

MOC2021 TECHNICAL PROGRAM

Sunday, 26 September

Moderators:

TBD

13:00–17:05 Session SS: Special Symposium "Photonics Progress Review"

SS-0 Introductory talk

13:00 Y. Kawata, *Shizuoka Univ.*

SS-1 New photonics industries starting from Shizuoka, Japan

13:05 Y. Takiguchi, *The Graduate School for the Creation of New Photonics Industries*

SS-2 Multi-tap time-resolved CMOS image sensors and their applications

13:50 S. Kawahito, *Shizuoka Univ.*

Break (14:35–14:50)

SS-3 Photonic-crystal surface-emitting lasers and their application to LiDAR

14:50 S. Noda, *Kyoto Univ.*

SS-4 Development of 20-inch photomultiplier tube for neutrino experiments

15:35 Y. Yoshizawa, *Hamamatsu Photonics K.K.*

SS-5 Clinical near-infrared spectroscopy and imaging

16:20 Y. Hoshi, *Hamamatsu Univ. School of Med.*

Break (17:05–17:15)

17:15–17:45 Get Together Party

9:00–9:15 Opening Remarks

Conference Co-chairs:

T. Arakawa, *Yokohama National Univ.*

M. Kuwata, *Mitsubishi Electric Corp.*

9:15–10:45 Session PL1: Plenary Session 1

Chairs: T. Arakawa, *Yokohama National Univ.*

M. Kuwata, *Mitsubishi Electric Corp.*

PL1-1 InGaN-based nanocolumn optical devices

9:15 K. Kishino, *Sophia Univ.*

PL1-2 Flat optics based on metasurfaces: from components to cameras

10:00 F. Capasso, *Harvard Univ.*

Break (10:45–11:00)

11:00–11:45 Session A: Emerging Photonics (1)

Chairs: TBD

TBD

A-1 All-dielectric Mie-resonant metaphotonics (Invited)

11:00 Y. Kivshar, *Australian National Univ.*

A-2 Conservation law of spin & orbital angular momentum for a vortex generated by a silicon photonic gear

11:30 S. Saito, *Hitachi, Ltd.*

Lunch (11:45–13:30)

13:30–14:30 Session B: Microoptics for Sensing (1)

Chairs: TBD

TBD

B-1 Artificial chirality evolution in micro-/nano-scale three-dimensional plasmonic metamaterials (Invited)

13:30 J. Rho, *Pohang Univ. of Science and Tech.*

B-2 Real-time LiDAR system using VCSEL-integrated amplifier/beam scanner

14:00 K. Tanahashi, I. Fujioka, S. Hu, X. Gu, and F. Koyama, *Tokyo Institute of Technology*

B-3 MOEMS technology based compact and robust broadband wavelength-swept mid-infrared quantum cascade laser

14:15 N. Akikusa¹, A. Sugiyama¹, T. Ochiai¹, T. Edamura¹, and H. Furukawa², ¹*Hamamatsu Photonics K.K.*, ²*AIST*

Break (14:30–14:45)

14:45–16:00 Session C: Microoptics for Sensing (2)

Chairs: TBD

TBD

C-1 Light-induced spiral motion of micro-objects in nonliquid environments (Invited)

14:45 W. Tang^{1,2}, W. Lv^{1,2}, J. Lu³, F. Liu^{1,2}, J. Wang^{1,2}, W. Yan^{1,2}, and M. Qiu^{1,2}, ¹*Westlake Univ.*, ²*Westlake Institute for Advanced Study*, ³*Zhejiang Univ.*

C-2 Hybridized plasmonic surface lattice resonance perovskite laser

15:15 Z.-T. Huang, C.-W. Yin, H. Li, K.-B. Hong, and T.-C. Lu, *National Yang Ming Chiao Tung Univ.*

C-3 Optical metrology and sensing in times of digital transition (Invited)

15:30 W. Osten, *Univ. Stuttgart*

Break (16:00–16:15)

16:15–17:15 Session D: Photonic Integration

Chairs: TBD

TBD

D-1 Photonics packaging for integrated photonics, from research to pilotscale manufacturing (Invited)

16:15 P. O'Brien, *Tyndall National Institute*

D-2 A freeform-based versatile microfluidic raman lab-on-chip system

16:45 Q. Liu, H. Thienpont, and H. Ottevaere, *Vrije Univ. Brussel*

D-3 Optoacoustic mode-locking based on micro-core photonic crystal fibre

17:00 W. He¹, M. Pang¹, D.-H. Yeh^{1,2}, and P. St. J. Russell¹, ¹*Max Planck Institute for the Science of Light*,
²*Friedrich-Alexander Univ.*

Break (17:15–17:30)

17:30–19:00 Session PL2: Plenary Session 2

Chairs: TBD

TBD

PL2-1 Exploring photonics — research activity on spatial light modulator in Hamamatsu —

17:30 T. Hara, *Hamamatsu Photonics K.K.*

PL2-2 Novel VCSEL designs for the next generation of photonic systems

18:15 D. Bimberg, *CIOMP, CAS/ TU Berlin*

19:00–19:15 Award Ceremony

8:30–9:45 Session E: Active Devices (1)

Chairs: TBD
TBD

E-1 High-efficiency photovoltaic power converters and application to optical power transmission (Invited)

8:30 S. Fafard, D. Masson, J.G. Werthen, J. Liu, T.C. Wu, C. Hundberger, M. Schwarzfischer, G. Steinle, C. Gaertner, C. Piemonte, B. Luecke, J. Wittl, and M. Weigert, *Broadcom*

E-2 1fJ/bit coupling-based ITO monolithic modulator in integrated photonics

9:00 C. S. Patil¹, H. Dalir^{1,2}, H. Wang¹, and V. Sorger^{1,2}, ¹*George Washington Univ.*, ²*Optelligence LLC*

E-3 Commercialization of VCSELs (Invited)

9:15 J. Tatum, L. Graham, J. Guenter, and P. Khurana, *Dallas Quantum Devices*

Break (9:45–10:00)

10:00–11:00 Session F: Active Devices (2)

Chairs: TBD
TBD

F-1 60-Times power enhancement of 300-GHz terahertz wave by 8-arrayed UTC-PDs

10:00 K. Kondo, Y. Matsuo, and K. Kato, *Kyushu Univ.*

F-2 Terahertz-wave beam steering by photomixing with chromatic dispersion of optical fibers

10-15 T. Saito¹, S. Takasaka², and K. Kato¹, ¹*Kyushu Univ.*, ²*Furukawa Electric Co., Ltd.*

F-3 Active-MMI SOA on quantum-dots toward high saturation output power under high temperature

10:30 Z. Fan, Y. Hinokuma, H. Jiang, and K. Hamamoto, *Kyushu Univ.*

F-4 Miniaturized vertically-stacked photovoltaic/bypass diode module

10:45 Y.-C. Wu, J.-C. Shih, Y.-C. Chen, J.-F. Liao, and Y. Hung, *National Sun Yat-sen Univ.*

Break (11:00–11:15)

11:15–12:15 Session G: Emerging Photonics (2)

Chairs: TBD
TBD

G-1 Structural colors and lasers by lattice resonance in silicon nitride metasurfaces (Invited)

11:15 K.-P. Chen, *National Chiao Tung Univ.*

G-2 Two-dimensional topological photonic crystals with helical edge states below the light line

11:45 C. Zhang¹, H. Yoshimi¹, Y. Ota², and S. Iwamoto¹, ¹*The Univ. of Tokyo*, ²*Keio Univ.*

G-3 Fabrication of valley photonic crystals with CMOS-compatible process

12:00 T. Yamaguchi¹, H. Yoshimi¹, M. Seki², M. Ohtsuka², N. Yokoyama², Y. Ota³, M. Okano², and S. Iwamoto¹, ¹*The Univ. of Tokyo*, ²*AIST*, ³*Keio Univ.*

Lunch (12:15–14:00)

14:00–15:00 Session H: Fabrication Technology

Chairs: TBD
TBD

H-1 Random depolarization film doped with calcite microparticles for clear real-color displays

14:00 S. Sasaki¹, M. Udono¹, and Y. Koike^{1,2}, ¹*Keio Univ.*, ²*Keio Photonics Research Institute*

- H-2 Blue/green-light resistant non-doped silica waveguide for visible-light applications**
14:15 Y. Fujiwara, J. Sakamoto, K. Watanabe, and R. Kasahara, *NTT Corp.*
- H-3 Fabrication of GaN-QPM crystals for slab waveguide type wavelength conversion devices**
14:30 H. Ishihara, K. Matsuhisa, K. Kurose, Y. Kawata, A. Sugita, Y. Inoue, and T. Nakano, *Shizuoka Univ.*
- H-4 Laser-wavelength stabilization by a focusing cavity-resonator-integrated guided-mode resonance filter**
14:45 R. Ueda¹, A. Watanabe¹, K. Ozawa¹, K. Kintaka², K. Nishio¹, T. Kusuura¹, J. Inoue¹, and S. Ura¹, ¹*Kyoto Institute of Technology*, ²*AIST*

Break (15:00–15:15)

15:15–16:15 Session J: New Materials

Chairs: TBD
TBD

- J-1 Novel structural optimization of femtosecond laser writing of waveguides in lithium niobate by raman spectroscopy**
15:15 A. Inoue, Y. Fujiwara, and K. Watanabe, *NTT Corp.*
- J-2 Two-photon polymerization-based direct laser writing and characterization of micro-lenses for optical interconnect applications**
15:30 K. Vanmol, A. Kandeel, G. Y. Belay, H. Thienpont, H. Ottevaere, and J. V. Erps, *Vrije Univ. Brussel*
- J-3 Micro-optics in single crystal diamond (Invited)**
15:45 N. Quack, G. Huszka, A. Toros, T. Graziosi, M. Kiss, and S. Mi, *EPFL*

Break (16:15–16:30)

16:30–17:30 Session K: Optical Processing (1)

Chairs: TBD
TBD

- K-1 Color centers with exceptional properties in diamond (Invited)**
16:30 T. Lühmann, S. Pazzagna, and J. Meijer, *Univ. Leipzig*
- K-2 Phase characteristic of phase-only spatial light modulator under high-power laser irradiation**
17:00 Y. Takiguchi, H. Tanaka, T. Watanabe, Y. Ohtake, and H. Toyoda, *Hamamatsu Photonics K.K.*
- K-3 Silicon photonic optical phase arrays with apodized subwavelength gratings**
17:15 T.-H. Lee¹, S.-H. Chung¹, W.-X. Chen¹, Y.-H. Lin¹, P.-Y. Wu², V. Kung², T.-T. Hu², and S.-L. Lee¹, ¹*National Taiwan Univ. of Science and Technology*, ²*FOCI Fiber Optic Communications, Inc.*

Break (17:30–17:45)

17:45–19:00 Session L: Novel Transmission Technology

Chairs: TBD
TBD

- L-1 Vector vortex beams propagation, manipulation, and detection in classical and quantum regime (Invited)**
17:45 T. Giordani, *Sapienza Univ. di Roma*
- L-2 Recent advancements in optical wireless communications (Invited)**
18:15 H. Haas, *The Univ. of Strathclyde*
- L-3 High output and high efficiency handy-sized LED-array based optical wireless power transmission system using fresnel lenses**
18:45 M. Zhao and T. Miyamoto, *Tokyo Institute of Technology*

Break (19:00–19:20)

19:20–21:00 Session PO: Poster Session

Chairs: TBD
TBD

(19:20–20:10) Even numbers

(20:10–21:00) Odd numbers

- PO-01 Termination of fiber fuse propagation using optical pulses**
K. Kurokawa and D. Shimokura, *Kitami Institute of Technology*
- PO-02 Fabrication of polarization control devices using metal grating structures**
A. Motogaito, Y. Hayashi, A. Watanabe, and K. Hiramatsu, *Mie Univ.*
- PO-03 Influence of lateral displacement of laguerre-gaussian beams on spiral mode sorting**
S. Kunimatsu, H. Kishikawa, N. Goto, and J. Fujikata, *Tokushima Univ.*
- PO-04 Nb₂O₅-based grating coupler employing multiple Nb₂O₅/SiO₂ layers in integrated probe for cross-sectional velocity distribution measurement**
K. Maru¹, Y. Yamamoto¹, and K. Nakatsuhara², ¹*Kagawa Univ.*, ²*Kanagawa Institute of Technology*
- PO-05 Silk fibroin optical planar waveguides fabricated on acrylic polymer foil**
V. Prajzler¹, K. Min², S. Kim², and P. Nekvindova³, ¹*Czech Technical Univ. in Prague*, ²*Ajou Univ.*, ³*Institute of Chemical Technology*
- PO-06 Femtosecond laser fabrication of metallic nanostructures using polarization control**
M. Shimose, S. Toriyama, K. Hashimoto, V. Mizeikis, and A. Ono, *Shizuoka Univ.*
- PO-07 Research on deep ultraviolet photodetectors based on carbon dots**
Y. Fang, Z. Zhao, Z. Weng, and M. Zhu, *Southeast Univ.*
- PO-08 Surface plasmon propagation of fluorescence from quantum dots through a crystalline silver nanowire**
T. Komatsu, Y. Hayashi, X. Ren, and A. Ono, *Shizuoka Univ.*
- PO-09 LiNbO₃/Si-hybrid slot-waveguide electro-optical modulator designs for 1550 nm**
T. M. Mercier¹, M. D.B. Charlton¹, and I. Tomita², ¹*Univ. of Southampton*, ²*National Institute of Technology, Gifu College*
- PO-10 Liquid crystal clad polymer waveguide based electro-optic attenuator**
R. Panchal and A. Sinha, *Indian Institute of Technology Delhi*
- PO-11 Numerical modelling of initial photoacoustic pressure in colloidal suspensions for photoacoustic imaging**
H. Fujii, T. Aoki, Y. Inoue, I. Terabayashi, K. Kobayashi, and M. Watanabe, *Hokkaido Univ.*
- PO-12 Sensitivity improvement of dynamic displacement measurement system composed of phase-modulated fiber optic interferometer**
M. Fujimori, S. Takemae, and Y. Tanaka, *Tokyo Univ. of Agriculture and Technology*
- PO-13 Switchable mode converter for four-mode MDM system assisted by passive mode controlling device designed by wavefront matching method**
Y. Sawada, T. Fujisawa, T. Sato, and K. Saitoh, *Hokkaido Univ.*
- PO-14 Simulation on non-axisymmetric ring resonator with nano-antenna for heat-assisted magnetic recording**
J. Chen¹, R. Katayama¹, and S. Sugiura², ¹*Fukuoka Institute of Technology*, ²*InnovaStella, Inc.*
- PO-15 Imaging spectral detection of single gold nanorod based on polarization-controlled excitation**
L. Shen, Y.-C. Hou, and W.-S. Tsai, *National Chung Hsing Univ.*
- PO-16 Experimental demonstration of full-range high-speed high-reliability wavelength switching at DFB laser with current temperature cooperative control**
S. Ye, M. Che, and K. Kato, *Kyushu Univ.*

- PO-17 Fabrication of vertical-taper structures for silicon photonic devices by local-thickness-thinning process**
S. Abe^{1,2}, H. Hara², S. Masuda², and H. Yamada¹, ¹*Tohoku Univ.*, ²*Advantest Laboratories Ltd.*
- PO-18 All-dielectric perfect absorber of quadrupole modes by using cross-shaped Mie resonators**
R. Xu and J. Takahara, *Osaka Univ.*
- PO-19 A cost-effective mode converter based on staircase structure for thin-film lithium niobate devices**
M. Wang and K. Chen, *Univ. of Electronic Science and Technology of China*
- PO-20 Safety system of optical wireless power transmission by suppressing light beam irradiation to human using depth camera**
X. Ma and T. Miyamoto, *Tokyo Institute of Technology*
- PO-21 Imprinted microoptics for grey scale pattern projectors**
T. Scharf, W. Noell, G. Quaranta, M. Pfeiffer, and R. Völkel, *Suss Microoptics SA*
- PO-22 Multipoint sensing system with a fine refractive index resolution by combining multimode-interference-sensors and wavelength selection configuration**
H. Fukano and T. Mukai, *Okayama Univ.*
- PO-23 Holographic gratings formed by wavelength multiplexing in liquid crystal composites**
A. Ogiwara¹ and M. Watanabe², ¹*Kobe City College of Technology*, ²*Okayama Univ.*
- PO-24 Formation of temperature dependent polymer dispersed liquid crystal using laser speckle pattern irradiation**
A. Ogiwara¹ and H. Kakiuchida², ¹*Kobe City College of Technology*, ²*AIST*
- PO-25 Acceptable angular range of beam pointing in free-space optical communications**
T. Nakayama¹, Y. Takayama¹, C. Fujikawa¹, and K. Kodate², ¹*Tokai Univ.*, ²*Japan Women's Univ.*
- PO-26 Highly sensitive and stable temperature sensing method using amplified-spontaneous-emission feedback circuit**
H. Masuda and B. Biswas, *Shimane Univ.*
- PO-27 Correlated photon pairs generation from a silicon micro-ring resonator with a gain-switched laser diode**
F. Yang, M. Fukunaga, K. Edamatsu, H. Yokoyama, H. Yamada, and N. Matsuda, *Tohoku Univ.*
- PO-28 Compact plasmonic enhanced MoTe₂ photodetector based on engineering gain-bandwidth-product scaling laws**
H. Wang¹ and V. J. Sorger^{1,2}, ¹*The George Washington Univ.*, ²*Optelligence LLC*
- PO-29 Formation of periodic nanostructures induced by circularly-polarized femtosecond laser**
R. Miyagawa, H. Matsuura, A. Nakamura, and O. Eryu, *Nagoya Institute of Technology*
- PO-30 Orbital angular momentum mode recognition based on sparse coding**
K. Suzuki, H. Kishikawa, N. Goto, and J. Fujikata, *Tokushima Univ.*
- PO-31 Highly accurate, reliable and non-contaminating two-dimensional material transfer system**
C. S. Patil¹, C. Dong¹, H. Dalir^{1,2}, and V. J. Sorger^{1,2}, ¹*George Washington Univ.*, ²*Optelligence LLC*
- PO-32 Optimizing optical convolution with nonlinear absorption**
J. K. George, M. Gorgone-Solyanik, and V. J. Sorger, *George Washington Univ.*
- PO-33 Optical feedback tolerance of transverse coupled cavity VCSELs**
H. R. Ibrahim^{1,2}, A. M. A. Hassan^{1,3}, M. Ahmed², and F. Koyama¹, ¹*Tokyo Institute of Technology*, ²*Minia Univ.*, ³*Al Azhar Univ., Assiute*
- PO-34 Thermal crosstalk evaluation of 1.1 μm-band vertical cavity surface emitting laser array for multi-core fiber transmission**
L. Dong¹, X. Gu^{1,2}, and F. Koyama¹, ¹*Tokyo Institute of Technology*, ²*Ambition Photonics Inc.*
- PO-35 An apodization method for grating coupler in waveguide cavity**
A. Watanabe¹, K. Ozawa¹, R. Ueda¹, J. Inoue¹, K. Kintaka², and S. Ura¹, ¹*Kyoto Institute of Technology*, ²*AIST*

- PO-36 Disk-hole array structure for hot-electron emission enhancement**
H. Morisawa, A. Ono, W. Inami, and Y. Kawata, *Shizuoka Univ.*
- PO-37 Light-induced self-written waveguide using soft material**
Z. Ni, H. Terasawa, and O. Sugihara, *Utsunomiya Univ.*
- PO-38 Tunable mode converter based on Mach-Zehnder interferometer**
D. Minemura, S. Liu, Y. Shoji, and T. Mizumoto, *Tokyo Institute of Technology*
- PO-39 Mode decomposition from near-field intensity pattern by a correlation discriminant and stochastic parallel gradient descent combined algorithm**
W. Jiang and K. S. Chiang, *City Univ. of Hong Kong*
- PO-40 4-Stage Mach-Zehnder interferometer optical switch with phase generating couplers**
M. Kawasaki, T. Watanabe, T. Nagayama, and S. Fukushima, *Kagoshima Univ.*
- PO-41 Demonstration of equal input (intensity and phase) MMI like power coupler by using nano-pixel structure**
K. Shoda, X. He, K. Kozu, H. Jiang, and K. Hamamoto, *Kyushu Univ.*
- PO-42 Compact high-extinction-ratio multimode interference electroabsorption modulator**
Y. Kanesaka and T. Arakawa, *Yokohama National Univ.*
- PO-43 Stability of spatiotemporal soliton in multimode fiber with optically induced temporal potential**
V. Mishra and M. S. Kang, *KAIST*
- PO-44 221K local heating in a Co loaded Si plasmonic waveguide**
N. Ota, T. Miyauchi, and H. Shimizu, *Tokyo Univ. of Agriculture and Technology*
- PO-45 Modeling of surface grating-loaded VCSEL with slowing light**
C. Ge and F. Koyama, *Tokyo Institute of Technology*
- PO-46 36.6 dB/mm extinction ratio in TE mode semiconductor optical isolators with Co**
R. Oshikiri, Y. Kobayashi, S. Nishiyama, and H. Shimizu, *Tokyo Univ. of Agriculture and Technology*
- PO-47 Emission enhancement of fluorescence using electron beam excited localized plasmons**
Y. Matsui, W. Inami, and Y. Kawata, *Shizuoka Univ.*
- PO-48 Development of luminescent thin films based on superlattice structures of Al₂O₃ and ZnO by atomic layer deposition**
S. Kobayashi, A. Nakamura, W. Inami, and Y. Kawata, *Shizuoka Univ.*
- PO-49 Enhancing the figure of merit in surface plasmon resonance sensors with a wedge-shape Au thin film**
T. Ogura, T. Maeda, S. Suzuki, and H. Shimizu, *Tokyo Univ. of Agriculture and Technology*
- PO-50 Evaluation of modal power distribution of graded-index plastic optical fiber connections**
S. Ueda and O. Sugihara, *Utsunomiya Univ.*
- PO-51 Optical reflection and fluorescence study for non-destructive estimation of crude protein content in leaves of grass**
M. Sakakura, N. Kita, G. Ishigaki, and M. Arai, *Univ. of Miyazaki*
- PO-52 Zn doping effect on surface morphology of metamorphic InAs on GaAs grown by MOVPE**
S. Nakagawa, Y. Imamura, Y. Hirata, K. Maeda, and M. Arai, *Univ. of Miyazaki*
- PO-53 Design of high-order series-coupled microring resonator wavelength filter with differential evolution method**
Y. Udagawa and T. Arakawa, *Yokohama National Univ.*
- PO-54 Footprint reduction of arrayed waveguided grating by waveguide width variation**
H. Zhou, S. Heinsalu, Y. Matsushima, H. Ishikawa, and K. Utaka, *Waseda Univ.*
- PO-55 Observation of living cells using surface plasmon resonance in the deep ultraviolet region**
K. Kobayashi, W. Inami, and Y. Kawata, *Shizuoka Univ.*
- PO-56 Study on the single-mode condition for lithium niobate-on-insulator (LNOI) rib waveguides**
X. Yu, M. Wang, and K. Chen, *Univ. of Electronic Science and Technology of China*

- PO-57 Nb₂O₅ horizontal slot waveguides fabricated by an improved etching process**
T. Hinata, Y. Hayama, N. Sawayanagi, T. Touma, K. Nakatsuhara, M. Takeda, and T. Nishizawa, *Kanagawa Institute of Technology*
- PO-58 Inflection in hysteresis and haze of PDLC devices by ferroelectric nanoparticle**
A. Kumari and A. Sinha, *Indian Institute of Technology Delhi*
- PO-59 Analysis and experiments of surface-plasmon tip-tapered fiber sensor with gold nanoparticles**
M. Yamamoto, T. Matsumura, Y. Matsushima, H. Ishikawa, and K. