

JSAP-OSA Joint Symposia 2012

(The 73rd JSAP Autumn Meeting 2012)

Program Guide



Program at a Glance

Sept. 11, 2012 (Tuesday)		
Room	G1	G2
AM	9:00-12:00 Plasmonics: materials and devices	9:30-11:25 Biophotonics
Lunch	12:00-13:30	11:25-12:55
PM	13:30-18:30 Plasmonics: materials and devices	12:55-18:05 Biophotonics
Evening	19:00-20:30 JSAP Reception @ANA Hotel Matsuyama	
Sept. 12, 2012 (Wednesday)		
Room	G1	G2
AM		9:00-10:00 Special Lecture by OSA President
	10:15-12:00 Plasmonics: materials and devices	10:15-12:15 Nanocarbon Photonics
Lunch	12:00-13:30	12:15-13:45
PM	13:30-15:15 Plasmonics: materials and devices	13:45-14:45 Nanocarbon Photonics
	15:30-17:15 Plasmonics:imaging	15:00-18:00 Medical Photonics
Evening	19:00-21:00 OSA Reception (*Invitation only) @ANA Hotel Matsuyama	
Sept. 13, 2012 (Thursday)		
Room	G1	G2
AM	9:30-12:00 Plasmonics:imaging	9:00-12:15 Lasers, Laser Applications
Lunch	12:00-13:30	12:15-13:45
PM	13:30-18:15 Opto-electronics	13:45-17:45 Lasers, Laser Applications
Sept. 14, 2012 (Friday)		
Room	G1	G2
AM	9:00-12:00 Opto-electronics	9:00-11:45 Optical Micro-sensing, Manipulation and Fabrications
Lunch		11:45-13:15
PM		13:15-15:00 Optical Micro-sensing, Manipulation and Fabrications

JSAP-OSA Joint Symposia 2012

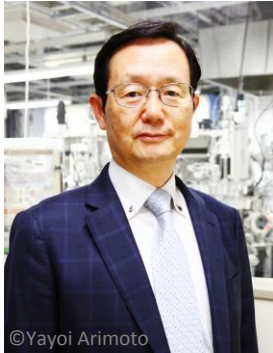
(The 73rd JSAP Autumn Meeting 2012)

September 11(Tue.)-14(Fri.), 2012

Ehime University / Matsuyama University

Matsuyama, Ehime, Japan

Welcome to JSAP-OSA Joint Symposia



Message from JSAP President

In this commemorative year of our 80th anniversary, I am delighted to have the first Optics/Photonics Symposia with our partner society, the Optical Society (OSA) at the 73rd JSAP Autumn Meeting. It is our great pleasure and honor to have Tony Heinz, the President of OSA with Elizabeth Rogan, the CEO and Kari Apter, Deputy Senior Director of Executive Office Programs at this meeting. I would like to express my sincere appreciation to OSA for their strong support and efforts to realize these joint symposia and encourage their brilliant members to participate in this meeting in Matsuyama, the city of castle and hot springs (onsen).

We welcome all the members of JSAP and those of OSA from around the world, in particular, our colleagues from other Asian countries.

The Japan Society of Applied Physics (JSAP), the only one academic society focusing on applied physics in the world, celebrates its 80th anniversary this year. Currently we have approximately 20,000 members and more than 6,000 of them will be participating in this autumn meeting.

During these 4 days of this exciting event, various programs are planned focusing on plasmonics, biophotonics, optoelectronics, optical fabrication and more. More than 160 papers are expected to be presented, and half of these are given by international speakers. I wish the speakers and the audience to exchange the latest research progresses and the friendship, and also enjoy exploring the historical town of Matsuyama.

The goals for the symposia are to strengthen our ties between OSA and JSAP, and to boost further exchanges and collaborations between our members. It is a great honor for JSAP to share the part of our overarching mission with OSA.

On JSAP's own behalf, I am wishing a great success to the meeting.

応用物理学会とOSAの新たな挑戦が松山から始まります。ご期待下さい。

Makoto Konagai

President, The Japan Society of Applied Physics (JSAP)
Tokyo Institute of Technology, Japan



Message from OSA President

On behalf of my fellow organizing committee members, it is my great pleasure to welcome you to the first JSAP-OSA Joint Symposia at the 73rd JSAP Autumn Meeting. The Optical Society (OSA) is honored to collaborate with the Japan Society of Applied Physics on this exciting event. We have partnered with JSAP and its affiliate the Optical Society of Japan for many years through a joint agreement to encourage scientific contact between members of the Societies. This past February, I had the privilege of meeting with JSAP/OSA members Satoshi Kawata, JSAP Vice-President and Symposia, and Yasuhiro Shiraki, JSAP Past President, at OSA headquarters in Washington, DC, USA. It was at their suggestion that OSA came to participate in the JSAP Autumn Meeting. We are grateful to them and JSAP for inviting us to collaborate in organizing these joint symposia for the benefit of the technical community.

As president of OSA, I am privileged to be able to travel to many parts of the world, meeting OSA members and optical scientists of all backgrounds. Japanese researchers are internationally renowned for their outstanding contributions to both the fundamental and applied side of optics and photonics. During my own career, I have very much benefitted from scientific advances made in Japan and from collaborations with brilliant Japanese scientists. It is my pleasure to have a chance to learn about the latest developments at this meeting. I am also delighted with the recognition that the OSA has achieved here in Japan. With more than 1,000 members, Japan is home to the largest group of OSA members in any country outside the United States.

I am looking forward to an exciting and varied program over the course of four days—featuring speakers discussing the latest in plasmonics, biophotonics, optoelectronics and optical fabrication, among other topics. We will surely enjoy not only the technical aspects of the meeting, but also the beauty of the unique venue here in the castle city of Matsuyama.

The purpose of the joint symposia was to bring together scientists from around the world to participate in the JSAP Autumn Meeting. That goal was certainly met as approximately half of the speakers in these sessions are from outside of Japan. JSAP is truly fostering international collaboration, and OSA is proud to be a part of this effort, as we too share the same objective as part of our society's mission.

On behalf of the OSA, let me wish you a very successful and enjoyable meeting!

松山で光科学と温泉を楽しみましょう。どうもありがとうございます。

Tony F. Heinz

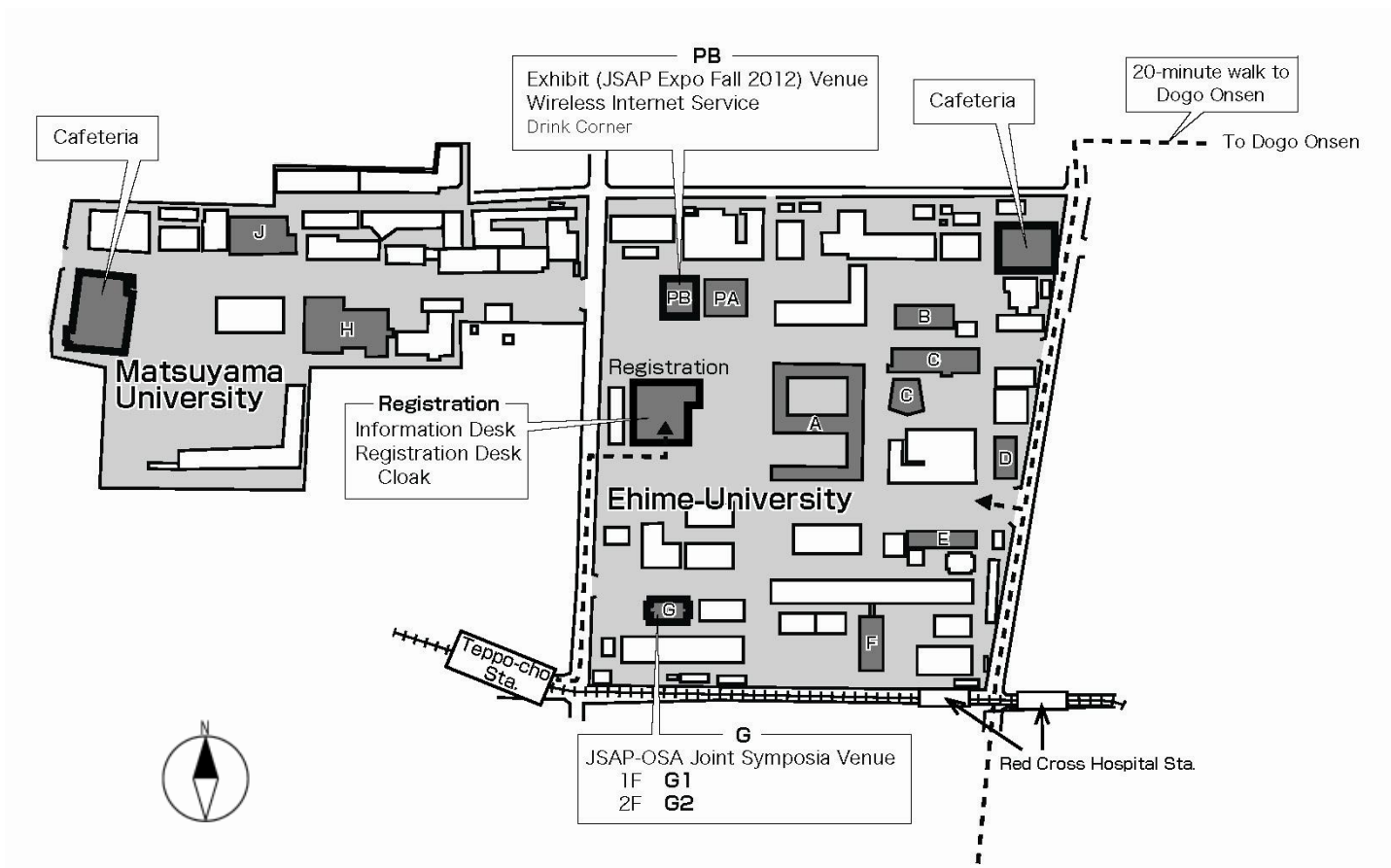
President, The Optical Society (OSA)
Columbia University, USA

General Information

Dates: September 11 (Tue.) – 14 (Fri.), 2012

Venue: Ehime University, Johoku Campus
(Bunkyo-cho 3, Matsuyama-shi, Ehime)
Matsuyama University, Bunkyo Campus
(Bunkyo-cho 4-2, Matsuyama-shi, Ehime)

Venue Map



Registration

Location: Lobby, Media Center 1F, Ehime University

Hours: Sept. 11-13; 8:00-17:30

Sept. 14; 8:00-13:00

Registration Fee (Abstract DVD, Official Guidebook included)

	Advanced	Onsite
JSAP/OSA Member	8,000 JPY	12,000 JPY
Student	3,000 JPY	5,000 JPY
Nonmember	15,000 JPY	20,000 JPY

* The members of the following co-operative academic societies are regarded as JSAP members and eligible to register at the member registration fee; American Physical Society (APS), European Physical Society (EPS), Institute of Physics (IOP), Electron Devices Society/IEEE (EDS), IEEE Photonics Society, Korean Physical Society (KPS), International Society for Optical Engineering (SPIE), Optical Society of Korea (OSK).

Lost and Found

JSAP offers Lost and Found service. To inquire about lost items during the conference, please come to the Information Desk.

After the conference, please contact at JSAP-OSA Joint Symposia Secretariat (jsap-osa-js@jsap.or.jp).

Wireless Internet Service

Wireless internet access are available for the participants at Venue PB (Gymnasium No. 3, Ehime University). We will hand out the leaflet of the procedure at the venue.

No PC is available at the site. Please bring your own laptops.

Cloak Room Service

Location: Permanent Exhibition Room, Media Center 1F, Ehime University

Hours: Sept. 11(Tue.) ; 8:00-19:00

Sept. 12 (Wed.) & 13 (Thu.) ; 8:00-19:30

Sept. 14 (Fri.); 8:00-16:00

Fee: 300 JPY per luggage

Notes: Please keep the valuables with you. We may have to refuse your luggage due to the limited space of the room.

Exhibit (JSAP Expo Fall 2012)

Location: Venue PB (Gymnasium No.3, Ehime University)

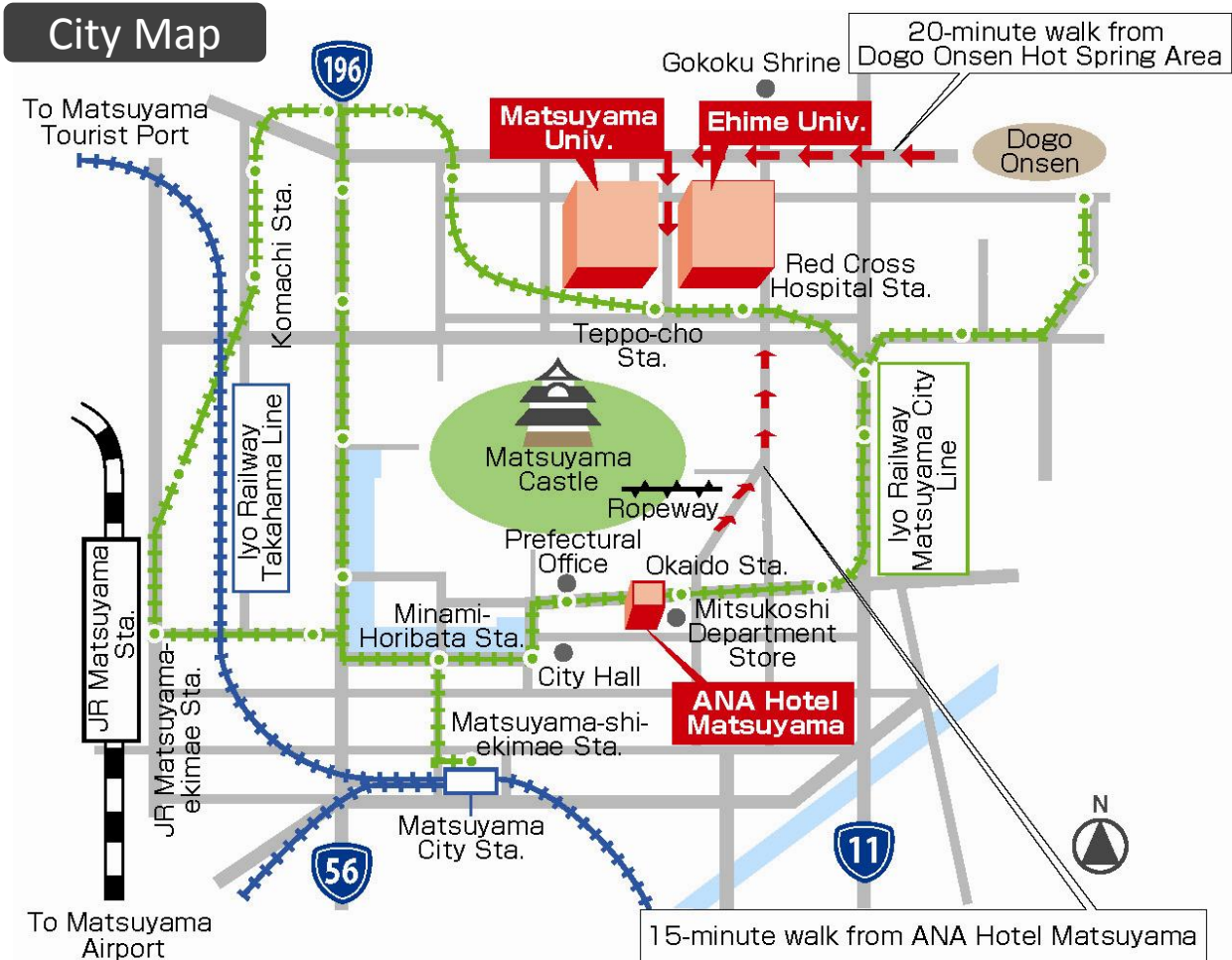
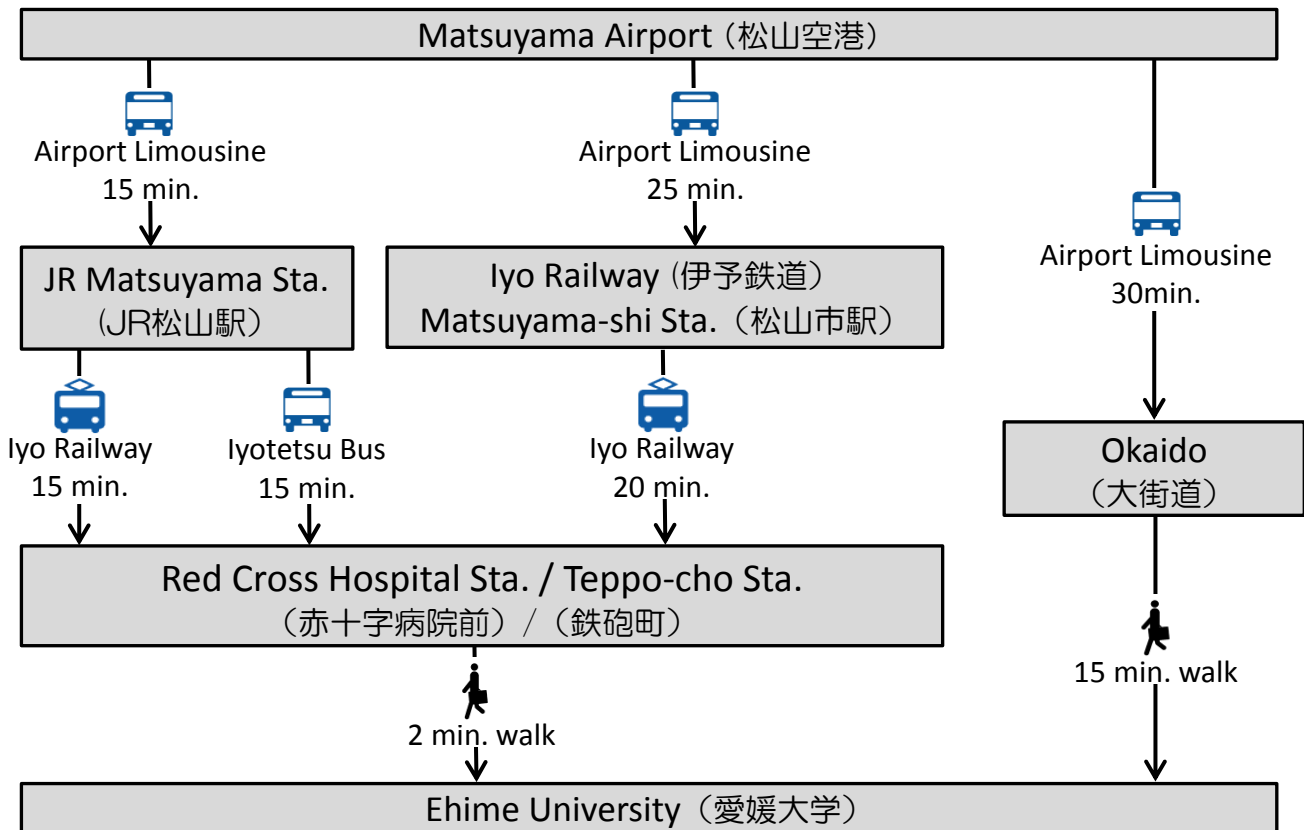
Hours: Sept. 11-13; 10:00-17:30

Sept. 14; 10:00-13:00

The exhibit is open to everyone.

Please see p.7 for more details.

Access



Social Events

■ JSAP Reception

Date: 19:00-20:30, Sept. 11 (Tue.), 2012

Location: Diamond Ballroom, ANA Hotel Matsuyama
(3-2-1 Ichiban-cho, Matsuyama city, Ehime, 790-8520)

Fee: 3,000 JPY

Limited 300 tickets available.

Please register at the registration desk by 15:00, Sept. 11.

