

# APNFO13 Time Table

July 28 (Thu.)	
<b>14:00</b>	Registration
<b>15:00</b>	<b>Summer School</b> <b>Ann Roberts</b> (The University of Melbourne) All-optical image processing with nanophotonics
<b>15:55</b>	Break
<b>16:00</b>	<b>Summer School</b> <b>Din-Ping Tsai</b> (City University of Hong Kong) Meta-lens: classical to quantum
<b>16:55</b>	Break
<b>17:00</b>	<b>Summer School</b> <b>Hiromi Okamoto</b> (Institute for Molecular Science) Imaging with local chiro-optical effects
<b>17:55</b>	

July 29 (Fri.)

8:30	Registration	
9:00	Opening Remarks	
9:15	<b>Plenary</b> <b>PL29-A1</b> <b>Motoichi Ohtsu</b> , <i>Research Origin for Dressed Photon, Japan</i> Off-shell science for dressed photons	
10:15	Coffee Break	
10:35	<b>IL29-A2</b> <u>Hajime Ishihara<sup>1</sup>, Hidemasa Yamane<sup>2</sup>, and Nobuhiko Yokoshi<sup>3</sup></u> <sup>1)</sup> Osaka University, Japan, <sup>2)</sup> Kitasato University, Japan, <sup>3)</sup> Osaka Metropolitan University, Japan Interplay between plasmonic resonance and microscopic nonlocality of nanomaterials	<b>IL29-B2</b> <u>Min Gu, and Yinan Zhang</u> <i>University of Shanghai for Science and Technology, China</i> High performance passive radiative cooling by artificial neuron network inverse design
11:05	<b>OL29-A3</b> <u>Yoshiaki Nishijima</u> <i>Yokohama National University, Japan</i> Molecular assembled metasurfaces for molecular detection	<b>OL29-B3</b> <u>Yuta Annaka, and Kazuo Ogura</u> <i>Niigata University, Japan</i> Selective excitation of spoof plasmon combining corrugated disk with corrugated waveguide
11:20	<b>OL29-A4</b> <u>Tomoya Kimura, Yoshito Y. Tanaka and Tsutomu Shimura</u> <i>The University of Tokyo, Japan</i> Unidirectional radiation control of SHG from tailored plasmonic nanostructures	<b>OL29-B4</b> <u>Lukas Wesemann, Jon Rickett, Timothy J. Davis, and Ann Roberts</u> <i>The University of Melbourne</i> Meta-optical devices as transmitting filters for real-time phase imaging
11:35	<b>OL29-A5</b> <u>Kazutaka Akiyoshi<sup>1</sup>, Yui Maeda<sup>1</sup>, Naoko Yamaguchi<sup>1</sup>, Tatsuya Kameyama<sup>1</sup>, Yasuyuki Tsuboi<sup>2</sup>, Hajime Ishihara<sup>3</sup>, and Tsukasa Torimoto<sup>1</sup></u> <sup>1)</sup> Nagoya University, Japan <sup>2)</sup> Osaka City University, Japan, <sup>3)</sup> Osaka University, Japan Plasmonic thin-layer chromatography for precise separation of less-toxic multinary quantum dots by size, shape, and optical property	<b>OL29-B5</b> <u>Mu Ku Chen<sup>1</sup>, Yuan Luo<sup>2</sup>, Cheng Hung Chu<sup>2,3</sup>, Sunil Vyas<sup>2</sup>, Hsin Yu Ku<sup>2</sup>, Yu Hsin Chia<sup>2</sup>, Xu Shi<sup>4</sup>, Takuo Tanaka<sup>3</sup>, Hiroaki Misawa<sup>4</sup>, and Din Ping Tsai<sup>1</sup></u> <sup>1)</sup> City University of Hong Kong, Hong Kong, <sup>2)</sup> National Taiwan University, Taiwan, <sup>3)</sup> RIKEN, Japan, <sup>4)</sup> Hokkaido University, Japan Moiré meta-lens for optical sectioning fluorescence imaging system
11:50	Lunch	
13:20	<b>IL29-A6</b> <u>Toshiharu Teranishi</u> <i>Kyoto University, Japan</i> New class of plasmonic alloy nanoparticles	<b>IL29-B6</b> <u>Pin Chieh Wu</u> <i>National Cheng Kung University</i> High-performance flat optics with toroidal metasurfaces
13:50	<b>OL29-A7</b> <u>Yukie Yokota<sup>1</sup>, Asuka Fujita<sup>1</sup>, Ryosuke Kodama<sup>2</sup>, Takumi Takatsuki<sup>2</sup>, Kanami Fujisaki<sup>2</sup>, and Kazuo Watanabe<sup>2</sup></u> <sup>1)</sup> Sophia University, Japan, <sup>2)</sup> Tokyo University of Science, Japan Plasmonic properties of assembled Pd nanosheets	<b>OL29-B7</b> <u>Jingcheng Zhang, Mu Ku Chen, Xiaoyuan Liu, and Din Ping Tsai</u> <i>City University of Hong Kong, Hong Kong</i> Meta-lenses for two dimensions and three dimensions arbitrary focusing
14:05	<b>OL29-A8</b> <u>Naoki Ichijo<sup>1</sup>, Hibiki Kikuchi<sup>1</sup>, Murat Yessenov<sup>2</sup>, Kenneth L. Schepler<sup>2</sup>, Ayman F. Abouraddy<sup>2</sup>, and Atushi Kubo<sup>1</sup></u> <sup>1)</sup> Univ. of Tsukuba, Japan, <sup>2)</sup> Univ. of Central Florida, CREOL, Japan Excitation and observation of the striped space-time surface plasmon polaritons	<b>OL29-B8</b> <u>Xiaoyuan Liu, Mu Ku Chen, Jingcheng Zhang, Yubin Fan, Jin Yao, Yao Liang, and Din Ping Tsai</u> <i>City University of Hong Kong, Hong-Kong</i> An intelligent meta-device resolving magic stairs
14:20	<b>OL29-A9</b> <u>Shuting Ma<sup>1</sup>, Ikuya Ando<sup>1</sup>, Yuta Shimoda<sup>1</sup>, Jiaqi Yang<sup>1</sup>, Hidehiko Yoshida<sup>2</sup>, Hitoshi Tabata<sup>1</sup>, and Hiroaki Matsui<sup>1</sup></u> <sup>1)</sup> The University of Tokyo, Japan, <sup>2)</sup> Utsunomiya University, Japan Surface lattice resonances in plasmonic arrays of ZnO:Ga for mid-infrared biosensing platform	<b>OL29-B9</b> <u>Kosuke Takaki, Satoshi Ikezawa, and Kentaro Iwami</u> <i>Tokyo University of Agriculture and Technology, Japan</i> Development of an axicon metalens for the visible wavelength
14:35	Coffee Break	
15:05	<b>OL29-A10</b> <u>Sayako Maeda, Rei Niguma, Tetsuya Matsuyama, Kenji Wada, and Koichi Okamoto</u> <i>Osaka Metropolitan University, Japan</i> Colorimetric LSPR sensor using Ag-NHoM structures	<b>OL29-B10</b> <u>Niken Priscilla<sup>1</sup>, Wendy Lee<sup>1</sup>, Lukas Wesemann<sup>1</sup>, and Ann Roberts<sup>1</sup></u> <i>The University of Melbourne, Australia</i> Metasurfaces with high numerical aperture for optical signal processing
15:20	<b>OL29-A11</b> <u>Tenpei Morishita<sup>1</sup>, K. Kobayashi<sup>1,2</sup>, and A. Ishikawa<sup>1</sup></u> <sup>1)</sup> University of Yamanashi, Japan, <sup>2)</sup> University of Toyo, Japan Relaxation dynamics of non-resonant excitation transfer phenomena based on steepest-entropy-ascent ansatz	<b>OL29-B11</b> <u>Hirotsugu Suzu<sup>1</sup>, Kazuharu Uchiyama<sup>2</sup>, Kingo Uchida<sup>3</sup>, Nicolas Chauvet<sup>1</sup>, André Röhrl<sup>1</sup>, Ryoichi Horisaki<sup>1</sup>, Hirokazu Hori<sup>2</sup> and Makoto Naruse<sup>1</sup></u> <sup>1)</sup> The University of Tokyo, Japan, <sup>2)</sup> University of Yamanashi, Japan, <sup>3)</sup> Ryukoku University, Japan Mathematical modeling of bending phenomena in photochromic single crystals by catastrophe theory
15:35	<b>IL29-A12</b> <u>Jeongyong Kim</u> <i>Sungkyunkwan University (SKKU), Republic of Korea</i> Plasmon-enhanced valley polarization of monolayer MoS <sub>2</sub> using continuous films of Au nanoparticles	<b>IL29-B12</b> <u>Hirokazu Hori<sup>1</sup>, Kazuharu Uchiyama<sup>1</sup>, Kingo Uchida<sup>2</sup>, Hayato Saigo<sup>3</sup>, and Makoto Naruse<sup>4</sup></u> <sup>1)</sup> University of Yamanashi, Japan, <sup>2)</sup> Ryukoku University, Japan, <sup>3)</sup> Nagahama Institute of Bio-Science and Technology, Japan, <sup>4)</sup> The University of Tokyo, Japan Natural intelligence based on optical near-field excitation-transfer and Schubert calculus
16:05	<b>IL29-A13</b> <u>Hind Kadiri, Loïc Le Cunff, Agnieszka Gwiazda, and Gilles LéronDEL</u> <i>University of Technology of Troyes, France</i> Advanced sub-wavelength structuring for multifunctional optical surfaces	<b>IL29-B13</b> <u>Kyoung-Duck Park</u> <i>Pohang University of Science and Technology (POSTECH), Korea</i> Tip-enhanced cavity-spectroscopy
16:35	Break	
17:15	<b>Poster Session 1 (online)</b>	
18:45		

## July 30 (Sat.)

9:00	<b>IL30-A1</b> <u>Lesly V. Melendez, and Daniel E. Gomez</u> <i>RMIT University, Australia</i> Asymmetric metal-semiconductor nanostructures for energy harvesting	<b>IL30-B1</b> <u>Mun Seok Jeong</u> <i>Hanyang University, Republic of Korea</i> Investigation of defects in 2D nanomaterials with vibrational nanoscopy
9:30	<b>IL30-A2</b> <u>Tomoya Oshikiri<sup>1</sup>, Xu Shi<sup>2</sup>, Masaru Nakagawa<sup>1</sup>, and Hiroaki Misawa<sup>2,3</sup></u> <i>1) Tohoku University, Japan, 2) Hokkaido University, Japan, 3) National Yang Ming Chiao Tung University, Taiwan</i> Efficient hot-hole transfer on metal/semiconductor interface under modal strong coupling condition	<b>IL30-B2</b> <u>Chi-h-Zong Deng, Ya-Lun Ho, Takashi Yatsui, Hitoshi Tabata, and Jean-Jacques Delaunay</u> <i>The University of Tokyo, Japan</i> Light manipulation on a chip based on long-propagation-length guided surface waves
10:00	<b>OL30-A3</b> <u>Kenji Iida</u> <i>Hokkaido University, Japan</i> Photoexcited Electron dynamics of Nanostructures Revealed by Theoretical and Computational Study	<b>OL30-B3</b> <u>Sotaro Nakamura, Chikara Ogawa, Takumi Aso, Satoshi Ikezawa, and Kentaro Iwami</u> <i>Tokyo University of Agriculture and Technology, Japan</i> Improvement of focusing performance in a rotating varifocal Moiré metalens at visible wavelengths
10:15	<b>OL30-A4</b> <u>Eri Fudo, Atsuhiko Tanaka, and Hiroshi Kominami</u> <i>Kindai University, Japan</i> H <sub>2</sub> evolution over Au/Ta <sub>2</sub> O <sub>5</sub> plasmonic photocatalyst under cocatalyst-free conditions	<b>OL30-B4</b> <u>Sotatsu Yanagimoto<sup>1</sup>, Naoki Yamamoto<sup>1</sup>, Takumi Sannomiya<sup>1</sup>, and Keiichirou Akiba<sup>1,2</sup></u> <i>1) Tokyo Institute of Technolog, Japan, 2)National Institutes for Quantum and Radiological Science and Technology, Japan</i> Analysis of the Purcell effect of nitrogen-vacancy centers in nanodiamonds coupled to Ag nanostructures
10:30	Coffee Break	
