, UK); Kaiming Zhou (Aston University, UK); Zuxing Zhang (Aston University, UK);  

00:00 Numerical Study on Ring-fiber Lenses Supporting Optical Vortices  
Chenzxuan Yin (Sun Yat-sen University, China); Zhengqian Zhong (Sun Yat-sen University, China); Yanfeng Zhang (Sun Yat-sen University, China); Yujie Chen (Sun Yat-sen University, China); Hui Chen (Sun Yat-sen University, China); Siyuan Yu (Sun Yat-sen University, China);  

00:00 All-fiber Tunable Notch Filter Based on Longitudinal Acoustic Wave  
Fangcheng Shen (Huazhong University of Science and Technology, China); Xuewen Shu (Huazhong University of Science and Technology, China);  

00:00 Hybrid Fiber-based Distributed Lighting System with Wireless Data Communications  
Jau-Jr Lin (National Changhua University of Education, Taiwan, R.O.C);  

00:00 Classification of Chaotic Codes Using Discriminant Analysis Classifiers and Higher Order Statistical Features  
Hend A. Elsayed (Delta University for Science and Technology, Egypt); Said Esmail El-Khamy (Alexandria University, Egypt);  

00:00 Novel Optical Fast Random Number Generators Based on Integer Domain Chaotic Iterations  
Qian Xue Wang (Guangdong University of Technology, China); Simin Yu (Guangdong University of Technology, China); Xiaole Fang (Land and Resources Technology Center of Guangdong Province, China);  

00:00 Temperature Sensing by Adopting the Optical Wide-band Chaos  
Di Huang (Huazhong University of Science and Technology, China); Li Xia (Huazhong University of Science and Technology, China);  

00:00 Low Cost Chaos-OTDR Using Laser Diode Modulated by Colpitts Oscillator  
Bingjie Wang (Ministry of Education and Shanxi Province, China); Hang Xu (Ministry of Education and Shanxi Province, China); Pengcheng Su (Ministry of Education and Shanxi Province, China); Li Liu (Ministry of Education and Shanxi Province, China); Anbang Wang (Ministry of Education and Shanxi Province, China); Yuncai Wang (Taiyuan University of Technology, China);  

00:00 Chaotic Brillouin Optical Coherent Domain Reflectometry  
Zhe Ma (Taiyuan University of Technology, China); Mingliang Zhang (Taiyuan University of Technology, China);  

00:00 Performance Analysis of a Yb$^{3+}$-doped Chaotic Fiber Ring Laser  
Lingzhen Yang (Taiyuan University of Technology, China); Li Zhang (Taiyuan University of Technology, China); Feifei Wang (Taiyuan University of Technology, China); Naijun Xu (Taiyuan University of Technology, China); Jun Zhang (Taiyuan University of Technology, China);  

00:00 Complementary Plasmonic Transfer through Laser-induced Nanostructuring  
Tianrui Zhai (Beijing University of Technology, China); Yonglu Wang (Beijing University of Technology, China); Xiping Zhang (Beijing University of Technology, China);
00:00  From Chaotic to Random Lasers  
Wei Li Zhang (University of Electronic Science & Technology of China, China); Shi Wei Li (University of Electronic Science & Technology of China, China); Rui Ma (University of Electronic Science & Technology of China, China); Yun Jiang Rao (University of Electronic Science & Technology of China, China); Zinan Wang (University of Electronic Science & Technology of China, China);

00:00  Random Fiber Laser with the Polarized Pump  
Mengqiu Fan (University of Electronic Science & Technology of China, China); Han Wu (University of Electronic Science & Technology of China, China); Zinan Wang (University of Electronic Science & Technology of China, China);

00:00  Portable Interferometric Microscopy with Sub-nanometer Accuracy for Ultrafast Dynamics in Biological Samples  
Natan T. Shaked (Tel-Aviv University, Israel);

00:00  Modification of Simplified Modal Method for Subwavelength Triangular Grating with Very High Efficiency  
Bin Wang (Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, China); Yihui Wu (Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, China); Peng Hao (Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, China); Wenchao Zhou (Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, China);

00:00  Nanopatterning beyond the Far-field Diffraction Limit Using Photochromism  
Rajesh Menon (The University of Utah, USA);

00:00  Optical Third-harmonic Generation in Au-CdTe  
Liwei Liu (ChangChun University of Science and Technology, China); Yue Wang (ChangChun University of Science and Technology, China); YueShu Feng (ChangChun University of Science and Technology, China); Jiaqi Zhang (ChangChun University of Science and Technology, China);

00:00  Plasmonic Liquid Marble for Quantitative and Multiplex Ultratrace Molecular SERS Sensing  
Xing Yi Ling (Nanyang Technological University, Singapore);

00:00  Femtosecond Laser Nanofabrication: An Enabler for Multifunctional Microfluidic Devices  
Hong-Bo Sun (Jilin University, China);

00:00  Raman Microscopy beyond the Diffraction Limit  
Satoshi Kawata (Osaka University, Japan);

Session 3P_10b  
SC3: Spectroscopy and Nanoscopy for Sensing and Imaging  
Wednesday PM, August 27, 2014  
Room J  
Organized by Yihui Wu  
Chaired by Yihui Wu

00:00  Portable Interferometric Microscopy with Sub-nanometer Accuracy for Ultrafast Dynamics in Biological Samples  
Natan T. Shaked (Tel-Aviv University, Israel);

00:00  Modification of Simplified Modal Method for Subwavelength Triangular Grating with Very High Efficiency  
Bin Wang (Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, China); Yihui Wu (Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, China); Peng Hao (Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, China); Wenchao Zhou (Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, China);

00:00  Nanopatterning beyond the Far-field Diffraction Limit Using Photochromism  
Rajesh Menon (The University of Utah, USA);

00:00  Optical Third-harmonic Generation in Au-CdTe  
Liwei Liu (ChangChun University of Science and Technology, China); Yue Wang (ChangChun University of Science and Technology, China); YueShu Feng (ChangChun University of Science and Technology, China); Jiaqi Zhang (ChangChun University of Science and Technology, China);

Session 3P_11a  
SC4: Novel Materials and Technologies for Microwave Components  
Wednesday PM, August 27, 2014  
Room K  
Organized by Maurizio Bozzi, Hendrik Rogier  
Chaired by Maurizio Bozzi, Sam Agneessens

00:00  Coupled Line 180° Hybrids with Modified Transdirectional Couplers  
Hongmei Liu (Dalian Maritime University, China); Shao-Jun Fang (Dalian Maritime University, China); Zhongbao Wang (Dalian Maritime University, China);

00:00  Brush-painted Silver Nanoparticle UHF RFID Tags on Fabric Substrates  
Johanna Virkki (Tampere University of Technology, Finland); Toni Bjorninen (Tampere University of Technology, Finland); Lauri Sydanheimo (Tampere University of Technology, Finland); Leena Ukkonen (Tampere University of Technology, Finland);

00:00  Combining SIW Techniques and Textile Materials for High Performance Wearable Antennas  
Sam Agneessens (Ghent University, Belgium); Sam Lemey (Ghent University, Belgium); Hendrik Rogier (Ghent University, Belgium);

00:00  Paper-based Substrate Integrated Waveguide Technology for the Future Generation of Eco-friendly Microwave Components  
Stefano Moscato (University of Pavia, Italy); Riccardo Mora (University of Pavia, Italy); Maurizio Bozzi (University of Pavia, Italy); Luca Perregrini (University of Pavia, Italy);

00:00  Using Subwavelength Diffraction Gratings to Design Open Electromagnetic Cavities  
Mathieu Dupre (ESPCI ParisTech & CNRS, France); Mathias Fink (ESPCI ParisTech & CNRS, France); Geoffroy Lerosey (ESPCI ParisTech & CNRS, France);
Session 3P.11b
SC4: Microwave and Millimeter-wave Measurements and Sensing

Wednesday PM, August 27, 2014
Room K
Organized by Masahiro Horibe
Chaired by Masahiro Horibe

00:00 Precipitation Retrievals Combining of FY3C MWHTS Observations and WRF Predicted Models
Jieying He (Chinese Academy of Sciences, China); Shenwei Zhang (Center for Space Science and Applied Research, Chinese Academy of Sciences, China);

00:00 Identification as a Solution to Ill-posed Problems in Practice of Microwave Measurements
Sergey Mikhailovich Nikulin (Alekseev’s Nizhny Novgorod State Technical University, Russia); Alezey Torgovanov (Alekseev’s Nizhny Novgorod State Technical University, Russia);

00:00 Measurement Large Signal Nonlinear Microwave Circuit S-parameters UsingSpatially Remote Load
Sergey Mikhailovich Nikulin (Alekseev’s Nizhny Novgorod State Technical University, Russia); Alezey Torgovanov (Alekseev’s Nizhny Novgorod State Technical University, Russia); Anton S. Shipunov (Alekseev’s Nizhny Novgorod State Technical University, Russia);

00:00 Identification of the Parameters of Coaxial-to-stripline Transition, Striplines and Electronic Components Models
Anton S. Shipunov (Alekseev’s Nizhny Novgorod State Technical University, Russia); Oleg V. Lavrichev (Arzamas Instrument Plant JSC, Russia); Sergey Michailovich Nikulin (Alekseev’s Nizhny Novgorod State Technical University, Russia);

00:00 Identification of the Parameters of Coaxial-to-stripline Transition, Striplines and Electronic Components Models
Anton S. Shipunov (Alekseev’s Nizhny Novgorod State Technical University, Russia); Oleg V. Lavrichev (Arzamas Instrument Plant JSC, Russia); Sergey Michailovich Nikulin (Alekseev’s Nizhny Novgorod State Technical University, Russia);

00:00 Localisation of Motionless Persons in 3D Space by UWB Radar
Peter Kazimir (Technical University of Kosice, Slovakia); Dusan Kocur (Technical University of Kosice, Slovakia); J. Fortes (Technical University of Kosice, Slovakia); Rudolf Zetik (Ilmenau University of Technology, Germany);

00:00 Broadband Measurement of Complex Permittivity for Liquids Using the Open-ended Cut-off Circular Waveguide Reflection Method
Kouji Shibata (Hachinohe Institute of Technology, Japan);

00:00 On Capacity Performance of 2 × 2 Satellite-earth Link at 30 GHz in Rain Environment
Jing Yang (Xi’dian University, China); Xiaowei Xue (Xi’dian University, China); Shuhong Gong (Xi’dian University, China);

00:00 Chaotic Radar Based on Microwave Nonlinear Circuit
Jingxia Li (Ministry of Education and Shanxi Province, China); Hang Xu (Ministry of Education and Shanxi Province, China); Jianguo Zhang (Ministry of Education and Shanxi Province, China); Bingjie Wang (Ministry of Education and Shanxi Province, China); Yuncai Wang (Taiyuan University of Technology, China);
00:00 Chaos Time Domain Reflectometry for Locating Faults on Live Wires
Hang Xu (Ministry of Education and Shanxi Province, China); Bingjie Wang (Ministry of Education and Shanxi Province, China); Jiaqiu Zhang (Ministry of Education and Shanxi Province, China); Li Liu (Ministry of Education and Shanxi Province, China); Jingia Li (Ministry of Education and Shanxi Province, China); Yuncai Wang (Taiyuan University of Technology, China);

00:00 Electromagnetic Surface Wave Scattering with Microwaves
Maha Chamtouri (Université de Lyon, France); Olivier Merchiers (CETHIL — Centre de Thermique de Lyon, France); Mathieu Francheur (University of Utah, USA); Herve Tortel (Aix-Marseille University, France); Jean-Michel Geffrin (Université Paul Cezanne Aix-Marseille III, France); Rodolphe Vaillon (Université de Lyon, France);

Session 3P_12a
SC4: MIMO Systems and Applications

Wednesday PM, August 27, 2014
Room L
Organized by Mario Marques da Silva, Elvino Sousa
Chaired by Mario Marques da Silva

00:00 On Coordinated Multi-Point Transmission for Cellular Environments
Mario Marques da Silva (Instituto de Telecomunicacoes, Portugal); Americo Correia (Instituto de Telecomunicacoes, Portugal); Rui Dinis (ISCTE/Instituto de Telecomunicacoes, Portugal); Paulo Montezuma (Instituto de Telecomunicacoes, Portugal);

00:00 Conceptual Paper: Performance of Space Diversity-combining Using Iterative Algorithms Compare with Maximal Ratio Combining
Mohsen Riahi Manesh (Multimedia University, Malaysia); Mohsen Akbari (University of Malaya, Malaysia); Ahmed Wasif Reza (University of Malaya, Malaysia); Kamarul Ariffin Noordin (University of Malaya, Malaysia);

00:00 Path Loss Model with Multiple-antenna
Hae-Gyu Park (Chungbuk National University, South Korea); Hongsk Keum (Electromagnetic Wave Technology Institute, Korea); Heung-Gyoung Ryu (Chungbuk National University, Korea);

00:00 Coordinated Multi-Point MIMO Processing for 4G
Carlos Reis (Instituto de Telecomunicacoes, Portugal); Americo Correia (Instituto de Telecomunicacoes, Portugal); Nuno Souto (ISCTE, Portugal); Mario Marques da Silva (Instituto de Telecomunicacoes, Portugal);

00:00 Multiple Input Multiple Output System with Multi User Support Based on Directive Information Transmission
Paulo Montezuma Carvalho (Universidade Nova de Lisboa, Portugal); Mario Marques da Silva (Instituto de Telecomunicacoes, Portugal); Rui Dinis (Universidade Nova de Lisboa, Portugal);

00:00 Efficiency of MIMO and Receive Diversity in Semi-arched Tunnels
Martine Lienard (University of Lille, France); Jose-Maria Molina-Garcia-Pardo (Technical University of Cartagena (UPCT), Spain); Concepcion Sanchez-Borras (University of Catolica San Antonio of Murcia, Spain); Pierre Degauque (University of Lille, France);

00:00 Channel Capacity Experiment of a Polarization Controlled MIMO Antenna for Wearable Applications
Kun Li (Toyama University, Japan); Kazuhiro Honda (Toyama University, Japan); Koichi Ogawa (Toyama University, Japan);

00:00 Model Analysis and Isolation Enhancement of Multiple Antennas
Zhi Li (Beihang University, China); Qi Wu (Beihang University, China); Donglin Su (Beihang University, China);