■ OSA Reception (*Invitation only)

Date: 19:00-21:00, Sept. 12 (Wed.), 2012

Location: Diamond ballroom, ANA Hotel Matsuyama
(3-2-1 Ichiban-cho, Matsuyama city, Ehime, 790-8520)

Access to ANA Hotel Matsuyama

By Iyo Railway, Matsuyama City Line: 2 minute-walk from Okaido

JSAP Expo Fall 2012

Date: Sept. 11(Tue.)–14 (Fri.), 2012

10:00-17:30 (10:00-13:00 on Sept. 14)

Location: Venue PB (Gymnasium No. 3, Ehime University)

Number of exhibitors: 100 companies (expected)

Exhibitors' List (as of July 19, 2012)

Agilent Technologies Japan Ltd., APF, Inc., Apollowave Corporation, Asahi Spectra Co., Ltd., Astellatech, Inc., Axis Net Inc., Bruker AXS K.K., Bunkoukeiki Co., Ltd., Cascade Microtech, Inc., Ceramicforum Co., Ltd., Comet, Inc. / Biemtron Co., Ltd., Crestec Corporation, Crev Inc., Crosslight Software Inc. Japan Branch, Crystal Base Co., Ltd., Cybernet Systems Co., Ltd., Digital Data Management Corporation, Edwards Japan Limited, EIKO Corporation, EpiQuest, Inc., EpiTech Inc., Fujikin Incorporated, Fujitsu Limited, Hightec Systems Corporation, HiSOL, INC., Hokkaido University, HORIBA, Ltd., IOP Publishing, Iwatani Industrial Gases Corp., J. A. Woollam Japan Corporation, Japan High Tech Co., Ltd., Japan Laser Corporation, Japan Synchrotron Radiation Research Institute(JASRI), JEOL Ltd., Kenix Corp, Kinokuniya Company Ltd., Kitano Seiki Co., Ltd, Kitz SCT Corporation, Kojundo Chemical Lab. Co., Ltd., Konica Minolta Optics, Inc., Kosaka Laboratory Ltd., Lightstone Corp., Meidensha Corporation, Momentive Performance Materials Japan, LLC, MTT Corporation, Mutsumi Corporation, Nagase Techno-Engineering Co., Ltd., Nanofactor Co., Ltd, Nanometrics Japan Ltd., National Institute for Materials Science, Neoark Corporation, Nippon Roper, K.K., NTT Advanced Technology Corporation, Ocean Photonics, Inc., Omicron NanoTechnology Japan Inc., Ophir Japan Ltd., Opto Sirius Corporation, Optohub Co., Ltd., Otsuka Electronics Co., Ltd., Oxford Instruments KK, Oxide Corporation, Pascal Co., Ltd., Photolex Corporation, Photon Design Corporation, Phototechnica Corp., Quantum Design Japan, Inc., R-DEC Co., Ltd., Rigaku Corporation, Riko International Co., Ltd. / Micro-Tech Co., Ltd., Rockgate Corporation, Sanwa Vacuum Co., Ltd., Sanyu Electron Co., Ltd., Science Laboratories Inc., Sigma-Aldrich Japan, SPLEAD, Springer Japan, SystemBrain, SYSTEMHOUSE SUNRISE Inc., Taiei Electric Co., TANAKA HOLDINGS Co., Ltd., Tec Corporation, Technex Lab Co., LTD., Thamway Co., Ltd., The Japan Society of Applied Physics, The Optical Society (OSA), Thermo Riko Co., Ltd., TNS Systems LLC / TPT Japan Co., Ltd., Tokyo Instruments, Inc. / Unisoku Co., Ltd., Toshima Manufacturing Co., Ltd., TOYO Corporation, Toyo Precision Parts MFG. Co., Ltd., Toyo Tanso Co., Ltd, Ulvac Cryogenics Incorporated, Vector Semiconductor Co.,Ltd., Wiley- Japan, WITec GmbH, Zurich Instruments

G1	G2
<p>9:00-12:00 11a-G1-1~10 Plasmonics: materials and devices Organizer: Prabhat Verma (Osaka Univ.)</p>	<p>9:30-11:25 11a-G2-1~6 Biophotonics Organizer: Katsumasa Fujita (Osaka Univ.)</p>
<p>9:00-9:15 11a-G1-1 Fabrication of Plasmonic Spectral Filter for Ubiquitous Photonics (1) <i>Kensuke Mura¹, Koji Ohta¹, Yasushi Oshikane², Takaya Higashi², Fumihiko Yamamoto², Motohiro Nakano², Haruyuki Inoue²; ¹AIST Kansai, Japan; ²Osaka Univ., Japan</i></p>	
<p>9:15-9:30 11a-G1-2 Local-Plasmon-Resonator Array Fabricated in SOI Substrates <i>Masanobu Iwanaga, Bongseok Choi; NIMS, Japan</i></p>	
<p>9:30-9:45 11a-G1-3 Large-scale Fabrication of Plasmonic Metal Nanostructures for Sensor Applications <i>Wakana Kubo^{1,2}, Takuo Tanaka^{1,3}; ¹RIKEN, Japan; ²JST-PRESTO, Japan; ³Hokkaido Univ., Japan</i></p>	<p>9:30-10:10 11a-G2-1 Invited Real-Time Raman Endoscopy for In Vivo Diagnosis of Gastric Precancer and Cancer During Clinical Gastroscopic Inspections <i>Zhiwei Huang; National Univ. of Singapore, Singapore</i></p>
<p>9:45-10:00 11a-G1-4 Fast Fabrication of Plasmonic Ag Nanostructure by Using Femtosecond Laser <i>Ming Lun Tseng¹, Yao-Wei Huang¹, Hsin Wei Huang¹, Chia Min Chang¹, Ding-Wei Huang¹, Hai-Pang Chiang², Greg Sun³, Din Ping Tsai⁴; ¹National Taiwan Univ., Taiwan; ²National Taiwan Ocean Univ., Taiwan; ³Univ. of Massachusetts Boston, USA; ⁴Academia Sinica, Taiwan</i></p>	
<p>10:00-10:15 11a-G1-5 MicroFabricated Radial Polarization Converter based on Gold Plasmonic Nanoslit <i>Miho Ishii, Yuzuru Kuramochi, Kenichi Ida, Kentaro Iwami, Norihiro Umeda; Tokyo Univ. of Agriculture and Technology, Japan</i></p>	<p>10:10-10:25 11a-G2-2 Detection of Lipid Uptake by Triglyceride Deposit Cardiomyovascuopathy-indicated Fibroblast Using CARS Microscopy <i>Harsono Cahyadi, Hirohiko Niioka, Ken-ichi Hirano, Chiaki Ikegami-Nomura, Tsutomu Araki, Mamoru Hashimoto; Osaka Univ., Japan</i></p>
<p>10:15-10:30 11a-G1-6 Optimization and fabrication of metallic nanotip for strong enhancement in TERS <i>Imad Maouli, Yuika Saito, Prabhat Verma, Satoshi Kawata; Osaka Univ., Japan</i></p>	<p>10:25-10:40 11a-G2-3 Independent Component Analysis of Stimulated Raman Spectral Images <i>Yasuyuki Oze^{1,2}, Kazuyoshi Itoh¹; ¹Osaka Univ., Japan; ²JST-PRESTO, Japan</i></p>
<p>Break 10:30~10:45</p>	<p>10:40-10:55 11a-G2-4 Complementary spatial and spectral analysis of the hyperspectral Raman data of cells <i>Almar Palonpon², Masaya Okada¹, Satoshi Kawata^{1,3}, Mikiko Sodeoka^{2,3}, Katsumasa Fujita^{1,2}; ¹Osaka Univ., Japan; ²JST-ERATO, Japan; ³RIKEN, Japan</i></p>
<p>10:45-11:15 11a-G1-7 Invited Optical nanofocusing and enhanced Raman scattering in vertical optical antennas <i>Tian Yang, Jing Long, Hui Yi, Xiaolong He, Baoan Liu; Shanghai Jiao Tong Univ., China</i></p>	<p>10:55-11:10 11a-G2-5 Raman microscope imaging of non-labeled apoptotic cells <i>Masaya Okada¹, Nicholas Smith¹, Almar Palonpon², Satoshi Kawata^{1,3}, Mikiko Sodeoka^{2,3}, Katsumasa Fujita^{1,2}; ¹Osaka Univ., Japan; ²JST-ERATO, Japan; ³RIKEN, Japan</i></p>

G1	G2
9:00-12:00 11a-G1-1~10 Plasmonics: materials and devices (continued)	9:30-11:25 11a-G2-1~6 Biophotonics (continued)
11:15-11:30 11a-G1-8 Localized Charges in Plasmonic Inverted Pyramidal Nanostructures with the Tips <i>Shih-Wen Chen¹, Hsin-Hung Cheng¹, Ying-Yu Chang¹, Jen-You Chu², Ding-Zheng Lin², Ying-Ping Chen², Jia-Han Li¹; ¹National Taiwan Univ., Taiwan; ²Industrial Technology Research Inst., Taiwan</i>	11:10-11:25 11a-G2-6 Deep UV Raman microscopy for resonance imaging of nucleotide distributions in a cell <i>Yasuaki Kumamoto¹, Atsushi Taguchi¹, Nicholas Smith², Satoshi Kawata²; ¹RIKEN, Japan; ²Osaka Univ., Japan</i>
11:30-11:45 11a-G1-9 Near-field optical response of periodically arrayed plasmonic nanogap antennas <i>Sakai Kyouzuke, Nomura Kensuke, Tanaka Yoshito, Sasaki Keiji; Hokkaido Univ., Japan</i>	Lunch 11:25~12:55
11:45-12:00 11a-G1-10 Selective Enhancement in Infrared Absorption Spectra via Metal-hole Alloy Plasmonic Crystal Micro-structures <i>Yoshiaki Nishijima¹, Hiroki Nigorinuma¹, Lorenzo Rosa², Juodkazis Saulius²; ¹Yokohama National Univ., Japan; ²Swinburne Univ. of Technology, Australia; ³Melbourne Centre for Nanofabrication, Australia</i>	12:55-18:05 11p-G2-1~17 Biophotonics Organizer: Katsumasa Fujita (Osaka Univ.)
Lunch 12:00~13:30	
13:30-18:30 11p-G1-1~17 Plasmonics: materials and devices Organizer: Prabhat Verma (Osaka Univ.)	12:55-13:35 11p-G2-1 Invited Improvement of penetration depth and spatial resolution in "in vivo" two-photon microscopy <i>Tomomi Nemoto; Hokkaido Univ., Japan</i>
13:30-14:00 11p-G1-1 Invited Generation of EUV Radiation by Plasmonic Field Enhancement using Funnel-waveguides <i>In-Yong Park, Joonhee Choi, Dong-Hyub Lee, Seunghwoi Han, Seungchul Kim, Seung-Woo Kim; KAIST, Korea</i>	13:35-13:50 11p-G2-2 Observe the Signal Propagation on Motor Neuron in Drosophila Larvae with Voltage Sensitive Dye and High-Speed Scanning Microscopy <i>Hen-Yi Lin¹, Chen-Li Lin¹, Li-An Chu², Ann-Shyn Chiang², Yen-Yin Lin², Shi-Wei Chu¹, Shi-Wei Chu¹; ¹National Taiwan Univ., Taiwan; ²National Tsing Hua Univ., Taiwan</i>
14:00-14:15 11p-G1-2 Silica coated gold nanoparticles 2D array for enhanced fluorescence sensing <i>Francesca Pincella¹, Katsuhiko Isozaki², Kazushi Miki¹; ¹Tsukuba Univ., Japan; ²NIMS, Japan</i>	13:50-14:05 11p-G2-3 Real-time optical diagnosis of rat brain locally exposed to a shock wave <i>Satoko Kawauchi¹, Shunichi Sato¹, Izumi Nishidate², Satoru Takeuchi³, Hiroshi Nawashiro³, Hiroshi Ashida¹; ¹National Defense Medical College Research Inst., Japan; ²Tokyo Univ. of Agriculture and Technology, Japan; ³National Defense Medical College, Japan</i>
	14:05-14:20 11p-G2-4 Chirality Study inside Biological Tissue by Second Harmonic Generation Circular Dichroism <i>Kuo-Jen Hsu, Hsuan Lee, Guan-Yu Zhuo, Shi-Wei Chu; National Taiwan Univ., Taiwan</i>

