

## **November 13 (Wed)**

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

Chair: Satoshi KAWATA

---

9:00-9:45 Plasmonic metamaterials meet quantum  
[Plenary] Simeon I. BOGDANOV, Alexandra BOLTASSEVA, Vladimir M. SHALAEV  
(Purdue University, Japan)

Chair: Hiroshi MASUHARA

---

9:45-9:55 Introduction of Optical Manipulation Session

9:55-10:40 Optomechanics with a levitated nanoparticle  
[Plenary] Romain QUIDANT (ICFO, ICREA, Spain)

10:40-11:00 Coffee Break

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

Chair: Takashige OMATSU

---

11:00-11:35 Optical manipulation in chemistry  
[Keynote] Hiroshi MASUHARA (National Chiao Tung University, Taiwan)

11:35-12:10 Light induced inverse-square law interactions between nanoparticles  
[Keynote] Jorge LUIS-HITA, Manuel I. MARQUÉS, Rafael DELGADO-BUSCALIONI,  
Nuno De SOUSA, Luis S. FROUFE-PÉREZ, Frank SCHEFFOLD, Juan Jose SAENZ (DIPC, Universidad Autónoma de Madrid, Spain, University of Fribourg, Switzerland)

12:10-12:45 Mechanical action of chiral light on chiral matter  
[Keynote] Etienne BRASSELET (University of Bordeaux, France)

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

Chair: Mark BRONGERSMA

---

11:00-11:35 Progress in photonic Crystals  
[Keynote] Susumu NODA (Kyoto University, Japan)

11:35-12:10 Taming hot-electron dynamics in plasmonic heterostructures  
[Keynote] Anatoly V. ZAYATS (King's College London, UK)

12:10-12:45 Machine-learning-assisted photonics  
[Keynote] Zhaxylyk A. KUDYSHEV, Simeon BOGDANOV, Vladimir M. SHALAEV,  
Alexandra BOLTASSEVA (Purdue University, USA)

12:45-14:00 Lunch Break

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

Chair: Yasuyuki TSUBOI

---

- 14:00-14:25 Dirac-like photonic structures: from pseudospin to topology  
[Invited] Daohong SONG, Daniel LEYKAM, Hrvoje BULJAN, Zhigang CHEN (Nankai University, China, Institute for Basic Science, Korea, University of Zagreb, Croatia, San Francisco State University, USA)
- 14:25-14:50 Linear and angular momentum transfer in nano-scale fields  
[Invited] Keiji SASAKI (Hokkaido University, Japan)
- 14:50-15:15 Going beyond light-induced helical nanostructures  
[Invited] Takashige OMATSU (Chiba University, Japan)
- 15:15-15:30 Orbital motion of multiple nanoparticles modulated by optical spin via electromagnetic inter-particle interaction  
Mamoru TAMURA, Takashige OMATSU, Shiho TOKONAMI, Takuya IIDA (Osaka Prefecture University, Chiba University, Japan)

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

Chair: Daisik KIM

---

- 14:00-14:25 Plasmonic hot holes: fundamentals and devices  
[Invited] Giulia TAGLIABUE (EPFL, Switzerland)
- 14:25-14:50 Radiative cooling and wavelength selective thermal emission with layered structures  
[Invited] Satoshi ISHII, Zih-Ying YANG, Thang DAO, Anh Tung DOAN, Satish Laxman SHINDE, Kuo-Ping CHEN, Tadaaki NAGAO (NIMS, Japan, National Chiao Tung University, Taiwan)
- 14:50-15:15 Plasmonic local heat as a resource for energy conversion  
[Invited] Wakana KUBO (Tokyo University of Agriculture and Technology, Japan)
- 15:15-15:30 Theory of interactions between single nanoparticles and plasmon by photoinduced force microscopy  
Hidemasa YAMANE, Nobuhiko YOKOSHI, Hajime ISHIHARA (Osaka Prefecture University, Osaka University, Japan)

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

Chair: Kotaro KAJIKAWA

---

- 14:00-14:25 Interfering multipole modes visualized by cathodoluminescence  
[Invited] Takumi SANNOMIYA (Tokyo Institute of Technology, Japan)
- 14:25-14:50 Integrated topological photonics using semiconductor-based photonic  
[Invited] nanostructures  
Satoshi IWAMOTO (The University of Tokyo, Japan)
- 14:50-15:15 Observation of ultrafast superradiance due to nonlocal light-matter  
[Invited] interaction leading to thermal-free photonics  
Masaaki ASHIDA, Takashi KINOSHITA, Takuya MATSUDA, Masayoshi ICHIMIYA, Hajime ISHIHARA (Osaka University, Osaka Prefecture University, The University of Shiga Prefecture, Japan)
- 15:15-15:30 Charge transfer between graphene and plasmonic materials  
Min-Wen YU, Satoshi ISHII, Tadaaki NAGAO, Kuo-Ping CHEN (National Chiao Tung University, Taiwan, NIMS, Japan)
- 15:30-15:50 Coffee Break

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

Chair: Zhigang CHEN

---

- 15:50-16:15 Plasmonic linear nanomotor with directional control of scattered light  
[Invited] Yoshito Y. TANAKA (The University of Tokyo, Japan)
- 16:15-16:40 Nanoscopic mechanical motion of small particles driven by switching of  
[Invited] photon force through photo-physicochemical processes  
Syoji ITO (Osaka University, Japan)
- 16:40-17:05 Swarming of plasmonic nanoparticles induced by optical and  
[Invited] hydrodynamic interactions: computational opto-hydrodynamics  
Rafael DELGADO-BUSCALIONI, Marc MELENDEZ, J. Jose SAENZ (Universidad Autonoma de Madrid, San Sebastian, Spain)

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

Chair: Satoshi ISHII

---

- 15:50-16:15 Extraordinary Young's interference: from catenary optical fields to  
[Invited] photonic spin-orbit interaction  
Xiangang LUO (Chinese Academy of Sciences, China)
- 16:15-16:40 Atomic-thick meta-optics from metalens to color prints  
[Invited] Xiangping LI (Jinan University, China)

16:40-17:05 Second order optical nonlinearity in metasurfaces  
[Invited] Teruya ISHIHARA (Tohoku University, Japan)

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

Chair: Satoshi IWAMOTO

---

15:50-16:15 Near-field excitation and wavefront tailoring with a single metasurfaces  
[Invited] Xiaor LI, Zhuo WANG, Shaohua DONG, Sixiong YI, Yizhen CHEN, Huijie GUO, Fuxin GUAN, Qiong HE, Lei ZHOU, Shulin SUN (Fudan University, China)

16:15-16:40 Second-harmonic generation by propagating plasmons with selective  
[Invited] modal controllability  
Chen-Bin HUANG (National Tsing Hua University, Taiwan)

16:40-17:05 Recent developments in III-nitride QD single photon emitters: operational  
[Invited] temperature, emission purity, and emission brightness  
Mark HOLMES, Munetaka ARITA, Yasuhiko ARAKAWA (The University of Tokyo, Japan)

17:05-17:15 Group Photo (1F Lobby)

----[ **Room D** ]----

17:20-18:50 Poster Session

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

19:30-21:30 Banquet