Session 3P_12b
SC4: Antenna-channel Interactions and Multipath Wireless Channels

Wednesday PM, August 27, 2014
Room L
Organized by Andres Alayon Glazunov

00:00 Non-stationarity Characterization for Vehicle-to-vehicle Channels Using Correlation Matrix Distance and Shadow Fading Correlation
Rusi He (Beijing Jiaotong University, China); Olivier Renaudin (Universite Catholique de Louvain, Belgium); Veli-Matti Kolmonen (Aalto University, Finland); Katsuyuki Haneda (Aalto University, Finland); Zhangdui Zhong (Beijing Jiaotong University, China); Bo Ai (Beijing Jiaotong University, China); Claude Oestges (Université Catholique de Louvain (UCL), Belgium);
00:00 Broadband Channel Measurements inside Metro Station  
Ke Guan (Beijing Jiaotong University, China);  
Zhangdai Zhong (Beijing Jiaotong University, China);  
Cesar Briso-Rodriguez (Universidad Politecnica de Madrid, Spain);  
Carlos Rodriguez-Sanchez (Metro de Madrid, Spain);  
Juan Moreno (Metro de Madrid, Spain);  
Sergio Perez (Universidad Politecnica de Madrid, Spain);  
Bi Ai (Beijing Jiaotong University, China);
00:00 Impact of Shadowing Correlation on Microdiversity and Marcodiversity of Cellular System in High-speed Railway Environments  
Bei Zhang (Beijing Jiaotong University, China);  
Zhangdai Zhong (Beijing Jiaotong University, China);  
Bo Ai (Beijing Jiaotong University, China);  
Ruisi He (Beijing Jiaotong University, China);
00:00 Design and Performance Evaluation of Single Antenna SSD (Simultaneous Single Band Duplex) System Using Turbo Equalizer  
Changyoung An (Chungbuk National University, South Korea);  
Hongsk Keum (Electromagnetic Wave Technology Institute, Korea);  
Heung-Gyoon Ryu (Chungbuk National University, Korea);
00:00 A Novel 3D Ray-tracing Acceleration Technique Based on Kd-tree Algorithm for Radio Propagation Prediction in Complex Indoor Environment  
Xiaowei Mei (Zhejiang University, China);  
Yong Zhang (Zhejiang University, China);  
Hai Lin (Zhejiang University, China);
00:00 Three Dimensional (3D) Electromagnetic Field Distributions in the Air and Relative Diversity Gain  
Selcuk Helhel (Akdeniz University, Turkey);  
Sukru Ozen (Akdeniz University, Turkey);  
Yalcin Albayrak (Akdeniz University, Turkey);  
Ibrahim Bahaadir Basygit (Akdeniz University, Turkey);
00:00 On Effective Gain Variability with Antenna Orientation  
Hassan El-Sallabi (Texas A&M University at Qatar, Qatar);  
Mohamed Abdallah (Texas A&M University, Qatar);  
Khalid Qaraqe (Texas A&M University at Qatar, Qatar);
00:00 Survey on Iterative-based Schemes Algorithms as Optimal Cooperative Spectrum Sensing Methods in Cognitive Radio Network Issue to Improve QoS  
Mohsen Akbari (University of Malaya, Malaysia);  
Mohsen Riahi Manesh (Multimedia University, Malaysia);  
Ahmed Wasif Reza (University of Malaya, Malaysia);  
Kamarul Ariffin Noordin (University of Malaya, Malaysia);
00:00 CDMA Signaling in Cognitive Radio Spectrum Mobility to Increase QoS  
Mohsen Akbari (University of Malaya, Malaysia);  
Mohsen Riahi Manesh (Multimedia University, Malaysia);  
Ahmed Wasif Reza (University of Malaya, Malaysia);  
Kamarul Ariffin Noordin (University of Malaya, Malaysia);
00:00 Depth Profiling and Variation of Soil Permittivity with Temperature in Ondo State, Nigeria  
K. D. Adedayo (Federal University of Technology, Nigeria);  
Moses O. Ajewole (Federal University of Technology Akure, Nigeria);  
A. G. Ashidi (Federal University of Technology, Nigeria);  
S. A. Oni (College of Education, Nigeria);  
Samuel Toluwalope Ogunjo (Federal University of Technology, Nigeria);
00:00 Algorithms for Indoor Localization on WLAN Networks  
Selcuk Helhel (Akdeniz University, Turkey);  
Atalay Kacakusak (Akdeniz University, Turkey);
00:00 A Simple and Compact Ultra Wide Band Antenna with Dual Band Notching for WIMAX and WLAN Using Defected Ground Structure  
Amit Chauhan (Kurukshetra University, India);  
Sonia Sharma (Kurukshetra University, India);  
Chandra Charu Tripathi (Kurukshetra University, India);
00:00 Similarity Measure of Fading Profiles of Different Antenna States of Reconfigurable Antennas  
Hassan El-Sallabi (Texas A&M University at Qatar, Qatar);  
Mohamed Abdallah (Texas A&M University, Qatar);  
Khalid Qaraqe (Texas A&M University at Qatar, Qatar);

Session 3P_13a  
SC4: RFID Antennas  

Wednesday PM, August 27, 2014  
Room M  
Organized by Yuan Yao, Chaowei Wang

00:00 Cross-dipole Tag Antenna with AMC for UHF RFID On-body Applications  
Chien-Wen Chiu (National Ilan University, Taiwan);  
Chen-An Ou (National Ilan University, Taiwan);  
Xun-Ping Guo (National Ilan University, Taiwan, R.O.C.);
00:00 A Novel Method to Measure the Two States RFID Chip Impedance
Hongbin Ge (Beijing University of Posts and Telecommunications, China); Yuan Yao (Beijing University of Posts and Telecommunications, China); Junsheng Yu (Beijing University of Posts and Telecommunications, China); Xiaodong Chen (Queen Mary, University of London, UK);

00:00 Design of Robust UHF RFID Tag Antenna for Freespace and Metal Surface
Ye Qi (Beijing University of Posts and Telecommunications, China); Yuan Yao (Beijing University of Posts and Telecommunications, China); Hongbin Ge (Beijing University of Posts and Telecommunications, China); Junsheng Yu (Beijing University of Posts and Telecommunications, China); Xiaodong Chen (Queen Mary University of London, UK);

00:00 A Novel Fully Printed 28-bits Capacity Chipless RFID Tag Based on Open Conical Resonators
Raji Nair (TU Dresden, Germany); Marvin Renan Barahona Medina (TU Dresden, Germany); Diego Betancourt (TU Dresden, Germany); Georg C. Schmidt (TU Chemnitz, Germany); Maxi Bellmann (TU Chemnitz, Germany); Daniel Hofi (TU Chemnitz, Germany); Dirk Plettner (TU Dresden, Germany); Arbed C. Hubler (TU Chemnitz, Germany); Frank Ellinger (TU Dresden, Germany);

00:00 Design of a Material-in-container Level Detecting RFID Sensor Antenna
Yilong Huang (Beijing University of Posts and Telecommunications, China); Yuan Yao (Beijing University of Posts and Telecommunications, China); Junsheng Yu (Beijing University of Posts and Telecommunications, China); Xiaodong Chen (Queen Mary University of London, UK);

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Session 3P.13b
Advanced Antenna Theory and Techniques

Wednesday PM, August 27, 2014
Room M
Organized by Wenxing Li
Chaired by Wenxing Li

00:00 A Dual-band Circularly Polarized Antenna with Novel Feeding Method for BDS, GPS and GLONASS Application
Jin Zhang (University of Electronic Science and Technology of China, China); Xian Qi Lin (University of Electronic Science and Technology of China, China); Li Ying Nie (University of Electronic Science and Technology of China, China); Fei Cheng (University of Electronic Science and Technology of China, China); Zan Yu Kang (University of Electronic Science and Technology of China, China); Yuan Jiang (University of Electronic Science and Technology of China, China); Jia Wei Yu (University of Electronic Science and Technology of China, China);

00:00 The Multiple Periodic Structure Antenna Design
Zi Long Ma (The University of Hong Kong, China); Li Jun Jiang (The University of Hong Kong, China); S. Gupta (The University of Hong Kong, China); Wei E. I. Sha (The University of Hong Kong, China);
00:00 Analysis and Design of Beam-scanning Reflectarray with Circular Polarization
Zuozing Dai (Shanghai Radio Equipment Research Institute, China); Yuanbo Shang (Shanghai Radio Equipment Research Institute, China); Fengwei Yao (Science and Technology on Electromagnetic Scattering Laboratory, China); Xiaobo Xuan (Shanghai Radio Equipment Research Institute, China);

00:00 A Novel Hybrid Reconfigurable Antenna for Portable Wireless Terminal Applications
Wenzing Li (Harbin Engineering University, China); Lei Bao (Harbin Engineering University, China); Si Li (Harbin Engineering University, China); Yingsong Li (Harbin Engineering University, China);

00:00 Novel Hepta-band Coupled-fed Antenna for WWAN/LTE Metal-ring-frame Smartphone Applications
Li-Wan Zhang (University of Electronic Science and Technology of China, China); Yong-Ling Ban (University of Electronic Science and Technology of China, China);

00:00 A Hepta-band WWAN/LTE Antenna Design for Metal-rimmed Smartphone Applications
Yun Fei Qiang (University of Electronic Science and Technology of China, China); Yong-Ling Ban (University of Electronic Science and Technology of China, China);

00:00 Printed Multi-band Slot Antenna Surrounded by a Metal Ring for WWAN Smartphone Applications
Peng-Peng Li (University of Electronic Science and Technology of China, China); Yong-Ling Ban (University of Electronic Science and Technology of China, China);

00:00 Tunable Antenna Introductions, Challenges and Opportunities
Guangqi Yang (Shanghai University, China); Hao Wang (Shanghai University, China); Li Yang (Northeastern University, China);

00:00 Classification of Acrylonitrile-butadiene-styrene and Polypropylene with Use of Microwave Resonance
Yuva Mori (Tokyo Denki University, Japan); Ken Tahara (Kanto Electronic Application and Development Corporation, Japan); Takehiko Kobayashi (Tokyo Denki University, Japan);

00:00 Measurement of Temperature Increase of Metal Hip Replacements During Magnetic Resonance Imaging
Miroslav Wiewegh (Czech Technical University in Prague, Czech Republic); Jan Vrba (Czech Technical University in Prague, Czech Republic);

00:00 Electric Fields inside an Ambulance from a Roof Antenna
Hsing-Yi Chen (Yuan Ze University, Taiwan); Chun-Kai Wang (Yuan Ze University, Taiwan);

00:00 A Multi-purpose Flexible Antenna for Musculoskeletal MR Imaging at 3T
Rui Zhang (Peking University, China); Qunzhi Chen (Peking University, China); Honggang Yuan (The University of North Carolina at Chapel Hill, USA);

00:00 Printed Multi-band Slot Antenna Surrounded by a Metal Ring for WWAN Smartphone Applications
Peng-Peng Li (University of Electronic Science and Technology of China, China); Yong-Ling Ban (University of Electronic Science and Technology of China, China);

00:00 Tunable Antenna Introductions, Challenges and Opportunities
Guangqi Yang (Shanghai University, China); Hao Wang (Shanghai University, China); Li Yang (Northeastern University, China);

00:00 FEM Analysis of Conical Type Coaxial Open-ended Probe for Dielectric Measurement
Homa Arab Salmanabadi (Ecole Polytechnique of Montreal, Canada); Cevdet Akyel (École Polytechnique de Montréal, Canada);

00:00 Zeroth-Order Mode Resonator Metamaterial Applicators for Superficial and Deep Local Microwave Hyperthermia
David Vrba (Czech Technical University in Prague, Czech Republic); Jan Vrba, Jr. (Czech Technical University in Prague, Czech Republic); Jan Vrba (Czech Technical University in Prague, Czech Republic); Miroslav Wiewegh (Czech Technical University in Prague, Czech Republic);

00:00 Anisotropic Dielectric Material in Design of Applicator for Superficial Microwave Hyperthermia
Jan Vrba, Jr. (Czech Technical University in Prague, Czech Republic); David Vrba (Czech Technical University in Prague, Czech Republic); Jan Vrba (Czech Technical University in Prague, Czech Republic); Miroslav Wiewegh (Czech Technical University in Prague, Czech Republic);

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**Session 3P_14a**

**Application of EM Field in Medicine and in Ecological Industrial Technologies**

**Wednesday PM, August 27, 2014**

**Room N**

Organized by Jan Vrba

Chaired by Jan Vrba
00:00 Microwave Technology Based Medical Imaging and Diagnostics
Jan Vrba, Jr. (Czech Technical University in Prague, Czech Republic); David Vrba (Czech Technical University in Prague, Czech Republic);

00:00 System for Animal EM Exposure with Well Defined Dosimetry and First Results of Biological Experiments
Jan Vrba (Czech Technical University in Prague, Czech Republic); David Vrba (Czech Technical University in Prague, Czech Republic); Jan Vrba, Jr. (Czech Technical University in Prague, Czech Republic); Frantisek Vozech (Charles University, Czech Republic); Jan Barcal (Charles University in Prague, Czech Republic); Luca Vannucci (Institute of Microbiology, Czech Academy of Sciences, Czech Republic);

00:00 The Effect of Hypomagnetic Field on the Behavior of Adult Male Mice
Weichuan Mo (Institute of Biophysics, Chinese Academy of Sciences, China); Jingpeng Fu (Institute of Biophysics, Chinese Academy of Sciences, China); Haimin Ding (Beijing University of Chinese Medicine, China); Ying Liu (Institute of Biophysics, Chinese Academy of Sciences, China); Qian Hua (Beijing University of Chinese Medicine, China); Rongqiao He (Institute of Biophysics, Chinese Academy of Sciences, China);

00:00 FDTD Analysis of Digitally-modulated Electromagnetic Wave Propagation in Human Head
Tuya Wuren (Kurume National College of Technology, Japan); Y. Tanaka (Kurume National College of Technology, Japan); Masafumi Fujii (University of Toyama, Japan); K. Kamiyama (University of Toyama, Japan); A. Ando (University of Toyama, Japan); F. Costen (The University of Manchester, UK);

00:00 Analysis of Spectral Characteristics of Normal Fibroblasts and Fibroblasts Cultured with Cancer Cells in Terahertz Frequency Range
Evgenii A. Strepitov (National Research University of Information Technologies, Mechanics and Optics, Russia); Igor V. Prozheev (ITMO University, Russia); Nikolay Sergeevich Balbekin (ITMO University, Russia); Max I. Sulatsky (ITMO University, Russia); Mikhail Konstantinovich Khodzitsky (ITMO University, Russia); O. A. Smolyanskaya (National Research University of Information Technologies, Mechanics and Optics, Russia); A. S. Trulioff (Saint-Petersburg State University, Russia); M. K. Serebryakova (Saint-Petersburg State University, Russia);

00:00 Bio-fate of Bone-marrow MSCs after Microwave Exposure in Vitro
Changzhen Wang (Institute of Radiation Medicine AMMS, China); Xiaoyan Wang (Beijing Institute of Basic Medical Sciences, China); Hongmei Zhou (Institute of Radiation Medicine AMMS, China); Shaoxia Wang (Beijing Institute of Radiation Medicine, China); Lifeng Wang (Beijing Institute of Radiation Medicine, China); Xinping Xu (Beijing Institute of Radiation Medicine, China); Ruiyun Peng (Beijing Institute of Radiation Medicine, China); Xiangjun Hu (Beijing Institute of Radiation Medicine, China);
Session 4A1
3. FocusSession.SC3: Real-time High-speed Measurements for Communication, Biomedical & Industrial Appl. 1 & 2

Thursday AM, August 28, 2014
Room A
Organized by Bahram Jalali, Chao Wang, Mohammad H. Asghari
Chaired by Chao Wang

00:00 A Channelized Wideband Analog to Digital Conversion Based on Coherent Optical Frequency Combs
Yitang Dai (Beijing University of Posts and Telecommunications, China); Haijie Yu (Beijing University of Posts and Telecommunications, China); Feifei Yin (Beijing University of Posts and Telecommunications, China); Jianqiang Li (Beijing University of Posts and Telecommunications, China); Junhai Yu (Beijing University of Posts and Telecommunications, China); Jingtong Lin (Beijing University of Posts and Telecommunications, China);

00:00 Characterizing Microwave Modulation Efficiency of an Optical Phase Modulator by Using Dispersion Induced Phase Modulation to Intensity Modulation Conversion
Yong Liu (University of Electronic Science and Technology of China (UESTC), China); Shangjian Zhang (University of Electronic Science and Technology of China (UESTC), China); Xinghai Zhou (University of Electronic Science and Technology of China (UESTC), China); Yali Zhang (University of Electronic Science and Technology of China (UESTC), China); Rongguo Lu (University of Electronic Science and Technology of China (UESTC), China);

00:00 Ultrafast Web-inspecting Laser Scanner
Akio Yazaki (University of California, Los Angeles, USA); Ata Mahjoubfar (University of California, Los Angeles, USA); Chanju Kim (University of California, Los Angeles, USA); Jacky Chan (University of California, Los Angeles, USA); Keisuke Goda (University of California, Los Angeles, USA); Masahiro Watanebe (Hitachi, Ltd., Japan); Bahram Jalali (University of California at Los Angeles, USA);

00:00 Time-encoded Amplified Microscopy for Ultrafast Imaging Using a Multiwavelength Laser Source
Ming Li (Institute of Semiconductors, Chinese Academy of Sciences, China); Ye Deng (Institute of Semiconductors, Chinese Academy of Sciences, China); Ningbo Huang (Institute of Semiconductors, Chinese Academy of Sciences, China); Jose Azana (Institut National de la Recherche Scientifique-Énergie, Matériaux et Télécommunications (INRS-EMT), Canada); Ninghua Zhu (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Fast Surface Imaging by Time-stretch Technique
Hongwei Chen (Tsinghua University, China); Fangjian Xing (Tsinghua University, China); Cheng Lei (Tsinghua University, China); Minghua Chen (Tsinghua University, China); Qing Yang (Tsinghua University, China); Shizhong Xie (Tsinghua University, China);