G1	G2
13:30-18:30 11p-G1-1~17 Plasmonics: materials and devices (continued)	12:55-18:05 11p-G2-1~17 Biophotonics (continued)
14:15-14:30 11p-G1-3 Local electromagnetic fields of surface plasmons on metallic oxide materials <i>Matsui Hiroaki, Tabata Hitoshi; The Univ. of Tokyo, Japan</i>	14:20-14:35 11p-G2-5 Second Harmonic Imaging to Distinguish Grana and Starch inside an Intact Leaf <i>Mei-Yu Chen, Guan-Yu Zhuo, Po-Fu Chen, Wei-Lin Chang, Kuo-Jen Hsu, Pei-Chun Wu, Tsung-Yuan Hsieh, Tzu-Ming Liu, Shi-Wei Chu; National Taiwan Univ., Taiwan</i>
14:30-14:45 11p-G1-4 Interaction Effect in Floated Optical Bowtie Nanoantennas <i>Chung Hoang, Thang Dao, Jung-Sub Wi, Masakazu Aono, Tadaaki Nagao; International Center for Materials NanoArchitectonics (MANA), NIMS, Japan</i>	14:35-14:50 11p-G2-6 Near infrared imaging of leaf water content under photosynthesis <i>Seiichi Uoshita, Taiki Minami, Yasushi Inouye; Osaka Univ., Japan</i>
14:45-15:00 11p-G1-5 Visible Light Plasmonic Enhancement of Photocatalytic Activity of ZnO Nanowires <i>Thang Dao, Nono Arai, Masud Rana, Chung Hoang, Gui Han, Toshihide Nabatame, Tadaaki Nagao; NIMS, Japan</i>	Break 14:50~15:05
Break 15:00~15:15	15:05-15:20 11p-G2-7 Imaging Biomolecules with Stokes-polarimeter based Second Harmonic Generation Microscopy <i>Nirmal Mazumder, Jianjun Qiu, Chih-Wei Hu, Fu-Jen Kao; National Yang-Ming Univ., Taiwan</i>
15:15-15:30 11p-G1-6 Excitation of antisymmetric SPP modes in metal-insulator-metal structures by embedded dye molecules <i>Shinji Hayashi, Shu Okada, Dai Nozaki, Minoru Fujii; Kobe Univ., Japan</i>	15:20-15:35 11p-G2-8 Fluorescence Lifetime Imaging and Anisotropy Measurement via Stimulated Emission <i>Po-Yen Lin^{1,2}, Thilo Dellwig¹, Shin-Shian Lee¹, Fu-Jen Kao¹; ¹National Yang-Ming Univ., Taiwan; ²Academia Sinica, Taiwan</i>
15:30-15:45 11p-G1-7 Investigation of the surface plasmon polariton excitation conditions at a metal-semiconductor contact interface by simulation of reflectance characteristics <i>Atsushi Motogaito, Shohei Nakamura, Hideto Miyake, Kazumasa Hiramatsu; Mie Univ., Japan</i>	15:35-15:50 11p-G2-9 Saturated excitation (SAX) microscopy; high depth-resolution fluorescence imaging <i>Masahito Yamataka, Nicholas Smith, Satoshi Kawata, Katsumasa Fujita; Osaka Univ., Japan</i>
15:45-16:00 11p-G1-8 Polarization-independent plasmonic porous Au absorber <i>Wen-Ting Kung, Chih-Jui Yu, Chih-Ming Wang; National Dong Hwa Univ., Taiwan</i>	15:50-16:05 11p-G2-10 Multimodal Imaging via Light Microscopy and Cathodoluminescence Microscopy for Biological Specimens with Rare-earth Doped Nanophosphors <i>Taichi Furukawa¹, Hirohiko Niio¹, Masayoshi Ichimiya², Tomohiro Nagata³, Masaaki Ashida¹, Tsutomu Araki¹, Mamoru Hashimoto¹; ¹Osaka Univ., Japan; ²Osaka Dental Univ., Japan; ³ULVAC Inc., Japan</i>
16:00-16:15 11p-G1-9 Plasmonic Behaviors of Au Nanorings in Solutions of Controlled Geometry <i>Hung-Yu Tseng, Wei-Fang Chen, Chih-Chung (C. C.) Yang; National Taiwan Univ., Taiwan</i>	16:05-16:20 11p-G2-11 Multimodal label-free imaging through combined Raman spectroscopy and quantitative phase imaging <i>Nicolas Pavillon, Alison Hobro, Katsumasa Fujita, Nicholas Smith; Osaka Univ., Japan</i>

G1	G2
13:30-18:30 11p-G1-1~17 Plasmonics: materials and devices (continued)	12:55-18:05 11p-G2-1~17 Biophotonics (continued)
16:15-16:30 11p-G1-10 Absorption-Induced Transparency in Plane Metallic Films <i>Takayuki Okamoto¹, Kentaro Takatori², Ruggero Micheletto², Koji Ishibashi¹; ¹RIKEN, Japan; ²Yokohama City Univ., Japan</i>	16:20-16:35 11p-G2-12 Optical control of cell signalling, contraction and action potentials <i>Nicholas Smith, Nicolas Pavillon, Jun Ando, Yasuaki Kumamoto, Katsumasa Fujita, Satoshi Kawata; Osaka Univ., Japan</i>
16:30-16:45 11p-G1-11 Local surface plasmon resonance of Ag/Co nanostructures selfassembled in TiO2 films <i>Anri Watanabe¹, Katsura Ikemiya¹, Akira Chikamatsu^{1,2}, Yasushi Hirose^{1,2,3}, Tetsuya Hasegawa^{1,2,3}; ¹The Univ. of Tokyo, Japan; ²JST-CREST, Japan; ³KAST, Japan</i>	Break 16:35~16:50
Break 16:45~17:00	16:50-17:05 11p-G2-13 Utilization of Coherent Lateral Leakage Radiation from Thin-Ridge SOI Waveguides for Integrated Optical Evanescent Biosensing <i>Kiplimo Yego, Thach G. Nguyen, Arnan Mitchell; RMIT Univ., Australia</i>
17:00-17:15 11p-G1-12 Tunable metal nano-structures for DUV plasmonics <i>Koichi Watanabe¹, Yuika Saito¹, Atsushi Taguchi², Satoshi Kawata¹; ¹Osaka Univ., Japan; ²RIKEN, Japan</i>	17:05-17:20 11p-G2-14 Localized Surface Plasmon Sensing of Single Influenza Virus with Specific Subtype <i>Jun Ning¹, Kotaro Nagata¹, Hideki Hasegawa², Hiroshi Kano¹; ¹Muroran Inst. of Technology, Japan; ²National Inst. of Infectious Disease, Japan</i>
17:15-17:30 11p-G1-13 Properties of Synthesized Nanoparticles through Characteristics of Solution Plasma <i>Yongkang Heo, Maria Bratescu, Nagahiro Saito; Nagoya Univ., Japan</i>	17:20-17:35 11p-G2-15 Fluorescence Analysis of Micro-patterned Bacterial Light-harvesting 2 Complexes on a Gold Surface <i>Rei A. Furukawa¹, Masaharu Kondo², Shunsuke Yajima², Shunsuke Sakai², Kouji Iida³, Takehisa Dewa², Keizo Shimada⁴, Kenji V. P. Nagashima⁴, Hideki Hashimoto⁵, Mamoru Nango⁵; ¹The Univ. of Electro-Communications, Japan; ²Nagoya Inst. of Technology, Japan; ³Nagoya Municipal Industrial Research Inst., Japan; ⁴Tokyo Metropolitan Univ., Japan; ⁵Osaka City Univ., Japan</i>
17:30-17:45 11p-G1-14 The Morphology of NPs on their local refractive index sensitivity in LSPR spectrum <i>Bin Chen; Kyushu Univ., Japan</i>	17:35-17:50 11p-G2-16 Counteracting Brownian diffusion in three dimensions for prolonged observations of freely diffusing single fluorescent nanoparticles <i>Lloyd M Davis, James A Germann, Jason K King, Brian K Canfield; Univ. of Tennessee Space Inst., USA</i>
17:45-18:00 11p-G1-15 Plasmonic Properties of Gold Trimer Ring Fabricated through DNA-Templating <i>Ryoko Watanabe-Tamaki¹, Atsushi Ishikawa¹, Takuo Tanaka^{1,2}; ¹RIKEN, Japan; ²Hokkaido Univ., Japan</i>	17:50-18:05 11p-G2-17 Synthesis and characterization of green-emitting Pt8 nanoclusters <i>Koichi Aoki¹, Shin-ichi Tanaka¹, Atsushi Muratsugu¹, Hidekazu Ishitobi¹, Takashi Jin², Yasushi Inouye¹; ¹Osaka Univ., Japan; ²RIKEN, OLABB, Osaka Univ., Japan</i>

G1	G2
<p data-bbox="256 230 587 259">13:30-18:30 11p-G1-1~17</p> <p data-bbox="137 264 707 293">Plasmonics: materials and devices (continued)</p> <p data-bbox="76 342 352 371">18:00-18:15 11p-G1-16</p> <p data-bbox="76 376 692 465">Plasmons in 1-D and 2-D Optical Nanoantennas: A Combination of Low Electron Energy Loss and Optical Spectroscopy</p> <p data-bbox="76 470 724 528"><i>Chung Vu Hoang, Gui Han, Duy Thang Dao, <u>Tadaaki Nagao</u>; NIMS, Japan</i></p> <p data-bbox="76 577 352 607">18:15-18:30 11p-G1-17</p> <p data-bbox="76 611 751 701">Simulation of arrays of metal nano-particles using a monochromatic recursive convolution finite-difference time- domain method</p> <p data-bbox="76 705 676 734"><i><u>Saswatee Banerjee</u>; Sumitomo Chemical Co. Ltd., Japan</i></p>	
ANA Hotel Matsuyama	
<p data-bbox="692 875 866 904">19:00-20:30</p> <p data-bbox="667 909 892 947">JSAP Reception</p> <p data-bbox="469 952 1086 990">Diamond Ballroom, ANA Hotel Matsuyama</p>	

