

■ JSAP-OSA Joint Symposia 2014

OSA President Special Lecture

Date : September 17 (Wed.) 13:45~14:45

Venue : Room C4

Lecturer : Philip Bucksbaum (Stanford University)

Title: Quantum Control in Strong Laser Fields

Sessions

| 18.1 Plasmonics | | Organizer: Prabhat Verma (Osaka Univ.) | | |
|--|-------------|---|--------------|---------|
| 18.1 | 9/19 (Fri.) | 9:00~18:00 | Oral Session | Room C3 |
| | 9/20 (Sat.) | 9:00~12:30 | Oral Session | Room C3 |
| 18.2 Bio-and Medical Photonics | | Organizers: Katsumasa Fujita (Osaka Univ.), Yuji Matsuura (Tohoku Univ.) | | |
| 18.2 | 9/18 (Thu.) | 9:30~17:30 | Oral Session | Room C4 |
| | 9/19 (Fri.) | 9:30~12:30 | Oral Session | Room C4 |
| 18.3 Laser Manufacturing | | Organizers: Masahiro Tsukamoto (Osaka Univ.), Masahito Katto (Miyazaki Univ.) | | |
| 18.3 | 9/19 (Fri.) | 13:30~17:00 | Oral Session | Room C4 |
| 18.4 Optical Micro-sensing, Manipulation and Fabrication | | Organizer: Tsutomu Shimura (The Univ. of Tokyo) | | |
| 18.4 | 9/18 (Thu.) | 9:00~17:15 | Oral Session | Room C3 |
| 18.5 Opto-electronics | | Organizers: Kazuhiko Shimomura (Sophia Univ.) | | |
| 18.5 | 9/20 (Sat.) | 9:15~15:00 | Oral Session | Room C1 |
| 18.6 Information Photonics | | Organizer: Ryoichi Horisaki (Osaka Univ.) | | |
| 18.6 | 9/20 (Sat.) | 9:00~15:00 | Oral Session | Room C4 |
| 18.7 Laser Photonics - XFEL and ultrafast optics - | | Organizer: Katsumi Midorikawa (RIKEN) | | |
| 18.7 | 9/17 (Wed.) | 9:15~17:45 | Oral Session | Room C4 |
| 18.8 Carbon Photonics | | Organizer: Kazunari Matsuda (Kyoto Univ.) | | |
| 18.8 | 9/17 (Wed.) | 10:15~17:45 | Oral Session | Room C3 |

Invited Talks

| 18.1 Plasmonics | | | | | |
|--------------------------------|-------------|------|---|------------------|--|
| Date | Hours | Room | Title (English) | Lecturer | |
| 9/19 (Fri.) | 9:00~9:30 | C3 | Metamaterials: From 3D Plasmonic Nanostructure to Reflective Metasurface | Din Ping Tsai | (National Taiwan Univ.) |
| | 10:45~11:15 | C3 | Thermal Radiation Control by Plasmonic Structures: from Metasurface to Metafilament | Junichi Takahara | (Osaka Univ.) |
| | 14:00~14:30 | C3 | Visualizing plasmons by near-field spectroscopy | Kohei Imura | (Waseda Univ.) |
| | 15:45~16:15 | C3 | Plasmonic Hot Electron Induced Structural Phase Transition in Monolayer MoS ₂ | Zheyu Fang | (Peking Univ.) |
| 9/20 (Sat.) | 9:00~9:30 | C3 | Plasmonic applications of lossy transition metals | Katsuyoshi Ikeda | (Hokkaido Univ.) |
| 18.2 Bio-and Medical Photonics | | | | | |
| Date | Hours | Room | Title (English) | Lecturer | |
| 9/18 (Thu.) | 9:30~10:00 | C4 | Optical Bio-Microrheology | Arthur Chiou | (National Yang-Ming Univ.) |
| | 13:45~14:15 | C4 | A composite-type optical fiberscope system with hybrid functions of diagnosis and medical treatment | Oka Kiyoshi | (Japan Atomic Energy Agency) |
| | 15:45~16:15 | C4 | Light-neuron interactions: Key to understanding the brain | Vincent Daria | (The Australian National Univ.) |
| 9/19 (Fri.) | 9:30~10:00 | C4 | Adaptive optics and its application to bioimaging | Yutaka Hayano | (National Astronomical Observatory of Japan) |
| 18.3 Laser Manufacturing | | | | | |
| Date | Hours | Room | Title (English) | Lecturer | |
| 9/19 (Fri.) | 13:30~14:00 | C4 | Latest laser technology and applications | Bastian Becker | (TRUMPF Corp.) |
| | 14:00~14:30 | C4 | Single mode fiber laser and their process applications | Akira Fujisaki | (Furukawa Electric Co., Ltd.) |
| | 15:30~16:00 | C4 | Micromachining of CFRP with Short Pulse Lasers | Masayuki Fujita | (ILT, Osaka Univ.) |