00:00 Long-range and Biomedical Measurements Based on Optical Fiber Strain Senor
Changquan Yu (A*STAR Institute for Infocomm Research, Singapore); Zhishao Chen (A*STAR Institute for Infocomm Research, Singapore); Junhao Hu (AnSensing Technology PTE LTD, Singapore);

00:00 Dispersive Fourier Transformation for Fast Real-time Imaging and Spectroscopy
Keisuke Goda (University of California, Los Angeles, USA); Bahram Jalali (University of California at Los Angeles, USA); Takuro Ideguchi (University of Tokyo, Japan);

00:00 Serial and Parallel Optical Coherence Tomography for Fast Orthogonal Image Slicing
Adrian Gh. Podoleanu (University of Kent, United Kingdom);

00:00 Research on OpenMP Model of the Parallel Programming Technology for Homogeneous Multicore DSP
Minjie Wu (National University of Defense Technology, China); Weiwei Wu (National University of Defense Technology, China); Deping Zhang (National University of Defense Technology, China); Hongyu Zhao (National University of Defense Technology, China); Nai-Chang Yuan (National University of Defense Technology, China);

00:00 Femto-second Arbitral Optical Waveform Synthesis Based on Optical Frequency Comb Synthesizer and Analyzer
Tatsutoshi Shiota (Saitama University, Japan);
09:00 Coherent Raman Dual Frequency Comb Spectroscopy
Takuro Ideguchi (The University of Tokyo, Japan); Simon Holzner (Max-Planck-Institut fur Quantenoptik, Germany); Birgitta Bernhardt (Max-Planck-Institut fur Quantenoptik, Germany); Guy Guelachvili (Institut des Sciences Moléculaires d’Orsay, France); Nathalie Picque (Max-Planck-Institut fur Quantenoptik, Germany); Theodor W. Hansch (Max-Planck-Institut fur Quantenoptik, Germany);

09:20 Advance of Research on Coaxial Relativistic Backward Wave Oscillator
Yan Teng (Northwest Institute of Nuclear Technology, China); Jun Sun (Northwest Institute of Nuclear Technology, China); Zhimin Song (Northwest Institute of Nuclear Technology, China); Changhua Chen (Northwest Institute of Nuclear Technology, China); Zhaoyu Du (Northwest Institute of Nuclear Technology, China);

09:40 An Intra-cavity Spatial Light Modulator Laser for Desired Planar Laser Modes
Pengfei Xu (Sun Yat-sen University, China); Guoxuan Zhu (Sun Yat-sen University, China); Yanfeng Zhang (Sun Yat-sen University, China); Hui Chen (Sun Yat-sen University, China); Yujie Chen (Sun Yat-sen University, China); Siyuan Yu (Sun Yat-sen University, China);

10:20 A Study on Crosstalk-free Polarization Splitter Based on Single-polarized Photonic Crystal Fibers
Zejun Zhang (Muroran Institute of Technology, Japan); Yasuhide Tsuji (Muroran Institute of Technology, Japan); Masashi Eguchi (Chitose Institute of Science and Technology, Japan);

10:40 Reduction of Bend Losses at Sharp Bend in Post Wall Waveguide
Kenichiro Yashiro (Chiba University, Japan); Ning Guan (Fujikura Ltd., Japan);

11:00 A Unified Field Analysis Method for IR/MMW Beam Splitter
Yi Tian (Beijing Institute of Technology, China); Hui Yan (Beijing Institute of Technology, China); Xin Wang (Beijing Institute of Technology, China); Li Zhang (Shanghai Institute of Electro-mechanical Engineering, China); Zhuo Li (Beijing Institute of Technology, China);

11:20 The Squarax Amplifier: An Electromagnetic and Thermo-mechanical Innovation
Alberto Leggieri (Università degli Studi di Roma “Tor Vergata”, Italy); Davide Passi (Università degli Studi di Roma “Tor Vergata”, Italy); Franco Di Paolo (Università degli Studi di Roma “Tor Vergata”, Italy);

11:40 Injection Phase-locking of a High-power Transit-time Oscillator
Lin Lian (National University of Defence Technology, China); Juntao He (National University of Defence Technology, China); Junpu Ling (National University of Defence Technology, China); Zumin Qi (National University of Defence Technology, China); Yi Hu (National University of Defence Technology, China);
Session 4A3
MS-1.3-1.4: Organic Transistors/Integrated Circuits and Dye-sensitized Solar Cells

Thursday AM, August 28, 2014
Room C
Organized by Shien-Ping Feng, Paddy Kwok Leung Chan

00:00 Low Voltage Flexible Organic Thermistor for Temperature Sensing
X. C. Ren (The University of Hong Kong, China); Paddy Kwok Leung Chan (The University of Hong Kong, China);

00:00 Active-matrix Organic Transistor and LED Array on Commercial Printer Paper
Boyu Peng (The University of Hong Kong, China); Paddy Kwok Leung Chan (The University of Hong Kong, China);

00:00 Piezoresistive Wearable Pressure Sensor with Cotton Cloth as Substrate and Spacer
Zongrong Wang (The University of Hong Kong, China); Paddy Kwok Leung Chan (The University of Hong Kong, China);

00:00 The Roles of Different NiO Compact Blocking Layers in P-type Sensitized Solar Cells
Huan Wang (Huazhong University of Science and Technology, China); Xianwei Zeng (Huazhong University of Science and Technology, China); Wenjun Zhang (Huazhong University of Science and Technology, China); Wei Chen (Huazhong University of Science and Technology, China);

00:00 Organic Dye-sensitized Solar Cells
Peng Wang (Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, China);

00:00 Metallization and Nucleation Investigation of Silver Deposition on SAM Pre-treated Flexible Substrate
Shien-Ping Feng (The University of Hong Kong, China); Hau Nga Yu (The University of Hong Kong, China);

00:00 Metal-free Nitrogen Doped Microwave-exfoliated Graphene Nanosheets (N-MEG) as High-electrocatalytic Counter Electrode for Dye Sensitized Solar Cells
Shien-Ping Feng (The University of Hong Kong, China);

Session 4A4
SC2&3: Plasmonics for Sensing Applications

Thursday AM, August 28, 2014
Room D
Organized by Aaron Ho-Pui Ho, Dangyuan Lei
Chaired by Aaron Ho-Pui Ho, Dangyuan Lei

00:00 Evanescent Wave Microscopy for Cellular and Biomolecular Characterisation
Mike Somekh (University of Nottingham, UK); Suejit Pechprasarn (Hong Kong Polytechnic University, China); Jiny Zhang (University of Nottingham, UK); Melissa Mather (University of Nottingham, UK);

00:00 Surface-enhanced Raman Spectroscopy for Biological Applications
Bin Ren (Xiamen University, China); Li-Jia Xu (Xiamen University, China); Pei Hu (Xiamen University, China); Xiao-Shan Zheng (Xiamen University, China); Cheng Zong (Xiamen University, China);

00:00 Surface-enhanced Raman Spectroscopy for Biological Applications
Bin Ren (Xiamen University, China); Li-Jia Xu (Xiamen University, China); Pei Hu (Xiamen University, China); Xiao-Shan Zheng (Xiamen University, China); Cheng Zong (Xiamen University, China);

00:00 Plasmonic Near-field Localization for Sensing and Imaging of Biomolecular Interactions
Donghyun Kim (Yonsei University, South Korea);

00:00 Evolution of Light-induced Vapor Generation at a Liquid-immersed Metallic Nanoparticle
Zheyu Fang (Peking University, China);
00:00 Surface-enhanced Raman Scattering of Nanostuctures
Zhipeng Li (Capital Normal University, China); Hongxing Xu (Institute of Physics, Chinese Academy of Sciences, China);

00:00 Vector Beams Assisted Microscopic Phase-sensitive Surface Plasmon Resonance Biosensor
Changjun Min (Nankai University, China); Chonglei Zhang (Nankai University, China); X.-C. Yuan (Shenzhen University, China);

00:00 Plasmonic Sensing Based on Metal Single-nanowire Waveguides
Fuxing Gu (University of Shanghai for Science and Technology, China); Heping Zeng (East China Normal University, China);

00:00 Tunable Plasmonic Absorption in Random Metallic Nano-islands for Optofluidic Applications
Jiajie Chen (The Chinese University of Hong Kong, China); Zhilin Kang (The Chinese University of Hong Kong, China); Guanghui Wang (The Chinese University of Hong Kong, China); Aaron Ho-Pui Ho (The Chinese University of Hong Kong, China);

00:00 Sensing with Localized Surface Plasmon Resonance of Nanoparticles
Fang Xu (The Chinese University of Hong Kong, China); Haifei Lu (The Chinese University of Hong Kong, China); Zhilin Kang (The Chinese University of Hong Kong, China); Jiajie Chen (The Chinese University of Hong Kong, China); Aaron Ho-Pui Ho (The Chinese University of Hong Kong, China);

00:00 Dressing Plasmon Resonance with Particle-microcavity Architecture for Efficient Nano-optical Trapping and Sensing
Haixi Zhang (The Chinese University of Hong Kong, China); Yanyan Zhou (Nanyang Technological University, Singapore); Xia Yu (Singapore Institute of Manufacturing Technology, Singapore); Feng Luan (Nanyang Technological University, Singapore); Jianbin Xu (The Chinese University of Hong Kong, China); Hock Chun Ong (The Chinese University of Hong Kong, China); Aaron Ho-Pui Ho (The Chinese University of Hong Kong, China);

00:00 Bifunctional Au@Pt Core-shell Nanostructures for In-situ Monitoring of Catalytic Reactions by Surface-enhanced Raman Scattering Spectroscopy
Zhi Yong Bao (The Hong Kong Polytechnic University, China); Ruibin Jiang (The Chinese University of Hong Kong, China); Xin Liu (The Hong Kong Polytechnic University, China); Jiyan Dai (The Hong Kong Polytechnic University, China); Bin Ren (Xiamen University, China); Jianfang Wang (The Chinese University of Hong Kong, China); Yuen Hong Tsang (The Hong Kong Polytechnic University, China); Dangyuan Lei (The Hong Kong Polytechnic University, China);

00:00 Gain-assisted Plasmonic Nanoshells for Biosensing Applications
Shan Yi (City University of Hong Kong, China); Siu Pang Ng (City University of Hong Kong, China); Chi Man Lawrence Wu (City University of Hong Kong, China);

00:00 Micro-analysis of Self-assembly Gold Nanoislands LSPR Biosensor Based on Atomic Force Microscopy
Guangyu Qiu (City University of Hong Kong, China); Siu Pang Ng (City University of Hong Kong, China); Chi Man Lawrence Wu (City University of Hong Kong, China);

00:00 Double-layer Gold Gratings and Their Applications
Yang Shen (Sun Yat-Sen University, China); Tianran Liu (Sun Yat-Sen University, China); Chongjun Jin (Sun Yat-Sen University, China);
00:00 Eight-fold Intergrowth of Gyroid Nets: A Chiral Dielectric Material with Optical Activity Comparable to That of Meta-materials
Gerd E. Schroder-Turk (Friedrich-Alexander-Universitat Erlangen-Nurnberg, Germany); M. Saba (Friedrich-Alexander-Universitat Erlangen-Nurnberg, Germany); M. D. Turner (Swinburne University of Technology, Australia); K. Mecke (Friedrich-Alexander-Universitat Erlangen-Nurnberg, Germany); Min Gu (Swinburne University of Technology, Australia);

00:00 Pushing and Pulling Chiral Particles with Light
K. Ding (The Hong Kong University of Science and Technology, China); S. B. Wang (The Hong Kong University of Science and Technology, China); J. Ng (Hong Kong Baptist University, China); L. Zhou (Fudan University, China); Che Ting Chan (The Hong Kong University of Science and Technology, China);

00:00 Chiral-light Generation with Helical and Multipolar Metamaterials
Manuel Decker (Australian National University, Australia); Isabelle Staude (Australian National University, Australia); Sergey S. Kruk (Australian National University, Australia); Dragomir N. Neshev (Australian National University, Australia); Yuri S. Kivshar (Australian National University, Australia);

00:00 Nonlinear Chiroptical Effects in Plasmonic Metasurfaces
Ventsislav K. Valev (University of Cambridge, UK); Jeremy J. Baumberg (University of Cambridge, UK); Nuno Braz (University College London, UK); Jan Mertens (University College London, UK); Claire Blejean (University of Cambridge, UK); Paul A. Warburton (University College London, United Kingdom); Victor V. Moshchalkov (Nanoscale Superconductivity and Magnetism & Pulsed Fields Group, Belgium); Nicolae-Coriolani Panov (University College London, United Kingdom); Thierry Verbiest (Superconductivity and Magnetism & Pulsed Fields Group, Belgium);

00:00 A Modal Approach to Metamaterials and Nanophotonics
David A. Powell (Australian National University, Australia);

00:00 Radiation of Chiral Molecules in Chiral Environment
Vasily V. Klimov (Lebedeev Physical Institute, Russian Academy of Sciences, Russia);

00:00 Anisotropy and Non-reciprocity in Boundary Conditions: Generalized PEMC Surface
Ari Sihvola (Aalto University School of Electrical Engineering, Finland); Henrik Wallen (Aalto University School of Electrical Engineering, Finland); Pasi Yla-Oijala (Aalto University School of Electrical Engineering, Finland); Sami P. Kiminki (Aalto University School of Electrical Engineering, Finland);

00:00 Planar Chiral Metamaterials: From Twisted to Conjugated Designs
Rongkuo Zhao (Imperial College London, UK);

Session 4A6
2. FocusSession.SC2: Novel Techniques for Subwavelength-focusing and Super Resolution Imaging 2

Thursday AM, August 28, 2014
Room F
Organized by Zhaowei Liu, Geoffroy Lerosey
Chaired by Zhaowei Liu, Geoffroy Lerosey

00:00 Application of Wire Metamaterial for Magnetic Resonance Imaging
A. P. Slobozhanyuk (ITMO University, Russia); P. A. Belov (ITMO University, Russia);

00:00 Plasmonic Structures for Generic Surface Plasmon Generation and Focusing
Shiqi Xiao (University of Birmingham, UK); Oscar Byrne (University of Birmingham, UK); Jensen Li (University of Birmingham, UK);

00:00 Flat Lens for Bending Waves Focusing in Time Domain
Marc Dubois (ESPCI ParisTech, France); Emmanuel Bossy (ESPCI ParisTech, France); Stefan Enoch (Institut Fresnel, France); Sebastien Guenneau (Aix Marseille University, France); Geoffroy Lerosey (ESPCI ParisTech & CNRS, France); Patrick Sebbah (ESPCI ParisTech, France);

00:00 Experimental Demonstration of Plasmonic Structured Illumination Microscopy
Feifei Wei (University of California, USA); Dylan La (University of California, USA); Hao Shen (University of California, USA); Weinei Wan (University of California, USA); Joseph Ponsetto (University of California, USA); Eric Huang (University of California, USA); Zhaowei Liu (University of California, USA);
Thursday AM, August 28, 2014

00:00 Deep Subwavelength Imaging by Metal-insulator-metal Plasmonic Lens
   Xiangang Luo (Institute of Optics and Electronics, Chinese Academy of Sciences, China); Changtao Wang (Institute of Optics and Electronics, Chinese Academy of Sciences, China); Zeyu Zhao (Institute of Optics and Electronics, Chinese Academy of Sciences, China); Ping Gao (Institute of Optics and Electronics, Chinese Academy of Sciences, China); Na Yao (Institute of Optics and Electronics, Chinese Academy of Sciences, China);

00:00 Super-resolution Focusing with Phononic Crystals
   Fabrice Lemoult (Institut Langevin, France); John H. Page (University of Manitoba, Canada);

00:00 Plasmonic Super-resolution Imaging beyond the Plasmonic Limit
   Satoshi Kawata (Osaka University, Japan);

00:00 STED Optical Nanoscopy with Inorganic Fluorescent Labels
   Xusan Yang (Peking University, China); Zhiping Zeng (Peking University, China); Xuanze Chen (Peking University, China); Yujia Liu (Peking University, China); Dayong Jin (Macquarie University, Australia); Peng Xi (Peking University, China);

00:00 Compressing Acoustic Waves with Rainbow Trapping Metamaterial
   Jie Zhu (University of California, USA); Xuefeng Zhu (Huazhong University of Science and Technology, China); Xiang Zhang (University of California, USA);

00:00 Subwavelength Resolution of 3D Diffractive Optics
   Igor V. Minin (Siberian State Geodesy Academy, Russia); Oleg V. Minin (Novosibirsk State Technical University, Russia);

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Session 4A7
SC3: High-speed Optical Communications and Advanced Optical Signal Processing. Parts 1 & 2
Thursday AM, August 28, 2014
Room G
Organized by Zhaohui Li, Xinogeng Xu, Lianshan Yan

00:00 SNR Comparison of Coherent Optical Receivers
   Miu Yoong Leong (Royal Institute of Technology (KTH), Sweden); Sergei Popov (Royal Institute of Technology (KTH), Sweden); Gunnar Jacobsen (Acreo Swedish ICT, Sweden); Sergey Sergeev (Aston University, UK);

00:00 Optical Digital-to-analog Converter Based on Mirroring Resonators and Optical Splitters
   Fanfan Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Ping Zhou (Institute of Semiconductors, Chinese Academy of Sciences, China); Qiaoshan Chen (Institute of Semiconductors, Chinese Academy of Sciences, China); Lei Zhang (Institute of Semiconductors, Chinese Academy of Sciences, China); Lin Yang (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Polarization Demultiplexing in Stokes Space for Coherent Optical Fiber Communications
   Xingwen Yi (University of Electronic Science and Technology of China, China); Zhenming Yu (University of Electronic Science and Technology of China, China); Qi Yang (State Key Lab of Optical Communication Technology and Networks, China); Kun Qiu (University of Electronic Science and Technology of China, China);

00:00 Coherent Detected Temporal Optical Code Division Multiplexing System with High Spectral Efficiency Using Nyquist Pulse Shaping
   Lin Chen (South China Normal University (SCNU), China); Xuezhi Hong (South China Normal University, China);

00:00 Quantum Cascade Lasers for Free Space Communications
   Qi Jie Wang (Nanyang Technological University, Singapore);

00:00 Multi-band Superchannel Coherent Optical Orthogonal Frequency-division Multiplexing Based on Offset QAM (OFDM/OQAM) System
   Qi Yang (State Key Lab of Optical Communication Technology and Networks, China);
00:00 Sub-symbol Based Carrier Phase Recovery in CO-OFDM System with Linear Interpolation
Xiaoqian Hong (South China Normal University (SCNU), China); Xuezhi Hong (South China Normal University, China); Sailing He (Zhejiang University, China);

00:00 All-optical Wavelength Conversion Using Optical Injection Induced Wavelength Switching in V-cavity Laser
Anbang Wang (Ministry of Education and Shanxi Province, China); Xiangyu Dong (Ministry of Education and Shanxi Province, China); Yuncai Wang (Taiyuan University of Technology, China);

00:00 Chaos Optical Time-domain Reflectometry
Takayuki Miyamoto (University of Electronic Science and Technology of China, Japan); Yingchen Wu (University of Electronic Science and Technology of China, Japan); Zhiyong Zhao (Tianjin University, China);

00:00 Application of Optical Frequency Comb Synthesizer/Analyzer to 22.4 Tbit/s Composite Amplitude and Phase Shift Keying
Takayuki Miyamoto (Saitama University, Japan); Xingwen Yi (University of Electronic Science and Technology of China, China); Zhenming Yu (University of Electronic Science and Technology of China, China); Jing Zhang (University of Electronic Science and Technology of China, China); Kun Qiu (University of Electronic Science and Technology of China, China);

00:00 Phase-conjugated Twin Waves for Optical OFDM Transmissions
Dengke Zeng (University of Electronic Science and Technology of China, China) and Phase Shift Keying

00:00 SSBI Cancellation for DD-OFDM Signal
Xuebing Zhang (Jinan University, China); Jianping Li (Jinan University, China); Zhaohui Li (Jinan University, China);

00:00 Far-field Antenna Factor Measurement for Broadband Antennas Using a Compact Radio on Fiber Modules
Satoru Kurokawa (NMIJ/AIST, Japan);

00:00 Comparison of Photonic Sensor and OEWG as the Probe for Near-field Antenna Measurements
Satoru Kurokawa (AIST Electromagnetic Fields Section Electromagnetic Waves Division NMIJ, Japan);

00:00 Product Trends of Optical E-field Sensor
Yoshikazu Toba (Seikoh Giken Co., Ltd., Japan); Jun Ichijoh (Seikoh Giken Co., Ltd., Japan); Takehiro Morioka (National Institute of Advanced Industrial Science and Technology, Japan); Masanobu Hirose (National Institute of Advanced Industrial Science and Technology, Japan); Satoru Kurokawa (National Institute of Advanced Industrial Science and Technology, Japan);

00:00 Antennas Design for Electric/Optical Sensors of High Sensitivity
Qiang Chen (Tohoku University, Japan); Hiroto Abe (Tohoku University, Japan);

00:00 Wireless Microwave to Lightwave Signal Converter Using Electro-optic Modulator with Antenna-coupled Electrode
Hirosi Murata (Osaka University, Japan); Takahiro Kohmu (Osaka University, Japan); Takeshi Ikeda (Osaka University, Japan); Yasuyuki Okamura (Osaka University, Japan);

Session 4A8a

Thursday AM, August 28, 2014
Room H
Organized by Satoru Kurokawa, Hiroshi Murata
Chaired by Satoru Kurokawa, Hiroshi Murata
00:00 Performance Analysis of Photonic Phase Shift Network for OAM-beam Antenna Array Receiver
Jian Jian (Sun Yat-sen University, China); Hui Chen (Sun Yat-sen University, China); Yujie Chen (Sun Yat-sen University, China); Yanfeng Zhang (Sun Yat-sen University, China); Siyuan Yu (Sun Yat-sen University, China);

Session 4A8b
SC2: Plasmon Enhanced Light-matter Interactions
Thursday AM, August 28, 2014
Room H
Organized by Huigao Duan, Joel Yang Kwang Wei

00:00 Giant Chiroptical Properties of Molecules in Hot Spots
Xiangdong Zhang (Beijing Computational Science Research Center, China); Rong-Yao Wang (Beijing Institute of Technology, China); Yineng Liu (Beijing Institute of Technology, China); Tong Wu (Beijing Institute of Technology, China); Jun Ren (Beijing Institute of Technology, China);

00:00 Threading Plasmonic Nanoparticle Strings with Light
Ventsislav K. Valev (University of Cambridge, UK); Lars O. Herrmann (University of Cambridge, UK); Christos Tserkezis (Donostia International Physics Center and CFC CSIC-UPV/EHU, Spain); Jon S. Barnard (University of Cambridge, UK); Oren A. Scherman (University of Cambridge, UK); Javier Aizpurua (Donostia International Physics Center (DIPC) and Centro Mixto de Física de Materiales (CSIC-UPV/EHU), Spain); Jeremy J. Baumberg (University of Cambridge, UK);

00:00 Emission of a Point Dipole Mediated by Multiple Fano Resonances in Plasmonic Nanostructures
Xiao Ming Zhang (Harbin Institute of Technology, China); Qiang Zhang (Harbin Institute of Technology, China); Fei Fei Qin (Harbin Institute of Technology, China); Jun Jun Xiao (Harbin Institute of Technology, China);

00:00 Resonance Enhanced Luminescence of Single Upconversion Nanoparticle Using Plasmonic Gold Nanorods
Xin Zhang (South China Normal University, China); Jing Liu (South China Normal University, China); Qiu Qiang Zhan (Zhejiang University, China);

00:00 Deep-subwavelength Plasmon Routing in Aperiodic Graphene Sheet Arrays
Bing Wang (Huazhong University of Science and Technology, China); He Huang (Huazhong University of Science and Technology, China); Kai Wang (Huazhong University of Science and Technology, China); Hua Long (Huazhong University of Science and Technology, China); Peiziang Lu (Huazhong University of Science and Technology, China);

00:00 Enhancing Antimicrobial Photodynamic Therapy with Silver Nanoparticles
Luciana S. A. De Melo (Federal University of Pernambuco, Brazil); Flavio S. Bonfim (Federal University of Pernambuco, Brazil); Adriana F. De Souza (Federal University of Pernambuco, Brazil); Jose Filho (Federal University of Pernambuco, Brazil); Armando Marsden (Federal University of Pernambuco, Brazil); Renato E. De Araujo (Federal University of Pernambuco, Brazil);

00:00 Silver Plasmonic Supercrystals Synthesized via Bottom-up Strategy for Enhanced Light-matter Interactions
Cuifeng Tian (Xi’an Jiaotong University, China); Jixiang Fang (Xi’an Jiaotong University, China);

00:00 Absorption and Polarization Manipulation with Sterestructured Metamaterials
Xiang Xiong (Nanjing University, China); S. C. Jiang (Nanjing University, China); Y. S. Hu (Nanjing University, China); Ru-Wen Peng (Nanjing University, China); Mu Wang (Nanjing University, China);

00:00 Light-trapping in Single Nanowire Photodetectors by Using Metallic Slits
Yaohui Zhan (Soochow University, China); Xiaofeng Li (Soochow University, China); Shaolong Wu (Soochow University, China);

Session 4A9
SC3: High Power Fiber Lasers
Thursday AM, August 28, 2014
Room I
Organized by Darren D. Hudson, Jianfeng Li
Chaired by Darren D. Hudson, Jianfeng Li

00:00 Mode-locked Ho-Pr Fiber Laser Operating at 2.86 μm
Darren D. Hudson (University of Sydney, Australia);

00:00 Mid-infrared Supercontinuum Generation in Specialty Optical Fibers
Guanshi Qin (Jilin University, China);
00:00 Coherent Beam Combining of Two Tm-doped Fiber MOPAs with Output Power of 50 W
Xiaoxi Jin (National University of Defense Technology, China); Xiong Wang (National University of Defense Technology, China); Xiaolin Wang (National University of Defense Technology, China); Yanxing Ma (National University of Defense Technology, China); Pu Zhou (National University of Defense Technology, China);

00:00 41 W All-fiber kHz-linewidth Single-frequency Linearly-polarized MOPA Laser
Shankui Xu (South China University of Technology, China); Can Li (South China University of Technology, China); Changsheng Yang (South China University of Technology, China); Zhongmin Yang (South China University of Technology, China);

00:00 High Power MOPA Structured Repetition Rates Tunable Tm-doped Fiber Laser
Deqin Ouyang (Shenzhen University, China); Junqing Zhao (Shenzhen University, China); Shuang-Chen Ruan (Shenzhen University, China);

00:00 The Frequency Gap and SNR Improvement for Self-seeded Multi-wavelength Brillouin-Erbium Fiber Laser
Pinghe Wang (University of Electronic Science and Technology of China, China); Feng Gao (University of Electronic Science and Technology of China, China);

00:00 670 W Single-frequency Retrieveable Multi-tone All-fiber MOPA
Xiaolin Wang (National University of Defense Technology, China); P. Zhou (National University of Defense Technology (NUDT), China); Rumao Tao (National University of Defense Technology, China); R. T. Su (National University of Defense Technology (NUDT), China); X. J. Xu (National University of Defense Technology (NUDT), China);

00:00 Passively Solitary and Noisy-like Mode-locked Tm-doped Fiber Laser Based on NALM
Hongyu Luo (University of Electronic Science and Technology of China (UESTC), China); Yulian He (University of Electronic Science and Technology of China (UESTC), China); Zhao Li (University of Electronic Science and Technology of China (UESTC), China); Lin Zhang (Aston University, UK); Sergei K. Turistyn (Aston University, UK); Yong Liu (University of Electronic Science and Technology of China (UESTC), China);

00:00 Dual Wavelength Passively Switched Cascade Ho-doped Fluoride Fiber Laser at 3 μm and 2 μm
Jianfeng Li (University of Electronic Science and Technology of China (UESTC), China); Hongyu Luo (University of Electronic Science and Technology of China (UESTC), China); Yulian He (University of Electronic Science and Technology of China (UESTC), China); Lin Zhang (Aston University, UK); Sergei K. Turistyn (Aston University, UK); Yong Liu (University of Electronic Science and Technology of China (UESTC), China);

00:00 High Power and Widely Tunable Raman Fiber Lasers at ~1.6 μm Based on Volume Bragg Gratings
Deyuan Shen (Fudan University, China); Jun Liu (Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China); Diyanuan Fan (Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China);

00:00 High Power Raman Fiber Lasers
Yan Feng (Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China); Lei Zhang (Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China); Huawei Jiang (Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China);

00:00 Ultrafast Laser Generation from a Topological Insulator Mode-locked Fiber Laser
Chujun Zhao (Shenzhen University, China); Han Zhang (Shenzhen University, China);

00:00 Numerical Study on High Power and Highly Efficient Random Fiber Laser Operating at 1455 nm
Mengqiu Fan (University of Electronic Science & Technology of China, China); Han Wu (University of Electronic Science & Technology of China, China); Zinan Wang (University of Electronic Science & Technology of China, China);

00:00 Theoretical Study on Random Laser Based on Active Lasers
Wei Li Zhang (University of Electronic Science & Technology of China, China); Shi Wei Li (University of Electronic Science & Technology of China, China); Rui Ma (University of Electronic Science & Technology of China, China); Yun Jiang Rao (University of Electronic Science & Technology of China, China);
SC2: Nanoantennas

Thursday AM, August 28, 2014
Room J
Organized by Zheyu Fang, Kuo-Ping Chen
Chaired by Zheyu Fang

00:00 Analysis and Design of the Dielectric Yagi-Uda Nanoantenna with the Double Driven Element
Thanatcha Satitchantrakul (King Mongkut’s University of Technology Thonburi, Thailand);
Rardchawadee Silapunt (King Mongkut’s University of Technology Thonburi, Thailand);

00:00 3D Triple-layer Slot Nanoantenna Array
Yu-Bo Wang (University of Electronic Science and Technology of China, China);
Joshua Le-Wei Li (Monash University, Malaysia);

00:00 Surface Plasmon Polaritons Focusing by the Plasmonic Chains Illuminated with Linearly Polarized Light
Jianming Li (Peking University, China);
Tao Huang (Peking University, China);
Feng Lin (Peking University, China);
Zheyu Fang (Peking University, China);
Xing Zhu (Peking University, China);

00:00 Paired-strips Gold Nanoantennas for Absorption Enhancement in P3HT Organic Thin-film
Zhi-Ying Yang (National Chiao Tung University, Taiwan);
Kuo-Ping Chen (National Chiao-Tung University, Taiwan);

00:00 Orthogonal Redirector and Wavelength Selector of SPPs Realized by Using Nano-optical Yagi-Uda Antenna
Xuewei Zhang (Peking University, China);
Mingcheng Liang (Peking University, China);
Zheyu Fang (Peking University, China);

00:00 Circuits Model of Gold Nanoantennas and the Far-field/Near-field Analysis
Chen-Wei Su (National Chiao Tung University, Taiwan);
Chun-Chieh Wang (National Chiao Tung University, Taiwan);
Kuo-Ping Chen (National Chiao-Tung University, Taiwan);

00:00 Plasmonic Beaming by Well Designed Nanoscatterers
Tao Li (Nanjing University, China);
Lin Li (Nanjing University, China);
Xia-Mei Tang (Nanjing University, China);
Shi-Ning Zhu (Nanjing University, China);

00:00 Plasmonic Photocoupler for Infrared Optoelectronics and Optospintronics
Jie Xu (Fudan University, China);
Fuchun Xi (Fudan University, China);
Leijian Zhang (Fudan University, China);
Qinbai Qian (Fudan University, China);
Peng Gou (Fudan University, China);
Lei Zhou (Fudan University, China);
Zhenghua An (Fudan University, China);