10:50	<b>IL30-A5</b> <u>Teng-Xiang Huang, Si-Si Wu, Mao-Feng Cao, Yi-Fan Bao, Xiao-Hui Peng, Xiang Wang, and Bin Ren</u> <i>Xiamen University, China</i> Probing the nano-defect related properties of 2D materials by tip-enhanced optical spectroscopy	<b>IL30-B5</b> <u>Zhaogang Dong</u> <i>Institute of Materials Research and Engineering (IMRE), Singapore, National University of Singapore, Singapore</i> Dielectric and plasmonic resonances of Si nanoantennas
11:20	<b>OL30-A6</b> <u>Tamitake Itoh<sup>1</sup> and Yuko S. Yamamoto<sup>2</sup></u> <i>1) AIST, Japan, 2) JAIST, Japan</i> Surface enhanced Raman spectroscopy of one-dimensional hotspots along gap between two nanowires	<b>OL30-B6</b> <u>Katsuma Aoki, Hyo Adegawa, Satoshi Ikezawa, and Kentaro Iwami</u> <i>Tokyo University of Agriculture and Technology, Japan</i> Arrayed Alvarez metalens for compound-eye imaging
11:35	<b>OL30-A7</b> <u>Hao Jin, Yuko S. Yamamoto</u> <i>JAIST, Japan</i> SERS and DFT investigation of rare earth ions-citrate complexes on silver colloids	<b>OL30-B7</b> <u>Quan Shi<sup>1</sup>, Hideki Fujiwara<sup>2</sup>, Ryusei Osaka<sup>2</sup>, Shin Kajita<sup>2</sup>, Ryo Yasuhara<sup>1</sup>, Noriyasu Ohno<sup>4</sup>, and Hiroyi Uehara<sup>1</sup></u> <i>1) National Institute for Fusion Science, Japan, 2) Hokkai-Gakuen University, Japan, 3) The University of Tokyo, Japan, 4) Nagoya University, Japan</i> Plasma induced surface nanostructure on compound-semiconductors and its application of random laser
11:50	Lunch	
13:20	<b>IL30-A8</b> <u>Jino George, Pooja Bhatt, and Kuljeet Kaur</u> <i>(IISER) Mohali, India</i> Polaritonics-charge transport through strong light-matter coupling	<b>IL30-B8</b> <u>Hui-Hsin Hsiao, and Ai-Yin Liu</u> <i>National Taiwan Normal University, Taiwan</i> Ultra-sensitive refractive-index sensor based on all-dielectric toroidal metasurfaces
13:50	<b>OL30-A9</b> <u>Tomohiro Fukushima, Soushi Yoshimitsu, and Kei Murakoshi</u> <i>Hokkaido University, Japan</i> Vibrational strong coupling of water for modulation of ionic conductivity	<b>OL30-B9</b> <u>Shigeru Kubota<sup>1</sup>, Kenta Hiraga<sup>1</sup>, Kensaku Kanomata<sup>1</sup>, Bashir Ahmmad<sup>1</sup>, Jun Mizuno<sup>2</sup>, and Fumihiko Hirose<sup>1</sup></u> <i>1) Yamagata University, Japan, 2) Waseda University, Japan</i> Application of nano-optical engineering to trap light in thin-film organic solar cells
14:05	<b>OL30-A10</b> <u>Govind Daval<sup>1</sup>, Ikki Morichika<sup>2</sup>, and Satoshi Ashihara<sup>2</sup></u> <i>1) Banaras Hindu University India, 2)The University of Tokyo, Japan</i> Vibrational strong coupling in a nanoscale molecular-plasmonic system	<b>OL30-B10</b> <u>Yuji Arakawa<sup>1</sup>, Kazuharu Uchiyama<sup>1</sup>, Yuki Hashimoto<sup>2</sup>, Kingo Uchida<sup>2</sup>, Hirotugu Suzui<sup>3</sup>, Makoto Naruse<sup>4</sup>, and Hirokazu Hori<sup>1</sup></u> <i>1) University of Yamanashi, Japan, 2) Ryukoku University, Japan, 3) The University of Tokyo, Japan</i> Erasure and reformation of nano-photoisomerization pathways in photochromic single crystals
14:20	<b>OL30-A11</b> <u>Seiji Hasegawa, and Kohei Imura</u> <i>Waseda University, Japan</i> Photoluminescence from gold nanorod and J-aggregates hybrids studied by scanning near-field optical microscopy	<b>OL30-B11</b> <u>Ryota Katsumi<sup>1,2</sup>, Takeshi Hizawa<sup>1</sup>, Akihiro Kuwahata<sup>2,3</sup>, Takayuki Iwasaki<sup>4</sup>, Mutsuko Hatano<sup>4</sup>, Fedor Jelezko<sup>5</sup>, Masaki Sekino<sup>2</sup>, and Takashi Yatsui<sup>1,2</sup></u> <i>1) Toyohashi University of Techno,logy, Japan, 2) The University of Tokyo, Japan, 3) Tohoku University, Japan, 4)Tokyo Institute of Technology, Japan, 5) Ulm University, Japan</i> Efficient photon extraction of NV centers in diamond by integrating Si <sub>3</sub> N <sub>4</sub> grating structure on diamond
14:35	Coffee Break	
15:05	<b>OL30-A12</b> <u>Hiromi Okamoto</u> <i>Institute for Molecular Science, Japan</i> Chiro-optical microscopic imaging and chiral near-field properties of plasmonic materials	<b>OL30-B12</b> <u>Kazuharu Uchiyama<sup>1</sup>, Ryo Nakagomi<sup>1</sup>, Hirotugu Suzui<sup>2</sup>, Kingo Uchida<sup>3</sup>, Makoto Naruse<sup>2</sup>, and Hirokazu Hori<sup>1</sup></u> <i>1) University of Yamanashi, Japan, 2) The University of Tokyo, Japan, 3) Ryukoku University, Japan</i> Order structure recognition by optical near-field statistics via photoisomerized nano-structures
15:20	<b>OL30-A13</b> <u>Tatsuki Kokubu, Daichi Nakayama, Tetsuro Katayama, Koinkar Pankaj, and Akihiro Furube</u> <i>Tokushima University, Japan</i> Characterization of tungsten sulfide nanosheets attached on gold nanoparticles modified SERS active substrates	<b>OL30-B13</b> <u>Rintaro Matsuda<sup>1</sup>, Masateru Taniguchi<sup>2</sup>, Sou Ryuzaki<sup>3</sup></u> <i>1) Kyushu University, Japan, 2) ISIR , Japan, 3) Hokkaido University, Japan</i> Statistical analysis for surface molecules of exosomes by using a plasmonic nanopore devices
15:35	<b>OL30-A14</b> <u>Sen Zhang, Yongdi Dang, Xinran Li, Yuxuan Li, and Yungui Ma*</u> <i>Zhejiang University, China</i> Rapid transient measurement of near-field thermal radiation in dissimilar bulk materials and metamaterials	<b>OL30-B14</b> <u>Hiromu Ishii and Toshiharu Saiki</u> <i>Keio University, Japan</i> Two-color optical nanopore measurement to visualize overall translocation process of DNA
15:50	Break	
16:00	<b>Plenary 2</b> <b>PL30-A15</b> <u>Isabelle Staude, University Jena, Germany</u> Active photonic nanostructures empowered by 2D materials	
17:00	Break	
17:10	<b>Poster Session 2 (in person)</b>	
18:40		

## July 31 (Sun)

9:00	<b>IL31-A1</b> <u>Wakana Kubo</u> <i>Tokyo University of Agriculture and Technology, Japan</i> Plasmonic energy harvesting	<b>IL31-B1</b> <u>Takuva Iida, Shihoko Tokonami, and Ikuhiko Nakase</u> <i>Osaka Metropolitan University, Japan</i> Light-induced acceleration of biochemical reactions mediated by plasmonic nanoparticles
9:30	<b>OL31-A2</b> <u>Keiko Esashika, Hideyuki Mitomo, and Toshiharu Saiki</u> <i>1) Keio University, Japan, 2) Hokkaido University, Japan</i> Tuning of gap distance of alkanethiol-modified AuNP dimers at Angstrom precision	<b>OL31-B2</b> <u>Takashi Takeuchi<sup>1</sup> and Kazuhiro Yabana<sup>2</sup></u> <i>1) RIKEN Cluster for Pioneering Research, Japan, 2) University of Tsukuba, Japan</i> Quantum hydrodynamic theory calculations for nonlinear optical response of metallic nanostructures
9:45	<b>OL31-A3</b> <u>Christophe Pin, Ryo Kakuta, and Keiji Sasaki</u> <i>Hokkaido University, Japan</i> Phase transition-induced nonlinear optical trapping of VO <sub>2</sub> nanoparticles	<b>OL31-B3</b> <u>Takeshi Iwasa<sup>1,2</sup>, Masato Takenaka<sup>1</sup>, Teppei Zengyo<sup>1</sup>, and Tetsuya Taketsugu<sup>1</sup></u> <i>1) Hokkaido University, Japan, 2) JST-PRESTO</i> Theoretical near-field vibrational spectroscopy beyond the dipole approximation
10:00	<b>OL31-A4</b> <u>An-Chieh Cheng<sup>1,2</sup>, Christophe Pin<sup>1</sup>, Teruki Sugiyama<sup>2</sup>, and Keiji Sasaki<sup>1</sup></u> <i>1) Hokkaido University, Japan, 2) National Yang Ming Chiao Tung University, Taiwan</i> Size dependence of nanostructures on plasmonic trapping-induced crystallization of NaClO <sub>3</sub>	<b>OL31-B4</b> <u>Atsushi Sugita, Kenshin Muroi, and Shunma Oh</u> <i>Shizuoka University, Japan</i> Second-order nonlinear optics of noncollinearly arranged plasmonic Au nanorod dimer structure
10:15	Coffee Break	
10:35	<b>IL31-A5</b> <u>Takumi Sannomiya, and Taeko Matsukata</u> <i>Tokyo Institute of Technology, Japan</i> Chiral light emission from circular plasmonic hole controlled by electron beam	<b>IL31-B5</b> <u>Po-Wen Tang<sup>1</sup>, He-Chun Chou<sup>1</sup>, Shiue-Yuan Shiau<sup>2</sup>, Xin-Quan Zhang<sup>3</sup>, Yi-Hsien Lee<sup>3</sup>, and Chi Chen<sup>1*</sup></u> <i>1) Academia Sinica, Taiwan, 2) National Center for Theoretical Sciences, Taiwan, 3) National Tsing-Hua University, Taiwan</i> Revealing the local band structures of lateral WS <sub>2</sub> /MoS <sub>2</sub> heterojunction and graded WxMo <sub>1-x</sub> S <sub>2</sub> alloy by near-field optical imaging
11:05	<b>IL31-A6</b> <u>Nozomi Hagiwara, Keiko Esashika, and Toshiharu Saiki</u> <i>Keio University, Japan</i> Single-base-resolved and millisecond SERS sensing of DNA oligonucleotides using gold nanoparticle dimers under Brownian motion	<b>IL31-B6</b> <u>Yu-Jung Lu</u> <i>1) Academia Sinica, Taipei Taiwan, 2) National Taiwan University, Taiwan</i> Gate-tunable plasmon-enhanced photodetection in a monolayer MoS <sub>2</sub> phototransistor
11:35	<b>OL31-A7</b> <u>Junsuke Yamanishi, Hyo-Yong Ahn, Tetsuya Narushima, and Hiromi Okamoto</u> <i>Institute for Molecular Science, Japan</i> Nanoscopic chiro-optical force imaging in photoinduced force microscopy	<b>OL31-B7</b> <u>Hivori Uehara<sup>1</sup>, Akira Mori<sup>2</sup>, Shuya Noda<sup>2</sup>, Yoshiaki Nishijima<sup>3</sup>, Yasutaka Matsuo<sup>4</sup>, Shigeki Tokita<sup>4</sup>, Ryo Yasuhara<sup>4</sup>, Kenji Goya<sub>2</sub></u> <i>1) National Institute for Fusion Science, Japan, 2) Akita Prefectural University, Japan, 3) Yokohama National University, Japan, 4) Hokkaido University, Japan, 5) Kyoto University, Japan</i> Evanescent wave infrared sensing using a fluoride fiber
11:50	Closing Remarks	
12:05		