

November 12 (Tue)

-----[Room A]-----

9:20-9:40 Opening remarks
 Hajime ISHIHARA, Chengwei QIU

Chair: Hajime ISHIHARA

9:40-10:25 Fluctuation and nanophotonics
[Plenary] Satoshi KAWATA (Osaka University and RIKEN, Japan)

Chair : Chengwei QIU

10:25-11:10 Spatiotemporal metaphotonics
[Plenary] Nader ENGHETA (University of Pennsylvania, USA)

11:10-11:30 Coffee Break

-----[Room A]-----

Chair: Takuo TANAKA

11:30-12:05 Dynamic two-dimensional optical phased array metasurfaces: connecting
[Keynote] nanophotonic and array architecture design
 Harry ATWATER (California Institute of Technology, USA)

12:05-12:40 Highly-dispersive time-variant metasurfaces for frequency conversion
[Keynote] Bumki MIN, Jagang PARK (KAIST, Korea)

----[Room B]----

Chair: Anatory ZAYATS

11:30-12:05 Far-field deeply subwavelength imaging and metrology: bringing artificial
[Keynote] intelligence to nanophotonics
 Nikolay I. ZHELUDEV (University of Southampton, UK, Nanyang
 Technological University, Singapore)

12:05-12:40 Plasmonic metastructures and bio-assemblies: Coherent transfer of
[Keynote] plasmons, hot electrons and chirality
 Alexander GOVOROV (University of Electronic Science and Technology of
 China, China, Ohio University, USA)

12:40-12:50 Group Photo (1F Lobby)

12:50-14:10 Lunch Break

----[**Room A**]----

Chair: Harry ATWATER

- 14:10-14:35 Active control of plasmonic enhanced light emission
[Invited] Yu-Jung LU (Academia Sinica/National Taiwan University, Taiwan)
- 14:35-15:00 Nonlinear metasurfaces for THz generation and manipulation
[Invited] Tal ELLENBOGEN (Tel-Aviv University, Israel)
- 15:00-15:25 Dielectric metasurfaces for future display: hologram, color printing and
[Invited] crypto-display
Junsuk RHO (Pohang University of Science and Technology, Korea)
- 15:25-15:40 Photoluminescence-driven broadband transmitting directional optical
nanoantennas
A.T.Mina YESILYURT, Kel-Meng SEE, Fan-Cheng LIN, Tzu-Yu CHEN,
You-Xin HUANG, Chen-Hsien HUANG, Jer-Shing HUANG (Leibniz Institute
of Photonic Technology, Germany, National Tsing Hua University, Academia
Sinica, National Chiao Tung University, Taiwan)
- 15:40-15:55 Optical property and optical control of interlayer magnon-magnon coupling in
dielectric superlattices
Kenta KATO, Tomohiro YOKOYAMA, Hajime ISHIHARA (Osaka University,
Osaka Prefecture University, Japan)

----[**Room B**]----

Chair: Romain QUIDANT

- 14:10-14:35 Recent progress in highly sensitive biosensing on optical metasurfaces
[Invited] Masanobu IWANAGA (NIMS, Japan)
- 14:35-15:00 Plasmonic electrons of nano-gaps induce highly mode-specific vibrational
[Invited] pumping of molecules
Zee Hwan KIM (Seoul National University, Korea)
- 15:00-15:25 Metamaterials for sensing applications
[Invited] Takuo TANAKA (RIKEN, Tokushima University, Japan)
- 15:25-15:40 Laser trapping and assembling of microparticles at solution surface based on
light propagation through whispering gallery mode
Tetsuhiro KUDO, Jia-Syun LU, Hiroshi MASUHARA (National Chiao Tung
University, Taiwan)
- 15:40-15:55 Quantum plasmonic immunoassay sensing
Xiao XIONG, Ping BAI, Jia-Bin YOU, Ching Eng PNG, Lin WU, Nuttawut
KONGSUWAN, Ortwin HESS (A*STAR, Singapore, Imperial College London, UK)

----[Room C]----

Chair: Satoshi TOMITA

- 14:10-14:35 Near-IR plasmon engineering in self-organized metasurfaces
[Invited] Maria Caterina GIORDANO (University of Genova, Italy)
- 14:35-15:00 Intensifying MoS₂ bilayers by quadrupole gap plasmons for excellent hydrogen evolution reaction by morphology-controlled plasmonic nanostructures towards superior photodetectors
[Invited] Pavithra SRIRAM, Dong-Sheng SU, Yu-Po WEN, Sheng-Wen WANG, Arumugam MANIKANDAN, Arun Prakash PERIASAMY, Huan-Tsung CHANG, Yu-Lun CHUEH, Ta-Jen YEN (National Tsing Hua University, National Taiwan University, Taiwan)
- 15:00-15:25 Plasmonic characteristics of metal-dielectric nanostructures fabricated via simple bottom-up process
[Invited] Sachiko MATSUSHITA, Mai MITA, Rie WATANABE, Takayuki OKAMOTO, Toshihiro ISOBE, Akira NAKAJIMA (Tokyo Tech, RIKEN, Japan)
- 15:25-15:40 Development of multiscale first-principles approach for optical responses in nanostructure
Mitsuharu UEMOTO, Kazuhiro YABANA (University of Tsukuba, Japan)
- 15:40-15:55 Photonic nanojet mediated back-action of dielectric microparticles
Yuxuan REN, Xinglin ZENG, Lei-Ming ZHOU, Cihang KONG, Cheng-Wei QIU, Kevin K. TSIA, Kenneth K. Y. WONG (The University of Hong Kong, China, National University of Singapore, Singapore)
- 15:55-16:15 Coffee Break

----[Room A]----

Chair: Hiromi OKAMOTO

- 16:15-16:40 Single chiral nanocrystal handedness determination using circularly polarized luminescence
[Invited] Gil MARKOVICH, Uri HANANEL, Eitam VINEGRAD, Ori CHESHNOVSKY (Tel Aviv University, Israel)
- 16:40-17:05 Super chiral nearfield or optical chirality dissipation: What controls chiral biosensing?
[Invited] Malcolm KADODWALA (University of Glasgow, UK)
- 17:05-17:30 Non-reciprocal magnetochiral metamaterials and metasurfaces
[Invited] Satoshi TOMITA (Tohoku University, Japan)
- 17:30-17:45 Geometric structure in helical evanescent waves and its implications
Lei WEI, Francisco J. RODRÍGUEZ-FORTUÑO (King's College London, UK)

17:45-18:00 The response of chiral magnetic order to chiral plasmonic field
Yuya YOSHITAKE, Shun HASHIYADA, Hiromi OKAMOTO, Yoshihiko TOGAWA (Osaka Prefecture University, RIKEN, Institute for Molecular Science, Japan)

----[**Room B**]----

Chair: Ta-Jen YEN

16:15-16:40 Sub-nanometer resolution tip-enhanced Raman spectroscopy in ambient
[Invited] Maria Vanessa BALOIS, Norihiko HAYAZAWA, Satoshi YASUDA, Katsuyoshi IKEDA, Bo YANG, Emiko KAZUMA, Yasuyuki YOKOTA, Yousoo KIM, Takuo TANAKA (RIKEN, Japan, University of the Philippines, Philippines, Japan Atomic Energy Agency, Nagoya Institute of Technology, Tokushima University, Japan)

16:40-17:05 All-dielectric field enhanced spectroscopy beyond the plasmonic limit
[Invited] Taka-aki YANO (Tokushima University, RIKEN, Japan)

17:05-17:30 Absorption and scattering cross-section spectroscopy of a single strong-coupling system between plasmon and molecular exciton resonance
[Invited] Tamitake ITOH (AIST, Japan)

17:30-17:45 Fabrication and optical characterization of SRO plasmonic nanopore by cathodoluminescence
Dung VU THI, Takumi SANNOMIYA (Tokyo Tech, Japan)

17:45 -18:00 Information encryption based on metasurfaces
Zhou ZHANG-KAI (Sun Yat-sen University, China)

----[**Room C**]----

Chair: Syoji ITO

16:15-16:40 Engineering light-matter interactions at the nanoscale
[Invited] Kenneth CROZIER (University of Melbourne, Australia)

16:40-17:05 Optical trapping of nanoparticle suspensions on a plasmonic chip and its application to manipulation
[Invited] Chie HOSOKAWA, Yuki MATSUBAYASHI, Suguru N. KUDOH, Keiko TAWA (Osaka City University, AIST, Kwansai Gakuin University, Japan)

17:05-17:30 Novel optical tweezers using nano-structured surfaces of semiconductors
[Invited] Yasuyuki TSUBOI (Osaka City University, Japan)

- 17:30-17:45 Super-resolved imaging of the swarming behavior of nanoparticles during optical trapping
Roger BRESOLI-OBACH, Boris LOUIS, Rafael CAMACHO, Chih-Hao HUANG, Tetsuhiro KUDO, Hiroshi MASUHARA, Johan HOFKENS (KULeuven, Belgium, Lund University, Sweden, National Chiao Tung University, Taiwan)
- 17:45 -18:00 Development of nanoparticle sensing devices coupled with electrohydrodynamics and optical tweezers
Fumika NITO, Tetsuya SHIOZAKI, Kohei ODANI, Kentaro DOI, Satoyuki KAWANO (Osaka University, Japan)