00:00 Substrate-mediated Charge Transfer Plasmons in Simple and Complex Nanoparticle Clusters
Ziwei Li (Peking University, China);
Zheyu Fang (Peking University, China);

00:00 Plasmonic Hot Electron Induced Structural Phase Transition in Monolayer MoS2
Yimin Kang (Peking University, China);
Zheyu Fang (Peking University, China);

00:00 Magnetic Plasmon Induced Fano Resonance at Optical Frequency
Yanjun Bao (Peking University, China);
Zheyu Fang (Peking University, China);

00:00 Optical Transmission of Corrugated Metal Films on a Two-dimensional Hetero-colloidal Crystal
Peng Zhan (Nanjing University, China);
Session 4A_11
SC1: Advanced Numerical Techniques in Computational Electromagnetics

Thursday AM, August 28, 2014
Room K
Organized by Mei Song Tong, Li Jun Jiang
Chaired by Mei Song Tong, Li Jun Jiang

00:00 Using Multiple-precision Arithmetic to Prevent Low-frequency Breakdowns in the Diagonalization of the Green’s Function
Ozgur Ergul (Middle East Technical University, Turkey); B. Karaosmanoglu (Middle East Technical University, Turkey);

00:00 Properties of Gram Matrices Associated with Loop-flower Basis Functions
Yibei Hou (Shanghai Jiao Tong University, China); Gaobiao Xiao (Shanghai Jiao Tong University, China);

00:00 Conductor Modeling Based on Volume Integral Equations
J. Zhang (Tongji University, China); Mei Song Tong (Tongji University, China);

00:00 A Large Time Step Method for Time-domain Maxwell’s Equations
Makwana Nikitabahen Navinchandra (Indian Institute of Technology, India); Avijit Chatterjee (Indian Institute of Technology, India);

00:00 An Efficient Magnetic Field Integral Equation Based Iterative Solver
Robert Brem (Technische Universität München, Germany); Thomas F. Eibert (Technische Universität München, Germany);

00:00 Mixed Spectral Element Method for Maxwell Eigenvalue Problem with Anisotropic and Lossy Media
Na Liu (Xiamen University, China); Z. Mao (Xiamen University, China); Q. H. Liu (Duke University, USA);

00:00 Time-domain Analytical Solutions at Each Point of Two-wire Transmission Line Excited by Plane-wave Fields
Mengshi Zhang (National University of Defense Technology, China); Guyan Ni (National University of Defense Technology, NUDT, China); Min Zhou (National University of Defence Technology, China);

00:00 An Analysis of Energy Conserved Splitting FDTD Method for 3D Maxwell’s Equations
Wen Li (Jiangsu Normal University, China); Huadong Zhao (Jiangsu Normal University, China); Lei Zhao (Jiangsu Normal University, China); Wenhua Yu (State College, USA);

00:00 Fast Calculation of Response of Scatterers in Uniaxial Laminates
Yu Zhong (Institution of High Performance Computing, Singapore); Xudong Chen (National University of Singapore, Singapore); Ping-Ping Ding (UMR8506 (CNRS, Supélec, University Paris-Sud), France); Marc Lambert (UMR8506 (CNRS, Supélec, University Paris-Sud), France); Dominique Lesselier (UMR8506 (CNRS, Supélec, University Paris-Sud), France);

00:00 A Derivative-free Broadband Source Reconstruction Method
Ping Li (The University of Hong Kong, China); Li Jun Jiang (The University of Hong Kong, China);

00:00 Numerical Verification of Nanoscale Antenna Performance for Ultra-fast Magnetic Recording
Shinichiro Ohnuki (Nihon University, Japan); T. Okuda (Nihon University, Japan); Y. Ashizawa (Nihon University, Japan); K. Nakagawa (Nihon University, Japan); A. Tsukamoto (Nihon University, Japan);

00:00 A Study on the Scattering Characteristics of the Antenna-radome System by Using the Modified Multi-layer Thin Dielectric Sheet Approximation
Xue Niu (University of Electronic Science and Technology of China, China); Zai-Ping Nie (University of Electronic Science and Technology of China, China); Shiquan He (University of Electronic Science and Technology of China, China); Xiaofeng Que (University of Electronic Science and Technology of China, China);

Session 4A_12
SC1&4: Antennas, Shielding, HPEM and EMC Measurement

Thursday AM, August 28, 2014
Room L
Organized by Rafal Przesmycki, Leszek Nowosielski
Chaired by Leszek Nowosielski, Marek Bugaj

00:00 Dual Band Microstrip Antenna
Rafal Przesmycki (Military University of Technology, Poland); Pawel Skokowski (Military University of Technology, Poland);
00:00 Wideband Microstrip Antenna
Rafal Przesmycki (Military University of Technology, Poland); Marek Bugaj (Military University of Technology, Poland); Marian Tadeusz Wnuk (Military University of Technology, Poland);

00:00 Ultra-wideband Antenna with Metamaterial and Periodic Structure
Roman Kubacki (Military University of Technology, Poland); Salim Lamari (Military University of Technology, Poland); Miroslaw Czyzewski (Military University of Technology, Poland);

00:00 Identification of Interface in the Complex Systems Based on Radiated Emission of Mobile Computer
Rafal Przesmycki (Military University of Technology, Poland); Marian Tadeusz Wnuk (Military University of Technology, Poland); Pawel Skokowski (Military University of Technology, Poland); Marek Bugaj (Military University of Technology, Poland);

00:00 Measurement and Analysis of Compromising Emanation for Laser Printer
Rafal Przesmycki (Military University of Technology, Poland);

00:00 Compromising Emanations from USB 2 Interface
Leszek Nowosielski (Military University of Technology, Poland); Marian Tadeusz Wnuk (Military University of Technology, Poland);

00:00 Attenuation Measurements of Materials Used in Construction of Buildings
Marek Bugaj (Military University of Technology, Poland);

00:00 New Attempt to Building Materials Permittivity Measurements
Roman Kubacki (Military University of Technology, Poland);

00:00 Measurements of Wall Attenuation in Closed Spaces inside a Building
Marek Bugaj (Military University of Technology, Poland);

00:00 Analytical Model of EMP Pulse
Leszek Nowosielski (Military University of Technology, Poland);

00:00 Measurement of Shielding Effectiveness with the Method Using High Power Electromagnetic Pulse Generator
Leszek Nowosielski (Military University of Technology, Poland); Jerzy Lopatka (Military University of Technology, Poland);

00:00 Honeycomb Ventilation Grill Shielding Effectiveness Measuring Methodology
Leszek Nowosielski (Military University of Technology, Poland); Cezary Piotrowski (Military University of Technology, Poland);

00:00 Technique of High Power Microwave Pulses Dosimetry of Living Systems
Roman Kubacki (Military University of Technology, Poland); Salim Lamari (Military University of Technology, Poland);

00:00 Modelling of Electromagnetic Wave Propagation with the Use of the Ray-tracing Method
Leszek Nowosielski (Military University of Technology, Poland); Jerzy Lopatka (Military University of Technology, Poland); Michal Silaczuk (Military University of Technology, Poland);

00:00 Electromagnetically Shielded Real-time MANET Testbed
Anna Kaszuba (Military University of Technology, Poland); Radoslaw Checinski (Military University of Technology, Poland); Michal Kryk (Military University of Technology, Poland);

Session 4A.13a
Remote Sensing of the Earth, Ocean, and Atmosphere
Thursday AM, August 28, 2014
Room M

00:00 PO-GO/ECM for Bistatic RCS Modeling of Complex Objects over Rough Sea Surface
Y. Bennani (University of Tours, France); Rachid Talhi (University of Tours, France);

00:00 Space-borne Observations and Analysis of Human-generated Electromagnetic Radiations
Rachid Talhi (University of Tours, France); P. Sebire (CNRS/LPC2E, France); Y. Bennani (University of Tours, France);

00:00 Study on the Variation Characteristics of Land Desertification in Ebinur Lake Basin
Lishuang Sun (Shenyang Jianzhu University, China); Yuntao Ma (Shenyang Jianzhu University, China); H. Ding (Shenyang Jianzhu University, China);

00:00 Analysis of EVI and NDVI Characteristics in Different Land Cover Types in Liaoning Province
Jingli Wang (Shenyang Jianzhu University, China); Yuntao Ma (Shenyang Jianzhu University, China); Lishuang Sun (Shenyang Jianzhu University, China);
00:00 On a New Ship Detection Parameter Using Multi-polarization SAR Data  
Chan-Su Yang (Korea Ocean Research and Development Institute, Korea); Kazuo Ouchi (Korea Ocean Institute of Science & Technology, Korea);

00:00 Experimental Ship Monitoring Using SAR, FMCW Radar and AIS on the Ieodo Ocean Research Station, South Korea  
Chan-Su Yang (Korea Ocean Research and Development Institute, Korea); Kazuo Ouchi (Korea Ocean Institute of Science & Technology, Korea);

Session 4A_13b  
SC4&3: Metamaterials for Antenna Applications: Practical Solutions  
Thursday AM, August 28, 2014  
Room M  
Organized by John Yiannis C. Vardaxoglou  
Chaired by John Yiannis C. Vardaxoglou

00:00 Minkowski Fractal Antenna Design with DMS-SRR and DGS-SRR Structure for WLAN Application  
Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia); Has-san Nornikman (Universiti Malaysia Perlis, Malaysia); M. H. F. Mohd Fukri (Universiti Malaysia Perlis (UniMAP), Malaysia); Mohamad Zoinol Abidin Abd Aziz (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia); Badrul Hisham Ahmad (Universiti Teknikal Malaysia Melaka (UTeM), Malaysia);

00:00 Equivalent Circuit Model of Different Configurations of Loop Elements Using Vector-fitting  
Payal Majumdar (Kwang-Chi Institute of Advanced Technology, China); Zhiya Zhao (Kwang-Chi Institute of Advanced Technology, China); Yuqiao Yue (Kuang-Chi Institute of Advanced Technology, China); Chun-lin Ji (Kuang-Chi Institute of Advanced Technology, China); Ruopeng Liu (Kuang-Chi Institute of Advanced Technology, China);

00:00 Antenna Reconfiguration Using Metasurfaces  
Hailiang Zhu (The University of Hong Kong, China); William Sing Wai Cheung (The University of Hong Kong, China); Tung Ip Yuk (The University of Hong Kong, China);

00:00 A Systematic Approach to Synthesizing Artificial Dielectrics (Metamaterials) and Its Application to Antenna Design  
Raj Mittra (The Pennsylvania State University, USA); J. C. Vardazoglou (Pennsylvania State University, USA);

00:00 Metamaterial Surfaces for Integrated Multiband Horn Applications  
John Yiannis C. Vardazoglou (Loughborough University, UK);

Session 4A_14  
SC1: Extended/Unconventional Electromagnetic Theory, EHD(Electrohydrodynamics)/EMHD(Electro-magneto-hydrodynamics), and Electro-biology  
Thursday AM, August 28, 2014  
Room N  
Organized by Eva Gescheidtova  
Chaired by Jan Mikulka

00:00 Intelligent Channel Assignment for WI-FI System Based on Reinforcement Learning  
Robert Urban (Brno University of Technology, Czech Republic); Petr Drexler (Brno University of Technology, Czech Republic);

00:00 Analysis of Conditions on the Boundary between Layers  
Radim Kadlec (Brno University of Technology, Czech Republic); Pavel Fiala (Brno University of Technology, Czech Republic);

00:00 Fast Calculation of T2 Relaxation Time in Magnetic Resonance Imaging  
Jan Mikulka (Brno University of Technology, Czech Republic); Pavel Deorak (Institute of Scientific Instruments of the ASCR, Czech Republic);

00:00 Measuring and Application of NIR Light Absorption Coefficient of Bacteria  
Pavel Krepelka (Brno University of Technology, Czech Republic); Fernando Camara Martinez (Universidad de Cordoba, Spain); Guisorn Denisse Posada-Izquierdo (Universidad de Cordoba, Spain); Fernando Perez-Rodriguez (Universidad de Cordoba, Spain);

00:00 Using Diffusion-weighted Images to Identify Brain Tumors  
Petr Marcon (Brno University of Technology, Czech Republic); Karel Bartusek (Institute of Scientific Instruments of the ASCR, Czech Republic); Andrea Sprlakova (Masaryk University, Czech Republic);
00:00 Partial Discharge Detection and Localization System
Martin Cap (Brno University of Technology, Czech Republic); Petr Drexler (Brno University of Technology, Czech Republic); Pavel Fiala (Brno University of Technology, Czech Republic);

00:00 Numerical Model of a Large Periodic Structure
Robert Urban (Brno University of Technology, Czech Republic); Petr Drexler (Brno University of Technology, Czech Republic); Pavel Fiala (Brno University of Technology, Czech Republic); Dusan Nespor (Brno University of Technology, Czech Republic);

00:00 Optimization of the Particle Swarm Algorithm
Jiri Chytil (Brno University of Technology, Czech Republic);

00:00 Sensitivity Improvement in NQR Based Detection Methods
Miloslav Steinbauer (Brno University of Technology, Czech Republic); Jan Seginak (Brno University of Technology, Czech Republic); Premysl Dohnal (Brno University of Technology, Czech Republic);

00:00 A Dark Matter Model to Unify Gravity and Electromagnetism
Michael James Underhill (Underhill Research Ltd, UK);

00:00 PIERS: Progress In Electromagnetism — Relativity Superseded
Piers Hutchinson (MA Oxon, Canada);

00:00 Interactive Segmentation of Hip Joint Cartilage
Pavel Dvorak (Institute of Scientific Instruments of the ASCR, Czech Republic); Vladimir Juras (Medical University of Vienna, Austria); Wolf-Dieter Vogl (Medical University of Vienna, Austria); Jiri Chytil (Brno University of Technology, Czech Republic);

00:00 Dependence of Water Conductivity and PH on Ion Cyclotron Resonance of Hydronium: A Way of Amplifying Electromagnetic Signals in Living Systems
Emiliano Furfaro (Tor Vergata University, Italy); Livio Giuliani (INAIL, Italy); Enrico D’Emilia (IS-PESL, Italy); A. Lisi (Institute of Translational Pharmacology, CNR, Italy); Mario Ledda (Istituto di Neurobiologia e Medicina Molecolare, C.N.R., Italy); Settimio Grimaldi (Institute of Neurobiology and Molecular Medicine (INMM), National Research Council (CNR), Italy);

00:00 A Double-amplification Strategy for Quantitative DNA Fluorescent Detection
Xia Liu (South China Normal University, China); Guofu Zhou (South China Normal University, China); Mingliang Jin (South China Normal University, China);

00:00 A Quantum-dots-assisted Positioning System for Location Sensing of Nanobots
Luyang Qian (South University of Science and Technology of China (SUSTC), China); Yu Zhou (South University of Science and Technology of China, China); Changyu Wang (South University of Science and Technology of China, China); Yifan Chen (South University of Science and Technology of China, China); Rui Wang (South University of Science and Technology of China, China); Qingsong Zhang (South University of Science and Technology of China, China);

00:00 Sub-5 nm Lanthanide-doped ZrO₂ Upconversion Nanoparticle for Single-proteins-targeted Imaging
Jing Liu (South China Normal University, China); Qiu Qiang Zhan (South China Normal University, China);

00:00 Nanoparticle-based Functional Fluorescent Systems
Shuizhu Wu (South China University of Technology, China); Fang Zeng (South China University of Technology, China); Changmin Yu (South China University of Technology, China);

00:00 AIE-active Biomaterials Based on 9, 10-bis (4-hydroxystyryl) Anthracene Derivatives
Wenjing Tian (Jilin University, China); Bin Xu (Jilin University, China); Xing Li (Jilin University, China); Hongguang Le (Jilin University, China); Zilong Wang (Jilin University, China); Yan Zang (Jilin University, China); Ke Ma (Jilin University, China);

00:00 Luminogenic Polymers with Aggregation-induced Emission Characteristics for High-performance Sensing Applications
Anjun Qin (South China University of Technology, China); Bin Zhong Tang (The Hong Kong University of Science & Technology, China);
00:00 Joint SERS-fluorescence Spectrum and Its Applications in Biosensing & Imaging
Zhuyuan Wang (Southeast University, China); Yiping Cui (Southeast University, China); Shenfei Zhong (Southeast University, China);
00:00 Nonlinear Optical Properties of Gold Nanorods (GNRs) under FS Laser Excitation near the Third Optical Tissue Window and Application for Multichannel Cellular Imaging
Yalun Wang (Zhejiang University, China); Kanghui Li (Zhejiang University, China); Zhen Feng Zhu (Zhejiang University, China); Jun Qian (Zhejiang University, China);
00:00 Three-photon Luminescence of High Aspect Ratio Gold Nanorods and Its Applications for High Contrast Tissue and in Vivo Imaging
Shaowei Wang (Zhejiang University, China); Jun Qian (Zhejiang University, China);
00:00 Near-infrared Fluorophore-doped Nanoparticles for in vitro and in vivo Bioimaging
Lilang Chu (Zhejiang University, China); Shaowei Wang (Zhejiang University, China); Kanghui Li (Zhejiang University, China); Wang Xi (Zhejiang University, China); Jun Qian (Zhejiang University, China);
00:00 Conjugated Polymer Nanoparticles for Cellular Imaging and Sensing Applications
Changfeng Wu (Jilin University, China); Gaixia Xu (Shenzhen University, China); Danni Chen (Shenzhen University, China);
00:00 A Photostable AIE Luminogen for Multifunctional Three-photon Bioimaging
Zhen Feng Zhu (Zhejiang University, China); Chris Wai Tung Leung (The Hong Kong University of Science and Technology, China); Xinyuan Zhao (Zhejiang University, China);
13:00 New Application Field for Surface Plasmon in Magnetic Recording and Sensing
Katsuji Nakagawa (Nihon University, Japan); Yoshito Ashizawa (Nihon University, Japan); A. Tsukamoto (Nihon University, Japan); Shinichiro Ohnuki (Nihon University, Japan);
13:20 An Ambient Sensitive Grating Reflector Based on Generalized Guided-mode Resonance
F.-C. Huang (National Taiwan University, Taiwan); L. K. Liao (National Taiwan University, Taiwan); Yih-Peng Chiou (National Taiwan University, Taiwan);
13:40 Application of the Explicit and Implicit FDTD Methods to the Analysis of a Terahertz Plasmonic Grating
Jun Shibayama (Hosei University, Japan); Y. Wada (Hosei University Tokyo, Japan); Junji Yamauchi (Hosei University, Japan); Hisamatsu Nakano (Hosei University, Japan);
14:00 Electronic State Control Based on Hybrid Simulation Consisted of Maxwell and Schrödinger Equations — A Single Electron Constrained in Thin Tube
Takashi Takeuchi (Nihon University, Japan); S. Ohnuki (Nihon University, Japan); T. Sako (Nihon University, Japan); Yoshito Ashizawa (Nihon University, Japan); Katsuji Nakagawa (Nihon University, Japan); Masahiro Tanaka (Gifu University, Japan);
14:20 Scattering Characteristics of Electrically Large IR-reflective/MW-transmissive Beam Combiner
Hui Yan (Beijing Institute of Technology, China); Yi Tian (Beijing Institute of Technology, China); Zhiwei Bai (Beijing Institute of Technology, China); Xin Wang (Beijing Institute of Technology, China); Zhuo Li (Beijing Institute of Technology, China);
14:40 Tuned Window for Standing Wave Linear Accelerators
Alberto Leggieri (Università degli Studi di Roma “Tor Vergata”, Italy); Alessia Ciccotelli (S.I.T. — Sordina IORT Technologies, Italy); Giuseppe Felici (S.I.T. — Sordina IORT Technologies, Italy); Leonardo Zappelli (Università Politecnica delle Marche, Italy); Davide Passi (Università degli Studi di Roma “Tor Vergata”, Italy); Franco Di Paolo (Università degli Studi di Roma “Tor Vergata”, Italy);

Session 4P2a
SC1&3: Design and Simulation of Electromagnetic and Optical Devices 2

Thursday PM, August 28, 2014
Room B
Organized by Shinichiro Ohnuki, Jun Shibayama
Chaired by Shinichiro Ohnuki, Jun Shibayama
Session 4P2b
Optoelectronic and Photonics Devices

Thursday PM, August 28, 2014
Room B

00:00 Numerical Modeling of Novel Optical Vortex Multiplexer
Qingsheng Xiao (Sun Yat-sen University, China); Shimao Li (Sun Yat-sen University, China); Jianguo Zhu (Sun Yat-sen University, China); Hui Chen (Sun Yat-sen University, China); Yanfeng Zhang (Sun Yat-sen University, China); Yujie Chen (Sun Yat-sen University, China); Siyuan Yu (Sun Yat-sen University, China);

00:00 Simulation and Design of Monolithically Integrated Numerical Modeling of Novel Optical Vortex Multiplexer
Qingsheng Xiao (Sun Yat-sen University, China); Shimao Li (Sun Yat-sen University, China); Jianguo Zhu (Sun Yat-sen University, China); Hui Chen (Sun Yat-sen University, China); Yanfeng Zhang (Sun Yat-sen University, China); Yujie Chen (Sun Yat-sen University, China); Siyuan Yu (Sun Yat-sen University, China);

00:00 Design and Simulation of 450 nm GaN-based Multiple-quantum-well Tunable V-cavity Laser
Zhipeng Hu (Zhejiang University, China); Jianjun Meng (Zhejiang University, China); Lin Wu (Zhejiang University, China); Jian-Jun He (Zhejiang University, China);

00:00 Simulation of Thermal Tuning in V-coupled Cavity Laser with an On-chip Thin-film Heater
Haoyu Deng (Zhejiang University, China); Jianjun Meng (Zhejiang University, China); Jian-Jun He (Zhejiang University, China);

00:00 The Proposal of Pulse Synchronous Laser Signal Source Based on Coupled-microdisk Photonic Molecules
Bo-Wen Liu (Institute of Semiconductors, Chinese Academy of Sciences, China); Yue-De Yang (Institute of Semiconductors, Chinese Academy of Sciences, China); Xiu-Wen Ma (Institute of Semiconductors, Chinese Academy of Sciences, China); Yong-Zhen Huang (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 Bandgap Engineering of InGaAsP/InP Multiple Quantum Well Structure by Dielectric Stopping
Hongli Zhu (Zhejiang University, China); Yuan Zhuang (Zhejiang University, China); Xin Zhang (Zhejiang University, China); Jian-Jun He (Zhejiang University, China);

00:00 High Stable Exciton Emission from SnO2 Quantum Dots Grown via a Facile “Top-down” Strategy
Shu Sheng Pan (Institute of Solid State Physics, Chinese Academy of Sciences, China); Wei Lu (The Hong Kong Polytechnic University, China); Zhao Qin Chu (Institute of Solid State Physics, Chinese Academy of Sciences, China); Si-Chao Xu (Institute of Solid State Physics, Chinese Academy of Sciences, China); Yun Xia Zhang (Institute of Solid State Physics, Chinese Academy of Sciences, China); Yuan Yuan Luo (Institute of Solid State Physics, Chinese Academy of Sciences, China); Guanghai Li (Institute of Solid State Physics, Chinese Academy of Sciences, China);

Session 4P3a
SC3: Fano Resonance in Nanoscale Structures

Thursday PM, August 28, 2014
Room C
Organized by Andrey E. Miroshnichenko, Yuri S. Kivshar

00:00 Self-Fano Resonance in a Symmetry Broken Ag Nanodisk
Zhengu Fang (Peking University, China);

00:00 Fano Resonances in Magneto-dielectric Core-shell Nanoparticles
Wei Liu (Australian National University, Australia);

00:00 Negative Optical Binding Force Induced by Fano Resonances in Plasmonic Heterodimers
Jun Jun Xiao (Harbin Institute of Technology, China); Qiang Zhang (Harbin Institute of Technology, China); Xiao Ming Zhang (Harbin Institute of Technology, China); F. F. Qin (Harbin Institute of Technology, China);
00:00 Subgroup Decomposition of Plasmonic Resonances in Hybrid Oligomers for Ultrasensitive Biochemical Sensing
Dangyuan Lei (The Hong Kong Polytechnic University, China);

00:00 Reworking the Understanding of Fano Resonances in Nanoparticle Oligomers
Ben Hopkins (Australian National University, Australia); Alexander N. Poddubny (National Research University for Information Technology, Mechanics and Optics, Russia); Andrey E. Miroshnichenko (Australian National University, Australia); Yuri S. Kivshar (Australian National University, Australia);

00:00 Equivalent Permittivity and Permeability and Multiple Fano Resonances for Nonlocal Metallic Nanowires
Yang Huang (Soochow University, China); Lei Gao (Soochow University, China);

00:00 Nonlinear Fano Resonance in Photonic Crystal Waveguide and Cavity System: Physical Properties and Applications
Yi Xu (Australian National University, Australia); Andrey E. Miroshnichenko (Australian National University, Australia);

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**Session 4P3b**
**SC2&3: Active Nanophotonics: Design of Nano-devices/Structures and Their Interaction with Molecules**

**Thursday PM, August 28, 2014**
**Room C**
Organized by Shiuan-Yeh Chen, Qing Huo Liu
Chaired by Shiuan-Yeh Chen, Qing Huo Liu

00:00 1.7-nanometer Resolution Structural Analysis of Carbon Nanotube by Tip Enhanced Raman Imaging
Chi Chen (The Institute of Physical and Chemical Research (RIKEN), Japan); Norihiko Hayazawa (The Institute of Physical and Chemical Research (RIKEN), Japan); Satoshi Kawata (The Institute of Physical and Chemical Research (RIKEN), Japan);

00:00 Hiding the Interior Region of Core-shell Nanoparticles Based on Scattering Cancellation
Jeng Yi Lee (National Tsing Hua University, Taiwan); Ray-Kuang Lee (National Tsing-Hua University, Taiwan);

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**Session 4P4a**
**SC3: High Speed Interconnects for High Performance Computing**

**Thursday PM, August 28, 2014**
**Room D**
Organized by Boping Wu, Zhen Zhou
Chaired by Boping Wu, Zhen Zhou

00:00 Through-Silicon-Via Pairs Modelling via Compressed Sensing
Tao Wang (Missouri University of Science and Technology, USA); Jun Fan (Missouri University of Science and Technology, USA); Yiyu Shi (Missouri University of Science and Technology, USA); Boping Wu (Missouri University of Science and Technology, USA);

00:00 Comprehensive Study of Through-Silicon Via (TSV) Modeling and Analysis in High Speed Three Dimensional Integrated Circuits (3D IC)
M. Amimul Ehsan (University of Missouri-Kansas City, USA); Zhen Zhou (Intel Corp., USA); Xin Fu (University of Kansas, USA); Yang Yi (University of Missouri-Kansas City, USA);

00:00 Ultra-wideband THz Interconnect Using Micromachined Silicon Dielectric Waveguide
Bo Yu (University of California, USA); Yuhao Liu (University of California, USA); Jane Gu (University of California, USA); Xiaoguang Liu (University of California, USA);
00:00 Method to Reduce Coupon Lengths for Transmission Line $S$-parameter Measurements through Elimination of Guided-wave Multiple Reflections
Shaowu Huang (Intel Corporation, USA); Jeff Loyer (Intel Corporation, USA); Richard Kunze (Intel Corporation, USA); Boping Wu (Intel Corporation, USA);

00:00 High-speed Silicon Mach-Zehnder Optical Modulator with Large Optical Bandwidth
Jianfeng Ding (Institute of Semiconductors, Chinese Academy of Sciences, China); Lin Yang (Institute of Semiconductors, Chinese Academy of Sciences, China);

00:00 A Simple Equivalent Circuit Model of Finite Ground Coplanar Waveguide (FGCPW) on MIS for Ultra-fast Monolithic Photodiode Application
M. Amimul Ehsan (University of Missouri-Kansas City, USA); Zhen Zhou (Intel Corp., USA); Yang Yi (University of Missouri-Kansas City, USA);

00:00 Performance Evaluation of an OFDM-based BPSK PLC System in an Impulsive Noise Environment
Abraham M. Nyete (University of Kwa-Zulu Natal, South Africa); Thomas Joachim Odhiambo Afullo (University of Kwa-Zulu Natal (UKZN), South Africa); Innocent Davidson (University of KwaZulu-Natal, South Africa);

00:00 Glass Weave and Rough Surface Effect for High Speed Channel Signal Integrity
Ruhua Ding (Intel Corporation, USA); Boping Wu (Intel Corporation, USA);

00:00 Comprehensive Ultra-broadband Design and Mode Suppression Techniques for Bends in a Differential Pair
Chengyuan Zhao (University of Missouri-Kansas City, USA); Zhen Zhou (Intel Corp., USA); Yi-Che Lee (Georgia Institute of Technology, USA); Yang Yi (University of Missouri-Kansas City, USA);

00:00 Effect of a Linear Frequency Modulation on the Nonlinear Dynamics of a Vortex Electromagnetic Pulse in a Graded-index Waveguide
I. M. Oreshnikov (Saint-Petersburg University, Russia); M. A. Bisyrin (Saint-Petersburg University, Russia);

00:00 Helically Corrugated Metallic Nanowires as Nanovortices Sources
Changming Huang (Shanghai Jiao Tong University, China); Fangwei Ye (Shanghai Jiao Tong University, China); Abiola O. Oladipo (University College London, United Kingdom); Nicole C. Panoiu (University College London, UK); Xianfeng Chen (Shanghai Jiao Tong University, China);

00:00 Generation of a Partially Coherent Laguerre-Gaussian Beam and Determination of Its Topological Charge
Yuan Dong (Soochow University, China); Chengjiang Zhao (Soochow University, China); Yangjian Cai (Soochow University, China);

00:00 Interference of Laser Beams with Different OAMs
Maxime Favier (Institut d’Optique, France); Sergei Popov (Royal Institute of Technology (KTH), Sweden);

00:00 Orbit Angular Momentum of Light in a Double-ring Fiber
Yangjie Liu (Nanyang Technological University, Singapore); Bin Zhou (South China Normal University, China);

00:00 Breakdown of Optical Vortices at a Dielectric Plane Surface
Yi Wang (Sun Yat-sen University, China); Huazhou Chen (Sun Yat-sen University, China); Guoxuan Zhu (Sun Yat-sen University, China); Shimao Li (Sun Yat-sen University, China); Yanfeng Zhang (Sun Yat-sen University, China); Hui Chen (Sun Yat-sen University, China); Yujie Chen (Sun Yat-sen University, China); Siyuan Yu (Sun Yat-sen University, China);

00:00 Self-imaging of Orbital Angular Momentum (OAM) Modes in Square Multimode Interference Waveguide
Zelin Ma (Sun Yat-sen University, China); Hui Chen (Sun Yat-sen University, China); Yanfeng Zhang (Sun Yat-sen University, China); Yujie Chen (Sun Yat-sen University, China); Siyuan Yu (Sun Yat-sen University, China);
Session 4P5
2. FocusSession.SC2: Microwave Metamaterials 2

Thursday PM, August 28, 2014
Room E
Organized by Tie Jun Cui, Yang Hao

00:00 Macroscopic Model for Metamaterials
Kirti Inamdar (ECED, India); Yogesh P. Kosta (Marwadi Education Foundation's Group of Institutions, India); Suprava Patnaik (St. Xavier's Institute of Engineering, India);

00:00 Dual-band Slot-FSS for Improving the Transmission of Wireless Communication Signals through Energy-saving Glass
Hsing-Yi Chen (Yuan Ze University, Taiwan); Tsung-Han Lin (Yuan Ze University, Taiwan);

00:00 A Novel Absorptive Frequency Selective Surface with Miniaturized Element
Qiang Chen (National University of Defense Technology, China); Chen Liang (National University of Defense Technology, China); Yunqi Fu (National University of Defense Technology, China);

00:00 Dual-band Hybrid Metacomposites Containing Ferromagnetic Microwire Arrays
Y. Luo (University of Bristol, UK); Hua-Xin Peng (University of Bristol, UK); Fuxiang Qin (National Institute for Materials Science, Japan); Mikhail Ipatov (Universidad del Pais Vasco, Spain); Valentina Zhukova (Universidad del Pais Vasco, Spain); Arkady P. Zhukov (Universidad del Pais Vasco, Spain); Julian Gonzalez (Universidad del Pais Vasco, Spain);

00:00 A Novel Plasmonic Waveguide Compatible with Conventional Transmission Line
Shuo Liu (Southeast University, China); Hao Chi Zhang (Southeast University, China); Tie Jun Cui (Southeast University, China);

00:00 Measurement of Enhanced Radiation Force on a Parallel Metallic-plate System in the Microwave Regime
Zhi Hong Hang (Soochow University, China); Z. Marcet (The Hong Kong University of Science and Technology, China); S. B. Wang (The Hong Kong University of Science and Technology, China); C. T. Chan (The Hong Kong University of Science and Technology, China); H. B. Chan (The Hong Kong University of Science and Technology, China);

00:00 Metamaterial-based Absorption Optimization of Microwave Magnetic Absorbers
Pei-Heng Zhou (University of Electronic Science and Technology of China, China); Limbo Zhang (University of Electronic Science and Technology of China, China); Husbin Zhang (University of Electronic Science and Technology of China, China); Yangqiu Xu (University of Electronic Science and Technology of China, China); Hai-Yan Chen (University of Electronic Science and Technology of China, China); Long-Jiang Deng (University of Electronic Science and Technology of China, China);

00:00 A New Type of Spoof Plasmonic Waveguide
Zhen Gao (Nanyang Technological University, Singapore); Fei Gao (Nanyang Technological University, Singapore); Baile Zhang (Nanyang Technological University, Singapore);

00:00 Slowing Microwaves with Deeply Subwavelength Metamaterial Waveguides
Nadege Kaina (ESPCI ParisTech, France); Mathias Fink (ESPCI ParisTech & CNRS, France); Geoffrey Lerosey (ESPCI ParisTech & CNRS, France);

00:00 Miniaturized Microstrip Bandpass Filter Based on the Twist Split Ring Resonators
Jian Li (University of Electronic Science and Technology of China, China); Guangjun Wen (University of Electronic Science and Technology of China, China); Yongjun Huang (University of Electronic Science and Technology of China, China); Kaimin Wu (University of Electronic Science and Technology of China, China); Weijian Chen (University of Electronic Science and Technology of China, China);

00:00 Arbitrary Control of Electromagnetic Flux in Inhomogeneous Anisotropic Zero-index Media
Jie Luo (Soochow University, China); Yun Lai (Soochow University, China); C. T. Chan (The Hong Kong University of Science and Technology, China);

00:00 A Realization Compact Pseudo Chebyshev Low Pass Filters for UHF Band Using RF MEMS Technology
Hui Fang Liew (University Malaysia Perlis, Malaysia); Syed Idris Syed Hassan (Universiti Malaysia Perlis, Malaysia); Mohd Fareq Bin Abdul Malek (University Malaysia Perlis (UniMAP), Malaysia); Yafridin Wahab (University Malaysia Perlis, Malaysia); M. M. Nurhakimah (University Malaysia Perlis, Malaysia); Hassan Norrakman (Universiti Malaysia Perlis, Malaysia); M. Mazlee (University Malaysia Perlis, Malaysia); Mohd Gauth Sazali (University Malaysia Perlis, Malaysia); Safwanah Safari Nadia (University Malaysia Perlis, Malaysia);
Session 4P6a

3. FocusSession.SC3: Laser Spectroscopy for Sensing and Environmental Monitoring 2

Thursday PM, August 28, 2014
Room F
Organized by Sune Svanberg, Heping Zeng
Chaired by Sune Svanberg

00:00 Microwave Metamaterials: Promises, Realities and Future Challenges
Raj Mittra (The Pennsylvania State University, USA);

00:00 Lightweight Broadband Microwave Absorber Designed with Multilayer Metamaterial Sheets
Zuo Jia Wang (Zhejiang University, China); Hongsheng Chen (Zhejiang University, China);

00:00 Electric and Magnetic Localized Surface Plasmons on Textured Metallic Particles
Xiaopeng Shen (Southeast University, China); Tie Jun Cui (Southeast University, China); Paloma A. Huidobro (Universidad Autonoma de Madrid, Spain); Francisco J. Garcia-Vidal (Universidad Autonoma de Madrid, Spain);

00:00 Design and Implementation of a New Missile-borne Conical Conformal Antenna
Ming Li (Xidian University, China); Liang Xu (Xidian University, China); Wen Bin Zeng (Xidian University, China); Guo Liu (Xidian University, China);

00:00 Sub-harmonic Generation of Broadband Mid-infrared Frequency Combs for Molecular Spectroscopy
Alireza Marandi (Stanford University, USA); Nick C. Leindecker (Stanford University, USA); Magnus W. Haakestad (Stanford University, USA); Tobias P. Lamour (Stanford University, USA); Kirk A. Ingold (Stanford University, USA); Konstantin L. Vodopyanov (Stanford University, USA); Robert L. Byer (Stanford University, USA);

00:00 Efficient Octave-spanning Supercontinuum Generation Driven by a Compact Yb-fiber Oscillator and All-fiber Amplifier
Qiang Hao (University of Shanghai for Science and Technology, China); Zhengru Guo (University of Shanghai for Science and Technology, China); Qingshan Zhang (University of Shanghai for Science and Technology, China); Heping Zeng (East China Normal University, China);

00:00 Amplitude-to-phase Noise Suppression in 100-W Infrared Optical Frequency Combs
Kangwen Yang (East China Normal University, China); Wenxue Li (East China Normal University, China); Xuling Shen (East China Normal University, China); Jian Zhao (East China Normal University, China); Dongyi Bai (East China Normal University, China); Heping Zeng (East China Normal University, China);

00:00 High-resolution Spectroscopy with Single-sideband Optical Modulator and Optical Frequency Comb
Tatsutoshi Shioda (Saitama University, Japan); Takashi Kurokawa (Tokyo University of Agriculture and Technology, Japan);

00:00 InGaAs/GaAs Quantum Well Laser with 40 nm Broad Spectrum of Emission
Huolei Wang (Institute of Semiconductors, Chinese Academy of Sciences, China); Junping Mi (Institute of Semiconductors, Chinese Academy of Sciences, China); Jiaqi Wang (Institute of Semiconductors, Chinese Academy of Sciences, China); Weixi Chen (Peking University, China); Jiaoqing Pan (Institute of Semiconductors, Chinese Academy of Sciences, China); Ying Ding (University of Glasgow, UK);
Session 4P6b
Novel Optical Imaging Methods for Biomedical Applications, Spectroscopic and THz Bioelectromagnetics

Thursday PM, August 28, 2014
Room F
Organized by Nanguang Chen
Chaired by Nanguang Chen

00:00 Schlieren Confocal Microscopy Enables Confocal Phase-relief Imaging
Hao Xie (Peking University, China); Dayong Jin (Macquarie University, Australia); Peng Xi (Peking University, China);

00:00 Dark-field Optical Coherence Tomography for Side-lobe Suppression
Xiaojun Yu (Nanyang Technological University, Singapore); Xinyu Liu (Nanyang Technological University, Singapore); Dongyao Cui (Nanyang Technological University, Singapore); Linbo Liu (Nanyang Technological University, Singapore);

00:00 A High Speed FPGA-based Pseudo-random Bit Sequence Generator
Qiang Zhang (Peking University, China); Wei Wang (Peking University, China); Ling Chen (Peking University, China); Tian Dong (Peking University, China); Nanguang Chen (National University of Singapore, Singapore);

00:00 The Influence of Tissue-mimic Outer Layer on Diffuse Optical Imaging of Hemisphere
Ling Chen (Peking University, China); Tian Dong (Peking University, China); Qiang Zhang (Peking University, China); Wei Wang (Peking University, China); Nanguang Chen (National University of Singapore, Singapore);

00:00 Optical Investigation of Nd³⁺-sensitized Upconversion Nanoparticles for Damage-free in vivo Deep Imaging and in vitro Microscopy
Yuxiang Zhao (South China Normal University, China); Qiu Qiang Zhan (South China Normal University, China);

00:00 Tradeoff Study of Microwave Imaging Based on Frequency Considerations
Day-Chyrh Chang (Oriental Institute of Technology, Taiwan, R.O.C.); Yau-Jyun Tsai (Oriental Institute of Technology, Taiwan, R.O.C.); Chih-Hung Lee (Yuan Ze University, Taiwan); Chang-Hsuan Kao (Oriental Institute of Technology, Taiwan);

00:00 Plasmonics Based Localization Microscopy: Axially Super-resolved Intracellular Imaging Based on Extraordinary Light Transmission
Wonju Lee (Yonsei University, Republic of Korea); Taehwan Son (Yonsei University, Republic of Korea); Jong-Ryul Choi (Daegu-Gyeongbuk Medical Innovation Foundation, Republic of Korea); Kyujung Kim (Pusan National University, Republic of Korea); Youngjin Oh (Yonsei University, Republic of Korea); Donghyun Kim (Yonsei University, South Korea);

00:00 Terahertz Spectroscopic Investigation of Substrate Materials for Biological Application in the Frequency Range of 1–15 THz
Rui Zhang (Peking University, China); Ruizue Wang (Peking University, China); Liangliang Zhang (Capital Normal University, China); Jue Zhang (Peking University, China); Cunlin Zhang (Capital Normal University, China); Jing Fang (Peking University, China);

00:00 Development of Ion Measurement Method by a Terahertz Chemical Microscopy
Yuki Okawa (Okayama University, Japan); K. Akimune (Okayama University, Japan); K. Sakai (Okayama University, Japan); T. Kiwa (Okayama University, Japan); Keiji Tsukada (Okayama University, Japan);

Session 4P7a
SC3: Optical Polarization and Coherence in the Near-field Range

Thursday PM, August 28, 2014
Room G
Organized by Sergei Popov
Chaired by Sergei Popov

00:00 Control of Radiative and Non-radiative Channels of Molecule Fluorescence near Hyperbolic Metamaterials
Vasily V. Klimov (Lebedev Physical Institute, Russian Academy of Sciences, Russia);

00:00 Purity of Random Electromagnetic Fields
Timo Hassinen (Royal Institute of Technology (KTH), Sweden); Jani Tervo (University of Eastern Finland, Finland); Ari T. Friberg (University of Eastern Finland, Finland);

00:00 Nanograting with Greatly Enhanced Near Field: A Highly-active Plasmonic Sers Substrate
Benfeng Bai (Tsinghua University, China)
Thursday PM, August 28, 2014

Session 4P7b
SC3: Quantum Optics

Thursday PM, August 28, 2014
Room G
Organized by Byoung S. Ham, Shengwang Du
Chaired by Byoung S. Ham, Shengwang Du

00:00 Quantum Plasmonics: Surface-plasmon-induced Quantum Interferences
Ying Gu (Peking University, China); Luojia Wang (Peking University, China); Dongxing Zhao (Peking University, China); Hongyi Chen (Peking University, China); Juanjuan Ren (Peking University, China); Qishuang Gong (Peking University, China);

00:00 Analysis of Hong-Ou-Mandel Interference Behavior of Photons Carrying Orbital Angular Momentum
Xiaoyan Chen (Sun Yat-sen University, China); Guozuan Zhu (Sun Yat-sen University, China); Yanfeng Zhang (Sun Yat-sen University, China); Hui Chen (Sun Yat-sen University, China); Yu-jie Chen (Sun Yat-sen University, China); Siyuan Yu (Sun Yat-sen University, China);

00:00 Phonon Echo Quantum Memories in a Single Mode Resonator
E. S. Moiseev (University of Calgary, Canada); Sergey A. Moiseev (Kazan National Research Technical University, Russia);

00:00 Towards Quantum Computing and Quantum Networking with Solid-state Single Spins and Single Photons
Chao-Yang Lu (University of Science and Technology of China, China);

00:00 Raman Quantum Memory for Light Based on Control Field Frequency Modulation
Alexey A. Kalachev (Texas A&M University, USA); Xiwen Zhang (Texas A&M University, USA); Olga Kocharovskaya (Texas A&M University, USA);

00:00 Generation of Subnatural-linewidth Polarization-entangled Paired Photons
Hui Yan (South China Normal University, China);

00:00 Compressive Quantum Sensing
John C. Howell (University of Rochester, USA);

00:00 Detection Loophole-free Entanglement Verification
Xiao Yuan (Tsinghua University, China); Ping Xu (University of Science and Technology of China, China); Luo-Kan Chen (University of Science and Technology of China, China); He Lu (University of Science and Technology of China, China); Xing-Can Yao (University of Science and Technology of China, China); Xiongfeng Ma (Tsinghua University, China); Yu-Ao Chen (University of Science and Technology of China, China); Jian-Wei Pan (University of Science and Technology of China, China);

00:00 Efficient Raman Conversion Based on the Atomic Coherence
Liqing Chen (East China Normal University, China); Z. Y. Ou (Indiana University-Purdue University Indianapolis, USA); Weiping Zhang (East China Normal University, China);

00:00 Exploring a New Scheme for Ramsey-CPT Atomic Frequency Standard
Jing Yang (Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, China); Yuan Tian (Huazhong University of Science and Technology, China); Bozhong Tan (Huazhong University of Science and Technology, China); Shihong Gu (Huazhong University of Science and Technology, China);

00:00 Sub-MHz Narrow-band Biphoton Generation
Luwei Zhao (Hong Kong University of Science and Technology, China); Xiaozin Guo (The Hong Kong University of Science and Technology, China); Chang Liu (The Hong Kong University of Science and Technology, China); Yuan Sun (The Hong Kong University of Science and Technology, China); Michael M. T. Loy (Hong Kong University of Science and Technology, China); Shengwang Du (The Hong Kong University of Science and Technology, China);
00:00 Holographic Microscopy at Quantum Limits
Saijun Wu (Swansea University, UK);

Session 4P8
SC1: Characterization, Propagation and Application of Beams with Controlled Polarization, Coherence and Phase
Thursday PM, August 28, 2014
Room H
Organized by Yangjian Cai, Fei Wang

00:00 Effects of Focusing on Scintillations of Higher Order Laser Modes in Non-Kolmogorov Turbulence
Yahya Kemal Baykal (Cankaya University, Turkey);

00:00 Dependence of the Beam Wander of an Airy Beam on Its Kurtosis Parameter in Turbulent Atmosphere
Wen Wei (Soochow University, China); Xiuxiang Chu (Zhejiang Forestry University, China); Yangjian Cai (Soochow University, China);

00:00 Nonparaxial Propagation of Complex Variable Function Cos-Gaussian Beams
Dongmei Deng (South China Normal University, China); Chidao Chen (South China Normal University, China); Yushan Zheng (Shenzhen Entry Inspection and Quarantine Bureau, China); Xi Peng (South China Normal University, China); Bo Chen (South China Normal University, China); Yulian Peng (South China Normal University, China); Meiling Zhou (South China Normal University, China);

00:00 Experimental Study of the Scintillation Properties of Partially Coherent Beams in Turbulent Atmosphere
Xianlong Liu (Soochow University, China); Fei Wang (Soochow University, China); Yangjian Cai (Soochow University, China);

00:00 Coherent forward Scattering through a Cold Sr$^{88}$ Atomic Cloud
C. C. Kwong (Nanyang Technological University, Singapore); Tao Yang (National University of Singapore, Singapore); P. Symore (National University of Singapore, Singapore); K. Panday (National University of Singapore, Singapore); D. Delande (Laboratoire Kastler Brossel, UPMC-Paris 6, ENS, CNRS, France); R. Pierrat (ESPCI ParisTech, France); D. Wilkowski (Nanyang Technological University, Singapore);

00:00 Radiation Force Produced by Tightly Focused Cylindrical Vector Pulse Beam by High Numerical Aperture Lens on Rayleigh Particles
Yiming Dong (Soochow University, China); Fei Wang (Soochow University, China); Yangjian Cai (Soochow University, China);

00:00 Cosine-Gaussian-correlated Schell-model Beams with Rectangular Symmetry
Chunhao Liang (Soochow University, China); Fei Wang (Soochow University, China); Xianlong Liu (Soochow University, China); Yangjian Cai (Soochow University, China);

00:00 Cosine-Gaussian Correlated Schell-model Pulses in Dispersive Media
Chaoliang Ding (Luoyang Normal University, China); Liuzhan Pan (Luoyang Normal University, China);

00:00 An Optimal Match between the Ground-based Laser and a Relay Mirror System
Xiuxiang Chu (Zhejiang Forestry University, China);

00:00 Partially Coherent Vector Beam with Special Correlation Functions
Yahong Chen (Soochow University, China); Fei Wang (Soochow University, China); Chengliang Zhao (Soochow University, China); Yangjian Cai (Soochow University, China);

00:00 Spatial Correlation Properties of Partially and Fully Coherent Fields
Yuanjie Yang (University of Electronic Science and Technology of China, China); Yi-Dong Liu (University of Electronic Science and Technology of China, China);

00:00 Analysis of a Vortex Beam in a Non-coaxial Optical Focusing System
Guoxuan Zhu (Sun Yat-sen University, China); Yangfeng Zhang (Sun Yat-sen University, China); Hui Chen (Sun Yat-sen University, China); Yu-jie Chen (Sun Yat-sen University, China); Siyuan Yu (Sun Yat-sen University, China);

00:00 $M^2$-factor for the Partially Coherent Elegant Laguerre-Gaussian Beam Propagating through the Turbulent Ocean
B. Wang (Anhui Normal University, China); Y. S. Yuan (Anhui Normal University, China); Zhiheng Cui (Anhui Normal University, China); Jun Qu (Anhui Normal University, China);

00:00 Propagation Properties of an Anomalous Hollow Beam with Orbital Angular Momentum through a Paraxial ABCD Optical System
Chenchen Zhao (Soochow University, China); Chengliang Zhao (Soochow University, China); Yangjian Cai (Soochow University, China);
<table>
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<tr>
<th>Time</th>
<th>Session 4P_11a SC1: Novel Mathematical Methods in Electromagnetics</th>
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| 00:00 | Propagation Properties of Partially Coherent Anomalous Hollow Beams in Uniaxial Crystals  
Xingyuan Lu (Soochow University, China);  
Chengliang Zhao (Soochow University, China);  
Yangjian Cai (Soochow University, China); |
| 00:00 | On the Influence of the Electronic Structure of Atoms on the Behavior of Radiation Transition Probabilities in Alternating Electric Fields  
Elena Vladimirovna Koryukina (National Research Tomsk State University, Russia); |
| 00:00 | Higher-order Surface Modes in the Goubau Line  
Yury V. Shestopalov (University of Gävle, Sweden);  
Ekaterina Kuzmina (Moscow State Institute of Radio Engineering, Electronics, and Automation (Technical University), Russia); |
| 00:00 | Inverse Problem Method for Permittivity Reconstruction of Two-layered Media: Numerical and Experimental Results  
Yury V. Shestopalov (University of Gävle, Sweden);  
Yury G. Smirnov (Penza State University, Russia);  
Ekaterina D. Derevyanchuk (Penza State University, Russia); |
| 00:00 | Propagation of TM Waves in a Double-layer Nonlinear Inhomogeneous Cylindrical Waveguide  
Eugene Smol’kin (Penza State University, Russia);  
Dmitry V. Valovik (Penza State University, Russia); |
| 00:00 | Numerical Analyze of Waveguide Transmission Coefficient with Non-uniform Dielectric Slab  
Aleksander P. Smirnov (Lomonosov Moscow State University, Russia);  
A. N. Semenov (Lomonosov Moscow State University, Russia);  
Yury V. Shestopalov (University of Gävle, Sweden); |
| 00:00 | Near Field Optimization in EM Simulation of Smart Shelf RFID Antenna Radiation  
Andrey S. Andrenko (SYSU-CMU Shunde International Joint Research Institute, China); |

<table>
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<tr>
<th>Time</th>
<th>Session 4P_11b Computational Electromagnetics</th>
</tr>
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| 00:00 | Efficient Method for Field Coupling to Nonuniform Transmission Line Using Cascaded SPICE Model  
Haiyan Xie (Northwest Institute of Nuclear Technology, China);  
Jianqiao Wang (Northwest Institute of Nuclear Technology, China);  
Yong Li (Northwest Institute of Nuclear Technology, China);  
Hongfu Xia (Northwest Institute of Nuclear Technology, China);  
Chun Xuan (Northwest Institute of Nuclear Technology, China); |
| 00:00 | Self-consistent Simulation of the Nuclear (E1) HEMP  
Meiyan Fu (Northwest Institute of Nuclear Technology, China);  
Maoyu Zhang (Northwest Institute of Nuclear Technology, China); |
| 00:00 | Reduced Vlasov-Maxwell Modeling  
Philippe Helluy (University of Strasbourg, Inria Tonus, France);  
M. Massaro (University of Strasbourg, France);  
L. Navoret (University of Strasbourg, Inria Tonus, France);  
N. Pham (University of Strasbourg, Inria Tonus, France);  
T. Strub (AxesSim, France); |
| 00:00 | Discontinuous Galerkin Time Domain Method for Scattering Problems Simulation with GPU Acceleration  
Geng Chen (Xuzhou Normal University, China);  
Lei Zhao (Jiangsu Normal University, China);  
Wenhua Yu (State College, USA); |
| 00:00 | A Fast Algorithm for Calculating Complex Targets Near-field EM Scattering Characteristics  
Yanjie Cui (Science and Technology on Electromagnetic Scattering Laboratory, China);  
Wenqiang Chen (Science and Technology on Electromagnetic Scattering Laboratory, China);  
Xiang-Yang Zhang (Science and Technology on Electromagnetic Scattering Laboratory, China);  
Jianping Zheng (Science and Technology on Electromagnetic Scattering Laboratory, China);  
Yang Bai (Science and Technology on Electromagnetic Scattering Laboratory, China); |
00:00 Fast Iterative Computation of Internal Field Intensity for Cabin on HIRF Based on Energy Conservation Modification
Zichang Liang (The State Key-Lab for Electromagnetic Characters of Environment, China); Yi Liao (Shanghai Key Laboratory of Electromagnetic Environmental Effects for Aerospace Vehicle, China); Pengcheng Gao (Science and Technology on Electromagnetic Scattering Laboratory, China); Liangshuai Guo (Shanghai Key Laboratory of Electromagnetic Environmental Effects for Aerospace Vehicle Yangpu, China);

00:00 Additional Cross Coupling Coefficient Used as Matching Ladder Network in Coupled Based Band Pass Filters
Bahareh Moradi (Universitat Autònoma de Barcelona, Spain); Ursula Martinez-Iranzo (Universitat Autònoma de Barcelona, Spain); Joan Garcia-Garcia (Universitat Autònoma de Barcelona, Spain);

00:00 Negative Group Delay Network Using CMOS Cascade Amplifier and Bonding-wire
Jaeyeon Kim (Chonbuk National University, Republic of Korea); Junsk Park (Chonbuk National University, Republic of Korea); Girdhari Chaudhary (Chonbuk National University, Republic of Korea); Yongchae Jeong (Chonbuk National University, Republic of Korea); Namsik Ryu (Electronics and Telecommunications Research Institute, Republic of Korea); Jongsik Lim (Soonchunhyang University, Republic of Korea);

00:00 High Efficiency TM_{01}-mode Cylindrical Waveguide Microwave Reactor for Microwave Material Continuing Processing
Yi Chen Zhong (University of Electronic Science and Technology of China, China); Wei Na Huang (University of Electronic Science and Technology of China, China); Yu Jian Cheng (University of Electronic Science and Technology of China, China);

00:00 High Efficiency Darlington Power Amplifier Design Using 0.5 µm GaN-on-Silicon HEMT Technology
Min-Li Chou (Chang Gung University, Taiwan, R.O.C.); Hong-Kun Wang (Chang Gung University, Taiwan, R.O.C.); Hsein-Chin Chiu (Chang Gung University, Taiwan, R.O.C.); Fan-Hsiu Huang (Chang Gung University, Taiwan);

00:00 Design of an All-pass Phaser Using Microstrip C-sections
Weiwei Liao (South University of Science and Technology of China, China); Qingfeng Zhang (South University of Science and Technology of China, China); Yifan Chen (South University of Science and Technology of China, China);

00:00 A Double Ended Active Electrode Using SiP with DC and 50 Hz Rejection
Linping Gao (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China); Nikolas Gao (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China); Jinyong Zhang (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China); Lei Wang (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China);

Session 4P.12
Microwave and Millimeter Wave Circuits and Devices, CAD

Thursday PM, August 28, 2014
Room L

00:00 Microstrip Diplexer Design Using Three EBG
Ursula Martinez-Iranzo (Universitat Autònoma de Barcelona, Spain); Bahareh Moradi (Universitat Autònoma de Barcelona, Spain); Eva Arasa (Universitat Autònoma de Barcelona, Spain); Julian Alonso (Universitat Autònoma de Barcelona, Spain); Joan Jose Garcia-Garcia (Universitat Autònoma de Barcelona, Spain);

00:00 Wide-stopband Millimeter-wave BPF on GaN MMIC Using Asymmetric Feeding Structure
Jin Xu Xu (South China University of Technology, China); Xiu-Yin Zhang (City University of Hong Kong, China); Xiao Feng Liu (South China University of Technology, China);

00:00 Substrate Integrated Waveguide Frequency Reconfigurable Filter Controlled by Magnetic Field
Qiu Dong Huang (University of Electronic Science and Technology of China, China); Xiao Liang Liu (University of Electronic Science and Technology of China, China); Yu Jian Cheng (University of Electronic Science and Technology of China, China);

00:00 A Dual-mode Circle Ring Resonator Bandpass Filter
Rong Sheng Li (Beijing University of Posts and Telecommunications, China); Ying-Hua Lu (Beijing University of Posts and Telecommunications, China);
00:00 Research on the Magnetic Field Space-time Distribution in the Air-core Pulse Transformer
Xiao Yang (National University of Defence Technology, China); Jianhua Yang (National University of Defence Technology, China); Xin-Bing Cheng (National University of Defence Technology, China); Jian-jin Lin (National University of Defence Technology, China); Lin Lian (National University of Defence Technology, China);

00:00 Simulation Design of a High-convergence Electron Optics System for an X-band High-impedance Relativistic Klystron
Danni Zhu (National University of Defence Technology, China); Jun Zhang (National University of Defence Technology, China); Zumin Qi (National University of Defence Technology, China); Li Wei (National University of Defence Technology, China);

00:00 A Compact Relativistic Magnetron with a TE_{10} Output Mode
Di-Fu Shi (National University of Defence Technology, China); Bao-Liang Qian (National University of Defence Technology, China); Wei Li (National University of Defence Technology, China); Hong-Gang Wang (National University of Defence Technology, China); Lin Lian (National University of Defence Technology, China);

00:00 Investigation of Novel Waveguide Phase Shifters for High Power Applications
Yiming Yang (National University of Defence Technology, China); Cheng-Wei Yuan (National University of Defence Technology, China); Qiang Zhang (National University of Defence Technology, China); Danni Zhu (National University of Defence Technology, China); Shengren Peng (National University of Defence Technology (NUDT), China); Longzhou Yu (National University of Defence Technology, China);

00:00 Electrical Lumped Model for Implemented RF-MEMS Capacitive Switch on Semi-suspended Coplanar-waveguide
Amin Khalili Moghaddam (University of Malaya, Malaysia); Joon Huang Chua (University of Malaya, Malaysia); Harikrishnan A/L Ramiah (University of Malaya, Malaysia);

00:00 High Gain Antenna Using Double Side Paired S-shaped Split Ring Resonator as Metamaterial Superstrate for ku-band Applications
Abdulkareem S. Abdullah (University of Basrah, Iraq); Ali A. Saleh (University of Basrah, Iraq);

00:00 A Multiple-notch UWB Printed Slot Antenna with CNSS Enhanced
Baiqiang You (Xiamen University, China); Tao Zhou (Xiamen University, China); Jianhua Zhou (Xiamen University, China);

00:00 Compact Printed Ultra-wide Band Antenna with Band-notched Characteristics
Chongzi Han (Harbin Institute of Technology, China); Jiaran Qi (Harbin Institute of Technology, China); Jing-Hui Qiu (Harbin Institute of Technology, China);

00:00 A Microstrip-fed Monopole Antenna Design for Ultra Wideband Application
Zuhura J. Ali (Tianjin University of Technology and Education, China); Hong-Xing Zheng (Tianjin University of Technology and Education, China);

00:00 A Triangular Antenna with Spiral Slot Arrays for Bei-dou Navigation
Jianhua Zhou (Xiamen University, China); Kaishuang Zhang (Xiamen University, China); Baiqiang You (Xiamen University, China);

00:00 A Study of Parameterization on Rectangular Patched Microstrip Antenna Using High Frequency Structure Simulator (HFSS)
Anas Abdu (Tianjin University of Technology and Education, China); Hong-Xing Zheng (Tianjin University of Technology and Education, China);

00:00 Compact UWB Coplanar Waveguide Antenna with Double Band-notches Using Novel Common Direction Triangle Complementary Split Ring Resonators
Quan Wang (University of Electronics Science and Technology of China, China); Tao Huang (University of Electronic Science and Technology of China, China); Di Jiang (University of Electronic Science and Technology of China, China); Zhenhai Shao (University of Electronics Science and Technology of China, China);

00:00 A New Spiral Antenna with Improved Axial Ratio and Shorted Arm Length
Hui-Fen Huang (South China University of Technology, China); Zonglin Lv (South China University of Technology, China);

Session 4P.13
Antenna and Array 2

Thursday PM, August 28, 2014
Room M
00:00 Patch Antenna with Electrically Tunable Ferrite-ferroelectric Bilayer
Kaida Xu (University of Electronic Science and Technology of China, China); Ronald J. Spiegel (Duke University, USA); Yonghong Zhang (University of Electronic Science and Technology of China, China); William Thomas Joines (Duke University, USA); Qing Huo Liu (Duke University, USA);

00:00 Compact Frequency-reconfigurable Antenna for Multi-band Wireless Applications
Abdulkareem S. Abdullah (University of Basrah, Iraq); Yasir I. Abduraheem (University of Basrah, Iraq); Ayman Nasih Salman Younis (University of Thi-Qar, Iraq);

00:00 Tri-band Dual-polarized Multilayer SAR Microstrip Antenna
Hossam Hamza (Xidian University, China); Khaled Hussien (Military Technical College, Egypt);

00:00 Active Phased Array Radars as an Effective ECCM systems
Faran Awais Butt (University of Management and Technology, Pakistan); Ahmed Malik (University of Management and Technology, Pakistan); Madiha Jalil (University of Management and Technology, Pakistan);

00:00 Dual Band Monopole Antenna for WBAN
Ebrahim Sailan Alabidi (Universiti Teknologi Malaysia, Malaysia); Muhammad Ramlee Kamarudin (Universiti Teknologi Malaysia, Malaysia); Tharek Bin Abdul Rahman (Universiti Teknologi Malaysia (UTM), Malaysia); Mohsen Khalily (Universiti Teknologi Malaysia, Malaysia);

00:00 Kind of Dual-band Horn Antenna with Coaxial Feed Structure for High Power Microwave Application
Qiang Zhang (National University of Defense Technology, China); Shengren Peng (National University of Defense Technology (NUDT), China); Cheng-Wei Yuan (National University of Defense Technology, China); Yiming Yang (National University of Defense Technology, China); Jing Liu (National University of Defense Technology, China);

00:00 Absorption of 30 and 20 GHz Microwave Communication Signal as a Function of Rain Rate
Inderjit Singh Hudiara (Chitkara University, India);
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( ) 7th PIERS1997 in Hong Kong ( ) 8th PIERS1997 in Cambridge ( ) 9th PIERS1998 in Nantes
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