G1	G2
<p style="text-align: center;">10:15-12:00 12a-G1-1~6 Plasmonics: materials and devices Organizer: Prabhat Verma (Osaka Univ.)</p> <p>10:15-10:45 12a-G1-1 Invited Optical Properties of Au-Ag core-shell Nanorods on a Solid Surface <i>Yasuro Niidome, Yukiko Tsuru, Yuki Hamasaki, Naotoshi Nakashima; Kyushu Univ., Japan</i></p> <p>10:45-11:00 12a-G1-2 Correlation of Transmission Spectrum between Plasmonic Nano Slit and Non-Plasmonic Nano Slit <i>Shihhui Chang, Yulun Su; National Cheng-Kung Univ., Taiwan</i></p> <p>11:00-11:15 12a-G1-3 Tip-enhanced Raman spectroscopic study of local interaction in polymer nanocomposites containing carbon nanotubes <i>Toshiaki Suzuki¹, Xinlei Yan¹, Takeshi Miyake¹, Yasutaka Kitahama¹, Harumi Sato¹, Tamitake Itoh², Takeshi Miura³, Yukihiko Ozaki¹; ¹Kwansei Gakuin Univ., Japan; ²AIST, Japan; ³UNISOKU, Japan</i></p> <p>11:15-11:30 12a-G1-4 Dispersion of the third order nonlinear optical response of Ag nanoparticles with different sizes <i>Rodrigo Sato¹, Yoshihiko Takeda², Masato Ohnuma², Takahisa Ohno², Hiroyoshi Momida³; ¹Univ. of Tsukuba, Japan; ²NIMS, Japan; ³Osaka Univ., Japan</i></p> <p>11:30-11:45 12a-G1-5 Self-Assembly and magneto-optical properties of noble metal - ferromagnetic metal hybrid nanoparticles <i>Ikemiya Katsura, Konishi Kuniaki, Fujii Eiko, Kogure Toshihiro, Hasegawa Tetsuya, Kuwata-Gonokami Makoto; The Univ. of Tokyo, Japan</i></p> <p>11:45-12:00 12a-G1-6 Realization of a ppt Sensitivity Plasmonic Sensor for Monitoring Ionic Mercury in Environmental Water <i>Chung Hoang, Makiko Oyama, Masud Rana, Masakazu Aono, Tadaaki Nagao; International Center for Materials NanoArchitectonics (MANA), NIMS, Japan</i></p> <p style="text-align: center;">Lunch 12:00~13:30</p>	<p>9:00-10:00 12a-G2-1 Invited OSA President Special Lecture Seeing Electrons in Graphene: A Model 2-Dimensional Material <i>Tony F. Heinz; Columbia Univ., USA</i></p> <p style="text-align: center;">10:15-12:15 12a-G2-2~7 Nanocarbon Photonics Organizer: Satoru Shoji (Osaka Univ.)</p> <p>10:15-10:45 12a-G2-2 Invited Nanocarbon photonics for ultrafast pulse generation and signal processing <i>Shinji Yamashita; The Univ. of Tokyo, Japan</i></p> <p>10:45-11:15 12a-G2-3 Invited Optoelectronic Properties of Single-Wall Carbon Nanotubes <i>Sebastien Nanot, Erik H. Haroz, Jihee Kim, Robert H. Hauge, Junichiro Kono; Rice Univ., USA</i></p> <p>11:15-11:30 12a-G2-4 Photophysics of Localized Electronic States in Oxygen-doped Carbon Nanotubes <i>Yuhei Miyauchi^{1,2}, Munechiyo Iwamura¹, Shinichiro Mouri¹, Tadashi Kawazoe³, Motoichi Ohtsu³, Kazunari Matsuda¹; ¹Kyoto Univ., Japan; ²JST-PRESTO, Japan; ³The Univ. of Tokyo, Japan</i></p> <p>11:30-11:45 12a-G2-5 Optimization of Single-Walled Carbon Nanotube/Silicon Heterojunction Solar Cells <i>Kehang Cui, Shuichiro Omiya, Pei Zhao, Theerapol Thurakitserree, Taiki Inoue, Shinya Aikawa, Shohei Chiashi, Shigeo Maruyama; The Univ. of Tokyo, Japan</i></p> <p>11:45-12:00 12a-G2-6 3D Microstructural Single Wall Carbon Nanotube / Polymer Composites Fabricated by Two Photon Lithography <i>Shota Ushiba¹, Satoru Shoji¹, Junichiro Kono², Satoshi Kawata¹; ¹Osaka Univ., Japan; ²Rice Univ., USA</i></p> <p>12:00-12:15 12a-G2-7 Reducing Graphene Oxide for Electronic Devices <i>Xian-Bin Li, Yong-Lai Zhang, Li Guo, Sheng-Yi Xie, Qi-Dai Chen, Hong-Bo Sun; Jilin Univ., China</i></p> <p style="text-align: center;">Lunch 12:15~13:45</p>

G1	G2
<p>13:30-15:15 12p-G1-1~7 Plasmonics: materials and devices Organizer: Prabhat Verma (Osaka Univ.)</p>	<p>13:45-14:45 12p-G2-1~3 Nanocarbon Photonics Organizer: Satoru Shoji (Osaka Univ.)</p>
<p>13:30-13:45 12p-G1-1 Self-organized assembly of metamaterials <i>Takuo Tanaka^{1,2}; ¹RIKEN, Japan; ²Hokkaido Univ., Japan</i></p>	
<p>13:45-14:00 12p-G1-2 Terahertz Plasmonics and Metamaterials <i>James Grant, Yong Ma, Shimul Saha, David Cumming; Univ. of Glasgow, UK</i></p>	<p>13:45-14:15 12p-G2-1 Invited Optoelectronic properties in low-dimensional carbon materials <i>Young Hee Lee, Chandan Biswas; Sungkyunkwan Univ., Korea</i></p>
<p>14:00-14:15 12p-G1-3 Graphene for Infrared Plasmonics and Metamaterials <i>Atsushi Ishikawa¹, Takuo Tanaka^{1,2}; ¹RIKEN, Japan; ²Hokkaido Univ., Japan</i></p>	
<p>14:15-14:30 12p-G1-4 Influence of intrinsic electronic properties on subwavelength optics in metamaterials made by superconducting MgB2 <i>Xianggang Qiu, Xu Fang; Chinese Academy of Sciences, China</i></p>	<p>14:15-14:30 12p-G2-2 Intense Terahertz-pulse Induced Highly Efficient Carrier Transport in Graphene <i>Shuntaro Tani, Francois Blanchard, Koichiro Tanaka; Kyoto Univ., Japan</i></p>
<p>14:30-14:45 12p-G1-5 Magnetic plasmon induced transparency in three dimensional metamaterials <i>Pin Chieh Wu¹, Wei Ting Chen¹, Kuang-Yu Yang¹, Chih Ting Hsiao¹, Greg Sun², Ai Qun Liu³, Nikolay I. Zheludev⁴, Din Ping Tsai⁵; ¹National Taiwan Univ., Taiwan; ²Univ. of Massachusetts Boston, USA; ³Nanyang Technological Univ., Singapore; ⁴Univ. of Southampton, UK; ⁵Academia Sinica, Taiwan</i></p>	<p>14:30-14:45 12p-G2-3 A Theoretical Study of an Influence of a Time Dependent External Field on Electronic Transport in Graphene <i>Takashi Akiyama, Matsuto Ogawa, Satofumi Souma; Kobe Univ., Japan</i></p>
<p>14:45-15:00 12p-G1-6 Plasmonic lasing spacer associated with toroidal metamolecule at optical frequencies <i>Chen Wei-Ting¹, Huang Y. -W¹, Wu P. C.¹, Fedotov V. A.², Zheludev N. I.², Tsai D. P.³; ¹National Taiwan Univ., Taiwan; ²University of Southampton, UK; ³Academia Sinica, Taiwan</i></p>	<p>15:00-18:00 12p-G2-4~12 Medical Photonics Organizer: Yuji Matsuura (Tohoku Univ.)</p>
<p>15:00-15:15 12p-G1-7 Optical Hybrid-Superlens-Hyperlens for Super-resolution Imaging <i>You Zhe Ho¹, Bo Han Cheng², Yung-Chiang Lan², Din Ping Tsai¹; ¹National Taiwan Univ., Taiwan; ²National Cheng Kung Univ., Taiwan</i></p>	<p>15:00-15:30 12p-G2-4 Invited Ultra-high Resolution Optical Coherence Tomography using Supercontinuum Sources <i>Norihiko Nishizawa, Shutaro Ishida; Nagoya Univ., Japan</i></p>

G1	G2
<p>15:30-17:15 12p-G1-8~13 Plasmonics: imaging Organizer: Prabhat Verma (Osaka Univ.)</p>	<p>15:00-18:00 12p-G2-4~12 Medical Photonics (continued)</p>
<p>15:30-16:00 12p-G1-8 Invited Optical nanoimaging through plasmonics and beyond plasmonics <i>Prabhat Verma; Osaka Univ., Japan</i></p>	<p>15:30-15:45 12p-G2-5 Quantitative evaluation of mental sweating of eccrine sweat glands on a human fingertip by optical coherence tomography <i>Masato Ohmi; Osaka Univ., Japan</i></p>
<p>16:00-16:15 12p-G1-9 Super-Resolution Imaging by Saturable Scattering of Single Gold Nanoparticle <i>Hsuan Lee¹, Tung-Yu Su¹, Yasuo Yonemaru², Ming-Ying Lee¹, Masahito Yamanaka², Ko-Fan Huang¹, Satoshi Kawata², Katsumasa Fujita², Shi-Wei Chu¹; ¹National Taiwan Univ., Taiwan; ²Osaka Univ., Japan</i></p>	<p>15:45-16:00 12p-G2-6 Three-dimensional Optical Doppler Tomography and Optical Angiography <i>Ting-Ta Chi, Chung-Ting Wu, Chen-Chin Liao, Yi-Chou Tu, Chih-Chung (C. C.) Yang; National Taiwan Univ., Taiwan</i></p>
<p>16:15-16:30 12p-G1-10 Highly sensitive tip-enhanced nanoscopy and its applications to ultrafast nonlinear spectroscopy <i>Norihiko Hayazawa¹, Kentaro Furusawa^{1,3}, Satoshi Kawata^{1,2}; ¹RIKEN, Japan; ²Osaka Univ., Japan; ³Tohoku Univ., Japan</i></p>	<p>16:00-16:15 12p-G2-7 In vivo determination of visible to near-infrared optical properties of rat brain using single reflection fiber probe with two source-collector geometries <i>Izumi Nishidate¹, Chiharu Mizushima¹, Yoshida Keiichiro¹, Satoko Kawauchi², Shunichi Sato², Manabu Sato³; ¹Tokyo Univ. of Agriculture and Technology, Japan; ²National Defense Medical College, Japan; ³Yamagata Univ., Japan</i></p>
<p>16:30-16:45 12p-G1-11 Tip-enhanced Raman microscopy through tip-sample distance control <i>Jun Yu, Yuika Saito, Prabhat Verma, Satoshi Kawata; Osaka Univ., Japan</i></p>	<p>Break 16:15~16:30</p>
<p>16:45-17:00 12p-G1-12 Plasmon hybridization at the gap between a metallic nanotip and a nanofilm system for tip-enhanced Raman spectroscopy <i>Kazumasa Uetsuki, Prabhat Verma, Satoshi Kawata; Osaka Univ., Japan</i></p>	<p>16:30-17:00 12p-G2-8 Invited Biomedical Applications of Au Nanorings with Long-wavelength Localized Surface Plasmon Resonance <i>Hung-Yu Tseng, Wei-Fang Chen, Ting-Ta Chi, Chung-Ting Wu, Chen-Chin Liao, Yi-Chou Tu, Chih-Chung Yang; National Taiwan Univ., Taiwan</i></p>
<p>17:00-17:15 12p-G1-13 Three dimensional light manipulation by structured gold nanobumps <i>Hung Guei Tsai, Chia Ming Chang, Cheng Hung Chu, Ming Lun Tseng, Yao-Wei Huang, Hsin Wei Huang, Bo Han Chen, Ding-Wei Huang, Din Ping Tsai; National Taiwan Univ., Taiwan</i></p>	<p>17:00-17:15 12p-G2-9 Label-free Observation and Principle Component Analysis of Mouse Tissue by Video-rate Stimulated Raman Scattering Microscope <i>Yoichi Otsuka¹, Yasuyuki Ozeki², Shuya Satoh¹, Wataru Umemura², Hiroyuki Hashimoto¹, Chidane Ouchi¹, Kazuyoshi Itoh²; ¹Canon Inc., Japan; ²Osaka Univ., Japan</i></p>

G1	G2
	<p data-bbox="963 230 1337 293">15:00-18:00 12p-G2-4~12 Medical Photonics (continued)</p> <p data-bbox="807 378 1461 595">17:15-17:30 12p-G2-10 Live cell imaging using high resolution fluorescence microscopy with direct electron beam excitation <i>Yasunori Nawa¹, Wataru Inami^{1,2}, Atsushi Ono^{1,2}, Sheng Lin³, Yoshimasa Kawata^{1,2}, Susumu Terakawa^{2,3}, ¹Shizuoka Univ., Japan; ²JST-CREST, Japan; ³Hamamatsu Univ. School of Medicine, Japan</i></p> <p data-bbox="807 658 1477 810">17:30-17:45 12p-G2-11 Enhanced cell membrane permeability by using multi-microsphere lens focusing of burst mode of low-intensity 80 MHz femtosecond lasers <i>Tatsuki Mitsuhashi, Mitsuhiro Terakawa; Keio Univ., Japan</i></p> <p data-bbox="807 871 1477 1023">17:45-18:00 12p-G2-12 Photoacoustic microscopy with two-photon absorption by femtosecond, sub-nanosecond, and nanosecond pulse lasers <i>Yoshihisa Yamaoka, Yoshinori Harada, Tetsuro Takamatsu; Kyoto Prefectural Univ. of Medicine, Japan</i></p>
<p data-bbox="596 1086 976 1122">ANA Hotel Matsuyama</p>	
<p data-bbox="703 1158 874 1189">19:00-21:00</p> <p data-bbox="552 1200 1023 1232">OSA Reception (*Invitation only)</p> <p data-bbox="480 1243 1094 1274">Diamond Ballroom, ANA Hotel Matsuyama</p>	

G1	G2
<p>9:30-12:00 13a-G1-1~9 Plasmonics: imaging Organizer: Prabhat Verma (Osaka Univ.)</p>	<p>9:00-12:15 13a-G2-1~10 Lasers, Laser Applications Organizer: Tetsuya Makimura (Tsukuba Univ.)</p>
<p>9:30-9:45 13a-G1-1 Imaging of Surface Plasmon Polariton by Cathodoluminescence <i>Naoki Yamamoto; Tokyo Inst. of Technology, Japan</i></p>	<p>9:00-9:30 13a-G2-1 Invited Promise on Giant Micro-photonics for Pulse-Gap <i>Takunori Taira; Inst. for Molecular Science, Japan</i></p>
<p>9:45-10:00 13a-G1-2 Structure Dependence of Surface Plasmon Enhanced Photoluminescence <i>Xiaoying Xu¹, Mitsuru Funato², Yoichi Kawakami², Koichi Okamoto¹, Kaoru Tamada¹; ¹Kyushu Univ., Japan; ²Kyoto Univ., Japan</i></p>	<p>9:30-10:00 13a-G2-2 Invited High-Power, High-Brightness Beam Combining of Semiconductor and Fiber Lasers <i>Tso Yee Fan; MIT Lincoln Laboratory, USA</i></p>
<p>10:00-10:15 13a-G1-3 Application of the Plasmonic Chip to the Enzyme-Linked ImmunoSorbent Assay (ELISA) for Sensitive Fluorescence Imaging <i>Tomomi Taga¹, Keiko Tawa¹; ¹AIST, Japan; ²Kwansei Gakuin Univ., Japan</i></p>	<p>10:00-10:15 13a-G2-3 Femtosecond Pulse Generation by Actively Mode-Locked Fiber Ring Laser <i>Dang Trang Nguyen, Akio Muramatsu, Akihiro Morimoto; Ritsumeikan Univ., Japan</i></p>
<p>10:15-10:30 13a-G1-4 Bright Fluorescence Images of Neurons Cultured on a Plasmonic Chip with Upright-Inverted Microscope <i>Chikara Yasui¹, Keiko Tawa², Chie Hosokawa², Junji Nishii³, Hiroyuki Aota¹; ¹Kansai Univ., Japan; ²AIST, Japan; ³Hokkaido Univ., Japan</i></p>	<p>10:15-10:30 13a-G2-4 High Repetition Rate Operation of Megawatt Peak Power Microchip Laser <i>Rakesh Bhandari, Takunori Taira; Inst. for Molecular Science, Japan</i></p>
<p>Break 10:30~10:45</p>	<p>Break 10:30~10:45</p>
<p>10:45-11:15 13a-G1-5 Invited Light propagation and nano-focusing properties in 1D chiral metamaterial <i>Wei-Chih Liu; National Taiwan Normal Univ., Taiwan</i></p>	<p>10:45-11:00 13a-G2-5 Evaluation of a single Ca⁺ clock by an optical comparison against a Sr lattice clock <i>Kensuke Matsubara, Hidekazu Hachisu, Shigeo Nagano, Ying Li, Asahiko Nogami, Clayton Locke, Kazuhiro Hayasaka, Tetsuya Ido; National Inst. of information and Communications Technology, Japan</i></p>
	<p>11:00-11:15 13a-G2-6 High-efficiency continuous production of hyperpolarized ¹²⁹Xe using line-narrowed diode lasers <i>Mineyuki Hattori¹, Takashi Hiraga¹, Naohiro Kaga², Norio Ohtake³; ¹National Inst. of Advanced Industrial Science and Technology, Japan; ²Aurea Works Co., Japan; ³Toyoko Kagaku Co. Ltd., Japan</i></p>

G1	G2
<p>9:30-12:00 13a-G1-1~9 Plasmonics: imaging (continued)</p>	<p>9:00-12:15 13a-G2-1~10 Lasers, Laser Applications(continued)</p>
<p>11:15-11:30 13a-G1-6 Fabrication of near-field plasmonic tips by photoreduction for strong enhancement in tip-enhanced Raman spectroscopy <i>Takayuki Umakoshi¹, Taka-aki Yano², Saito Yuika¹, Prabhat Verma¹; ¹Osaka Univ., Japan; ²Tokyo Inst. of Technology, Japan</i></p>	<p>11:15-11:30 13a-G2-7 Pulsed BaWO₄ Raman amplifier at 1180 nm <i>Cong Wang, Xingyu Zhang, Qingpu Wang, Lei Li, Zhenhua Cong, Xiaohan Chen, Zhaojun Liu, Huihua Xu, Yuangeng Zhang, Weitao Wang; Shandong Univ., China</i></p>
<p>11:30-11:45 13a-G1-7 Nanoscale Circular Dichroism of 2D Chiral Nanostructures <i>Tetsuya Narushima, Hiromi Okamoto; Inst. for Molecular Science, Japan</i></p>	<p>11:30-11:45 13a-G2-8 Generation of Phase Conjugate Light Using CCD Array and Liquid Crystal Panel <i>Kotomi Kawakami¹, Shigeaki Uchida², Hideki Okamura³; ¹Tokyo Inst. of Technology, Japan; ²Univ. of Tokyo, Japan; ³International Christian Univ., Japan</i></p>
<p>11:45-12:00 13a-G1-8 The pre-ablation features formed by focusing femtosecond laser beam with the dual axicons to c-Si in a vacuum <i>Takashi Yagi¹, Go Odachi², Kento Hara³, Ryosuke Sakamoto⁴; ¹Tokai Univ., Japan; ²SWCC Showa Cable Systems, Japan; ³Forum Engineering, Japan; ⁴Josai Junior High school, Japan</i></p>	<p>11:45-12:00 13a-G2-9 Optical multiple-image security system based on phase encoding algorithm in the Fresnel transform domain <i>Hone-Ene Hwang, Ming-Chun Chien, Gwo-Huei Yang; Chung Chou Univ. of Science and Technology, Taiwan</i></p>
	<p>12:00-12:15 13a-G2-10 Coherent analog computer using injection-locked laser network systems <i>Shoko Utsunomiya¹, Naoto Namekata², Kenta Takata³, Kai Wen⁴, Javed Rouf³, Kai Yan³, Shuichiro Inoue², Yoshihisa Yamamoto⁴; National Inst. of Informatics, Japan; ²Nihon Univ., Japan; ³Tokyo Univ., Japan; ⁴Stanford Univ., USA</i></p>
<p>13:30-18:15 13p-G1-1~16 Opto-electronics Organizer: Hiroshi Murata (Osaka Univ.)</p>	<p>Lunch 12:15~13:45</p>
<p>13:30-14:00 13p-G1-1 Invited Chromium-Doped Fiber Amplifier (CDFA) and Its Applications for Next Generation Optical Fiber Network [Invited] <i>Hidenori Taga¹, Sheng-Lung Huang², Yi-Jen Chiu¹, Wood-Hi Cheng¹; ¹National Sun Yat-Sen Univ., Taiwan; ²National Taiwan Univ., Taiwan</i></p>	<p>13:45-17:45 13p-G2-1~13 Lasers, Laser Applications Organizer: Tetsuya Makimura (Tsukuba Univ.)</p>
<p>14:00-14:15 13p-G1-2 Fabrication of Cr-Doped Fibers Using Powder-in-Tube with Redrawing Technique by Drawing Tower <i>Yi-Chung Huang¹, Chun-Nien Liu¹, Jau-Sheng Wang¹, Fang-Yen Lo¹, Sheng-Lung Huang², Wood-Hi Cheng¹; ¹NSYSU, Taiwan; ²NTU, Taiwan</i></p>	<p>13:45-14:15 13p-G2-1 Invited Octave-wide mid-infrared frequency comb source for spectroscopic medical breath analysis <i>Konstantin Vodopyanov; Stanford Univ., USA</i></p>

G1	G2
13:30-18:15 13p-G1-1~16 Opto-electronics (continued)	13:45-17:45 13p-G2-1~13 Lasers, Laser Applications (continued)
<p>14:15-14:30 13p-G1-3 Rigorous Characterization of Photonic Crystal Fiber, Device and its Couplings <i>Azizur Rahman, Muhammad Uthman, Kenneth Grattan; City Univ. London, UK</i></p>	<p>14:15-14:30 13p-G2-2 Application of gapless terahertz frequency comb for gas spectroscopy <i>Yi-Da Hsieh¹, Yuki Iyona¹, Yoshiyuki Sakaguchi¹, Shuko Yokoyama¹, Hajime Inaba², Kaoru Minoshima², Tsutomu Araki¹, Francis Hindle⁴, Takeshi Yasui³; ¹Osaka Univ., Japan; ²AIST, Japan; ³Univ. of Tokushima, Japan; ⁴Univ. of Littoral Opal Coast, France</i></p>
<p>14:30-14:45 13p-G1-4 A Supercontinuum Source for Mid-IR Applications Using Chalcogenide Microstructured Optical Fiber <i>Somnath Ghosh, Naresh Kumar T., Ravi K. Varshney, Bishnu P. Pal; Indian Inst. of Technology Delhi, India</i></p>	<p>14:30-14:45 13p-G2-3 Three-dimensional imaging of internal structure using line-field terahertz computed tomography <i>Mukesh Jewariya¹, Yoshiyuki Ohgi², Emmanuel Abhram³, Tsutomu Araki², Takeshi Yasui¹; ¹The Univ. of Tokushima, Japan; ²Osaka Univ., Japan; ³Univ. of Bordeaux, France</i></p>
<p>14:45-15:00 13p-G1-5 Extremely Large Mode-Area Single-Moded Microstructured Optical Fiber for Mid-IR High Power Delivery <i>Ajanta Barh, Somnath Ghosh, Ravi K. Varshney, Bishnu P. Pal; Indian Inst. of Technology Delhi, India</i></p>	<p>14:45-15:00 13p-G2-4 THz-TDS of GaAs/AlGaAs/n-GaAs core-shell-skin nanowires on Si (100) and Si (111) <i>Jasher Ibanes¹, Elmer Estacio¹, Arnel Salvador¹, Armando Somintac¹, Christopher Que², Satoshi Tsuzuki³, Kohji Yamamoto³, Masahiko Tani³; ¹Univ. of the Philippines, Philippines; ²De La Salle Univ., Philippines; ³Univ. of Fukui, Japan</i></p>
Break 15:00~15:15	<p>15:00-15:15 13p-G2-5 Carrier lifetimes of GaAs/AlGaAs/n-GaAs core-shell-skin nanowires at 300K <i>Maria Herminia Balgos, Rafael Jaculbia, Sheryl Vizcara, Elmer Estacio, Arnel Salvador, Armando Somintac; Univ. of the Philippines Diliman, Philippines</i></p>
<p>15:15-15:30 13p-G1-6 Wavelength Dependence of Reflection Phase of Cavity-resonator-integrated Guided-mode Resonance Filter <i>Tomonori Ogura¹, Junichi Inoue¹, Koji Hatanaka¹, Kenji Kintaka², Kenzo Nishio¹, Yasuhiro Awatsuji¹, Shogo Ura¹; ¹Kyoto Inst. of Technology, Japan; ²National Inst. of Advanced Industrial Science and Technology, Japan</i></p>	<p>15:15-15:30 13p-G2-6 Evidence of tunneling in the 300K TRPL spectra of GaAs/AlGaAs coupled quantum wells <i>Rafael Jaculbia, Maria Herminia Balgos, Michael Defensor, Kaye Ann Delas Alas, Karim Omambac, Elmer Estacio, Arnel Salvador, Armando Somintac; National Inst. of Physics, Philippines</i></p>
<p>15:30-15:45 13p-G1-7 Compact Optical Branching Filter with a Si Slit Structure <i>Kenta Saiki¹, Keita Hiidome¹, Takashi Endo¹, Tatsuya Yamaguchi¹, Yusuke Kitamura¹, Toshio Katsuyama¹, Hitoshi Takagi², Masayuki Morita², Yoshitaka Ito², Ken Tsutsui², Yasuo Wada²; ¹Univ. of Fukui, Japan; ²Toyo Univ., Japan</i></p>	Break 15:30~15:45

G1	G2
13:30-18:15 13p-G1-1~16 Opto-electronics (continued)	13:45-17:45 13p-G2-1~13 Lasers, Laser Applications (continued)
<p>15:45-16:00 13p-G1-8 A Low-Power Consumption Thermo-Optic Effect Based Single Silicon Microring Resonator Mach-Zehnder Modulator <i>Rajdeep Gautam, Hiroshi Kaneshige, Hitoshi Yamada, Katouf Redouane, Taro Arakawa, Yasuo Kokubun, ; Yokohama National Univ., Japan</i></p>	<p>15:45-16:15 13p-G2-7 Invited Femtosecond laser direct writing of 3D micro- and nanofluidics for bio-applications <i>Cheng Ya; Chinese Academy of Sciences, China</i></p>
<p>16:00-16:15 13p-G1-9 Wireless Microwave-Optical Signal Converters Using Optical Modulation in Gap-Embedded Patch-Antennas on Ferroelectric Optical Crystals <i>Yusuf Nur Wijayanto, Hiroshi Murata, Yasuyuki Okamura; Osaka Univ., Japan</i></p>	<p>16:15-16:30 13p-G2-8 Phase separation in transparent solids due to laser-induced micro-explosions <i>Mizeikis Vygantas¹, Gervinskas Gediminas², Tadich Anton³, Vailionis Arturas⁴, De Ligny Dominique⁵, Gamaly Eugene⁶, Rode Andrei⁶, Juodkasis Saulius²; ¹Shizuoka Univ., Japan; ²Swinburne Univ. of Technology, Australia; ³Australian Synchrotron, Australia; ⁴Stanford Univ., USA; ⁵Univ. Claude Bernard Lyon I, France; ⁶Australian National Univ., Australia</i></p>
Break 16:30~16:45	<p>16:30-16:45 13p-G2-9 Optical Manipulation of Atomic Arrangement in Multilayer Ge-Sb-Te Phase Change Materials <i>Kotaro Makino¹, Junji Tominaga², Fons Paul², Kolobov Alexander V.², Muneaki Hase¹; ¹Univ. of Tsukuba, Japan; ²AIST, Japan</i></p>
<p>16:45-17:00 13p-G1-11 Simple, low-cost, and high area p-n heterojunction device based on ZnO nanowires: Combination with TiO₂ and its application as a UV photodetector <i>Duy Thang Dao, Chung Vu Hoang, Thuy Chi Dang, Nono Arai, Gui Han, Tadaaki Nagao; NIMS, Japan</i></p>	<p>16:45-17:00 13p-G2-10 H2 Treatment to Improve Photodarkening Resistivity in Highly Ytterbium Doped Fiber <i>Atasi Pal; CSIR-Central Glass & Ceramic Research Inst., India</i></p>
<p>17:00-17:15 13p-G1-12 Annealing effect of InAs/Sb:GaAs quantum dots grown on germanium-on-insulator-on-silicon (GeOI) substrate by MOCVD <i>Rajesh Mohan, Jun Tatebayashi, Masao Nishioka, Yasuhiko Arakawa; The Univ. of Tokyo, Japan</i></p>	<p>17:00-17:15 13p-G2-11 The Stimulated Emission Depletion Property of Insulin-Gold Nanoclusters <i>Po-Fu Chen, Chien-Liang Liu, Guan-Jie Chen, Tung-Yu Su, Ching-Cheng Cheng, Pi-Tai Chou, Shi-Wei Chu; National Taiwan Univ., Taiwan</i></p>
<p>17:15-17:30 13p-G1-13 Signature of reduced inter-dot coupling in telecommunication band lower density InAs quantum dots grown on InP(311)B <i>Nahid Jahan¹, Xiangming Liu¹, Kouichi Akahane², Masahide Sasaki², Hidekazu Kumano¹, Ikuo Suemune¹; ¹Hokkaido Univ., Japan; ²National Inst. of Information and Communications Technology, Japan</i></p>	<p>17:15-17:30 13p-G2-12 Theoretical Study of Manufacturing Processes for Anisotropic Laser Ceramics <i>Yoichi Sato, Takunori Taira; Inst. Mol. Sci., Japan</i></p>

G1	G2
<p data-bbox="264 226 620 293">13:30-18:15 13p-G1-1~16 Opto-electronics (continued)</p> <p data-bbox="98 374 772 562">17:30-17:45 13p-G1-14 Picosecond Carrier Lifetime of GaAs/AlGaAs Single Quantum Wells at 77K <i>Jessica Pauline Afalla, Jasher Ibanez, Maria Herminia Balgos, Arnel Salvador, Armando Somintac; Univ. of the Philippines Diliman, Philippines</i></p> <p data-bbox="98 618 711 869">17:45-18:00 13p-G1-15 Magnetotransport Properties of InSb Two-Dimensional Electron Gas with Gate Dielectric Al₂O₃ <i>M.M. Uddin¹, H.W. Liu², K.F. Yang², T.D. Mishima³, M.B. Santos³, K. Nagase², Y. Hirayama¹; ¹Tohoku Univ., Japan; ²ERATO Nuclear Spin Electronics Project, Japan; ³Univ. of Oklahoma, USA</i></p> <p data-bbox="98 898 786 1055">18:00-18:15 13p-G1-16 Determination of Penetration Depth of Transverse Spin Current in (100) oriented Heusler alloy films by Spin Pumping. <i>Lutondo Kwilu, Hiroshi Naganuma, Mikiko Oogane, Yasuo Ando; Tohoku Univ., Japan</i></p>	<p data-bbox="938 226 1402 293">13:45-17:45 13p-G2-1~13 Lasers, Laser Applications (continued)</p> <p data-bbox="826 374 1489 530">17:30-17:45 13p-G2-13 Highly-efficient, half-joule output optical-parametric oscillation by using 10-mm-thick periodically poled Mg-doped congruent LiNbO₃ <i>Hideki Ishizuki, Takunori Taira; Inst. Molecular Science, Japan</i></p>

G1	G2
<p style="text-align: center;">9:00-12:00 14a-G1-1~10 Opto-electronics Organizer: Hiroshi Murata (Osaka Univ.)</p> <p>9:00-9:15 14a-G1-1 Simulation of Gold Nanoparticles Enhanced HIT Solar Cell <i>Kuang Sheng Chung¹, Pin Chieh Wu¹, Wei Ting Chen¹, Din Ping Tsai²; ¹National Taiwan Univ., Taiwan; ²Academia Sinica, Taiwan</i></p> <p>9:15-9:30 14a-G1-2 Influence of incident light losses on transparency of ITO electrodes <i>Yeon Hyun Park, Jungheum Yun, Sunghun Lee, Gun-Hwan Lee; Korean Inst. of Materials Science, Korea</i></p> <p>9:30-9:45 14a-G1-3 Polarimetric observation of molecular reorientation in dye-doped liquid crystal thin film toward sub-micrometer scale <i>Guan-Yu Zhuo, Kuan-Chieh Chen, Shi-Wei Chu; National Taiwan Univ., Taiwan</i></p> <p>9:45-10:00 14a-G1-4 Flexible high efficiency fluorescent white organic light emitting device <i>Pen-Chu Lin, Fuh-Shyang Juang, Yu-Sheng Tsai, Lin-Ann Hong; National Formosa Univ., Taiwan</i></p> <p>10:00-10:15 14a-G1-5 Direct energy transfer from triplet to singlet between two fluorescent dyes induced by exterior heavy atom <i>Lixin Xiao¹, Xing Xing¹, Taiju Tsuboi², Yosuke Nakai², Fei Wang¹, Boyuan Qi¹, Zhijian Chen¹, Bo Qu¹, Qihuan Gong¹; ¹Peking Univ., China; ²Kyoto Sangyo Univ., Japan</i></p> <p style="text-align: center;">Break 10:15~10:30</p> <p>10:30-11:00 14a-G1-6 Invited Ceramic and glass ceramic phosphors for white LEDs <i>Setsubisa Tanabe^{1,2}; ¹Kyoto Univ., Japan; ²JST PRESTO, Japan</i></p>	<p style="text-align: center;">9:00-11:45 14a-G2-1~9 Optical Micro-sensing, Manipulation, and Fabrications Organizer: Tsutomu Shimura (The Univ. of Tokyo)</p> <p>9:00-9:15 14a-G2-1 Rapid Maskless Production of Antireflective Biomimetic Surfaces by Multi-Exposure Two-Beam-Interference Ablation <i>Lei Wang, Zhen-Hua Lv, Qi-Dai Chen, Hong-Bo Sun; Jilin Univ., China</i></p> <p>9:15-9:30 14a-G2-2 Single-pulse femtosecond laser fabrication of high-aspect sub-micron structures in transparent substrates <i>L.M. Davis, B.K. Canfield, L. Costa, D. Rajput, W. Hofmeister, A. Terekhov; Univ. of Tennessee Space Inst., USA</i></p> <p>9:30-10:00 14a-G2-3 Invited Holographic femtosecond laser processing <i>Yoshio Hayasaki; Utsunomiya Univ., Japan</i></p> <p style="text-align: center;">Break 10:00~10:15</p> <p>10:15-10:30 14a-G2-4 A metalized microturbine driven by a scanning ultra-low power laser beam <i>Ikegami Takashi¹, Ozawa Ryota¹, Michael P. Stoker², John T. Fourkas², Maruo Shoji¹; ¹Yokohama National Univ., Japan; ²Univ. of Maryland, USA</i></p> <p>10:30-10:45 14a-G2-5 Axial particle displacement using optical tweezers <i>Mary-Clare Dy, Tadao Sugiura, Kotaro Minato; Nara Inst. of Science and Technology, Japan</i></p> <p>10:45-11:00 14a-G2-6 Rotation and translation of a silver nanowire using an optical vortex <i>Ryota Ozawa¹, Sanghee Nah², John Fourkas², Shoji Maruo¹; ¹Yokohama National Univ., Japan; ²Univ. of Maryland, USA</i></p>

G1	G2
<p style="text-align: center;">9:00-12:00 14a-G1-1~10 Opto-electronics (continued)</p> <p>11:00-11:15 14a-G1-7 Resolution of Imaging System with Electrical Focusing Using a Liquid Crystal lens <i>Mao Ye, B. Wang, M. Uchida, S. Yanase, S. Takahashi, S. Sato; Akita Industrial Technology Center, Japan</i></p> <p>11:15-11:30 14a-G1-8 High-speed Triphenylamine-based Photorefractive Polymeric Composites <i>Sho Tsujimura, Kenji Kinashi, Wataru Sakai, Naoto Tsutsumi; Kyoto Inst. of Technology, Japan</i></p> <p>11:30-11:45 14a-G1-9 Photorefractive Composite Based on Poly(4-(diphenylamino) benzyl-acrylate) <i>Ha Giang Ngoc, Kenji Kinashi, Wataru Sakai, Naoto Tsutsumi; Kyoto Inst. of Technology, Japan</i></p> <p>11:45-12:00 14a-G1-10 Optimization of poly(N-vinylcarbazole)-based photorefractive composite <i>Kenji Kinashi, Yu Wang, Wataru Sakai, Naoto Tsutsumi; Kyoto Inst. of Technology, Japan</i></p>	<p style="text-align: center;">9:00-11:45 14a-G2-1~9 Optical Micro-sensing, Manipulation, and Fabrications (continued)</p> <p>11:00-11:15 14a-G2-7 Measurement of orbital angular momentum spectrum from fork-like interferogram <i>Zhili Yang¹, Keisaku Yamane^{1,2}, Yasunori Toda^{1,2}, Ryuji Morita^{1,2}; ¹Hokkaido Univ., Japan; ²JST-CREST, Japan</i></p> <p>11:15-11:30 14a-G2-8 Spectral-Domain Low-Coherence Dynamic Light Scattering Technique for One-Shot Detection of the Solid-Liquid Interface Effect in Brownian Particles <i>Toshiharu Watarai, Toshiaki Iwai; Tokyo Univ. of Agri. & Tech., Japan</i></p> <p>11:30-11:45 14a-G2-9 Improving surface plasmon detection in gold nanostructures using a multi-polarization spectral integration method <i>Kuang-Li Lee¹, Min-Jian Chih², Pei-Kuen Wei¹; ¹Academia Sinica, Taiwan; ²National Taiwan Ocean Univ., Taiwan</i></p> <p style="text-align: center;">Lunch 11:45~13:15</p> <p style="text-align: center;">13:15-15:00 14p-G2-1~6 Optical Micro-sensing, Manipulation, and Fabrications Organizer: Tsutomu Shimura (The Univ. of Tokyo)</p> <p>13:15-13:45 14p-G2-1 Invited Silicon photonic biosensor concept with on-chip wavelength multiplexing <i>Rainer Hainberger¹, Paul Muellner¹, Roman Bruck¹, Thorsten Wahlbrink², Michael Waldow²; ¹AIT Austrian Inst. of Technology GmbH, Austria; ²AMO GmbH, Germany</i></p> <p>13:45-14:00 14p-G2-2 Single-shot interferometry with free sample set-position by mean of optical frequency comb <i>Quoc Tuan Banh, Kohei Suzuki, Masaya Sakatsume, Tatsutoshi Shioda; Nagaoka Univ. of Technology, Japan</i></p> <p>14:00-14:15 14p-G2-3 Evaluation of optical vortex displacement in loaded sample using astatistical algorithm <i>Charmaine Rose Delos Reyes, Percival Almoro; Univ. of the Philippines, Philippines</i></p>

G1	G2
	<p data-bbox="831 226 1469 327">13:15-15:00 14p-G2-1~6 Optical Micro-sensing, Manipulation, and Fabrications (continued)</p> <p data-bbox="807 405 1485 562">14:15-14:30 14p-G2-4 Broadband digital holography with chromatic-phase shifter <i>Duc Quang Pham, Satoshi Hasegawa, Akihiro Kiire, Daisuke Barada, Toyohiko Yatagai, Yoshio Hayasaki; Utsunomiya Univ., Japan</i></p> <p data-bbox="807 633 1441 757">14:30-14:45 14p-G2-5 Optical Heterodyne Angular Displacement Measurement System <i>Ruey-Ching Twu; Southern Taiwan Univ., Taiwan</i></p> <p data-bbox="807 828 1477 952">14:45-15:00 14p-G2-6 Beam Estimation by the Inverse Diffraction <i>Ryo Nishikawa¹, Katsuhiko Uno¹, Shigeru Tachikawa²; ¹Ibaraki Univ., Japan; ²AGT Corporation, Japan</i></p>

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NOTICE

The 74th JSAP Autumn Meeting 2013

Date: Sept. 16(Mon.)–20(Fri.)

Venue: Doshisha University, Kyotanabe Campus

(1-3 Tatara Miyakodani, Kyotanabe City, Kyoto , 610-0394 Japan)

The following joint symposia will be scheduled concurrently with the annual meeting.

■ **JSAP-OSA Joint Symposia 2013**

Details to be announced in early April, 2013.

■ **JSAP-MRS Joint Symposia 2013**

The call for paper will be open in late January, 2013.

The 73rd JSAP Autumn Meeting 2012

JSAP-OSA Joint Symposia 2012

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