■ JSAP-OSA Joint Symposia 2014 (continued)

Invited Talks

| 18.4 Optical Micro-sensing, Manipulation and Fabrication | | | | | |
|--|-------------|------|---|------------------|---|
| Date | Hours | Room | Title (English) | Lecturer | |
| 9/18 (Thu.) | 9:00~9:30 | C3 | Optical Nanomanipulation Using Nanoshaped Plasmonic Fields | Keiji Sasaki | (Hokkaido Univ.) |
| | 10:15~10:45 | C3 | 3D Light-driven Micro-tools with Nano-probes | Jesper Gluckstad | (DTU Fotonik) |
| | 14:00~14:30 | C3 | Polarization Control over Deep Ultraviolet Light by Subwavelength Structures | Guoguo Kang | (Beijing Inst. of Technology) |
| | 15:30~16:00 | C3 | Subwavelength light focusing and imaging via wavefront shaping in complex media | Park Yongkeun | (KAIST) |
| | 16:30~17:00 | C3 | Helical lights twist materials to form chiral structures -Chiral Photonics- | Takashige Omatsu | (Chiba Univ.) |
| 18.5 Opto-electronics | | | | | |
| Date | Hours | Room | Title (English) | Lecturer | |
| 9/20 (Sat.) | 9:15~9:45 | C1 | Functional Devices based on Photonic Crystal Waveguides | Kaiyu Cui | (Tsinghua Univ.) |
| | 11:30~12:00 | C1 | Optical Switches and Biosensors Using Silicon Photonics | Shin Yokoyama | (Hiroshima Univ.) |
| | 13:00~13:30 | C1 | Growth, Fabrication, and Characterization of GaN-based Columnar LEDs | Dong-Seon Lee | (GIST) |
| | 14:30~15:00 | C1 | Beam Steering, Beam Shaping and Intensity Modulation Based on Bragg Reflector Waveguides | Fumio Koyama | (Tokyo Inst. of Technology) |
| 18.6 Information Photonics | | | | | |
| Date | Hours | Room | Title (English) | Lecturer | |
| 9/20 (Sat.) | 9:00~9:30 | C4 | Multimodal nonlinear spectral imaging of tissue samples with CARS molecular fingerprint | Hideaki Kano | (Univ. of Tsukuba) |
| | 10:15~10:45 | C4 | Imperceptible Polychromatic Visual Stimuli for Brain-Display Interfaces | Fang-Cheng Lin | (NCTU) |
| | 11:15~11:45 | C4 | Efficient Autofocusing in Optical Scanning Holography | Edmund Lam | (Univ. of Hong Kong) |
| | 12:45~13:15 | C4 | Separating Reflective and Fluorescent Components using High Frequency Illumination in the Spectral Domain | Imari Sato | (National Inst. of Informatics) |
| | 14:00~14:30 | C4 | Computational Hyperspectral Imaging | Qionghai Dai | (Tsinghua Univ.) |
| 18.7 Laser Photonics - XFEL and ultrafast optics - | | | | | |
| Date | Hours | Room | Title (English) | Lecturer | |
| 9/17 (Wed.) | 9:30~10:00 | C4 | Few-Cycle Parametric Amplifiers and Sub-Cycle Waveform Synthesizers | Oliver D. Muecke | (DESY Center for Free-Electron Laser Science) |
| | 10:00~10:30 | C4 | Synthesis of Single-Cycle Optical Fields | Andy Kung | (Academia Sinica) |
| | 11:15~11:45 | C4 | Exploring Quantum-Classical Boundary by Ultrafast Optics | Kenji Ohmori | (Inst. for Molecular Science) |
| | 15:00~15:30 | C4 | Two-color XFEL operation at SACLA | Toru Hara | (RIKEN) |
| | 15:45~16:15 | C4 | Two-photon process with X-ray free-electron laser | Kenji Tamasaku | (RIKEN) |
| 18.8 Carbon Photonics | | | | | |
| Date | Hours | Room | Title (English) | Lecturer | |
| 9/17 (Wed.) | 10:15~10:45 | C3 | Carbon-Based Optics and Photonics | Junichiro Kono | (Rice Univ.) |
| | 11:30~12:00 | C3 | Single Carbon Nanotube Devices for Integrated Photonics | Yuichiro Kato | (The Univ. of Tokyo) |
| | 15:00~15:30 | C3 | Band nesting and photocarrier relaxation in group 6 transition metal dichalcogenide | Goki Eda | (National Univ. of Singapore) |
| | 16:15~16:45 | C3 | Nanoscale Raman imaging and analysis of strain distribution in carbon nanotube | Taka-aki Yano | (Tokyo Inst. of Tech.) |

■ Invited Lectures of Overseas Researchers

| Date | Hours | Room | Title | Speaker | |
|----------------|-------------|------|---|------------------------------|-------------------|
| 9/17 (Wed.) | 13:15~14:00 | S10 | 8. Plasma Electronics Plasma Applications to Agriculture: Plasma Farming | Suk Jae Yoo | (NFRI, Korea) |
| 9/17 (Wed.) | 14:00~14:45 | S10 | 8. Plasma Electronics The role of reactive oxygen and nitrogen species in plasma cancer treatment | Deborah O'Connell | (Univ. York) |
| 9/18 (Thu.) | 13:15~13:45 | A11 | 6.4 New thin-film materials Tuning the magnetic properties of Co thin films by oxygen ion implantation | Jose Francisco Lopez-Barbera | (ICN2, Spain) |
| 9/18 (Thu.) | 14:00~14:45 | A27 | 14. 2Ultrathin films and quantum nanostructures Broad Spectral Bandwidth Light Emitters for Biomedical Imaging | Richard Hogg | (Univ. Sheffield) |

■ English Session

English presentations are scheduled in the following sessions.

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|-----------|--|-------------|-------------------------|-----------------|
| 8 | Plasma electronics - English Session | | | |
| | 9/17 (Wed.) | 9:00~18:00 | Oral Session | Room S10 |
| 10 | Spintronics and magnetics | | | |
| | 9/17 (Wed.) | 13:30~15:06 | Short Oral Presentation | Room S2 |
| 10.1 | Creation of new materials | | | |
| | 9/18 (Thu.) | 9:00~11:45 | Oral Session | Room S2 |
| 10.2 | Spin torque, spin current, circuits, and measurement technologies | | | |
| | 9/20 (Sat.) | 9:00~15:00 | Oral Session | Room S2 |
| 10.3 | Giant magnetoresistance (GMR), tunnel magnetoresistance (TMR) and magnetic recording technologies | | | |
| | 9/19 (Fri.) | 9:00~11:45 | Oral Session | Room S2 |
| 10.4 | Semiconductors, organic, optical, and quantum spintronics | | | |
| | 9/19 (Fri.) | 13:15~17:30 | Oral Session | Room S2 |
| | 9/20 (Sat.) | 9:00~12:00 | Oral Session | Room S10 |
| 13.5 | Si-English Session | | | |
| | 9/18 (Thu.) | 10:30~12:15 | Oral Session | Room A15 |
| 18 | JSAP-OSA Joint Symposia 2014 | | | |
| | 9/17 (Wed.)~20 (Sat.) All Day | | Oral Session | Room C1, C3, C4 |
| Symposium | Japan-Korea Joint Symposium on Semiconductor Physics and Technology – Nano-carbon materials including graphene – | | | |
| | 9/17 (Wed.) | 9:15~18:00 | Oral Session | Room S1 |
| | Present and Future of Functional atomic thin film research | | | |
| | 9/18 (Thu.) | 13:15~18:30 | Oral Session | Room B3 |
| Symposium | Innovation in R&D of the Flexible Electronics -Toward the Inorganic Flexible Devices- | | | |
| | 9/19 (Fri.) | 9:15~17:00 | Oral Session | Room A4 |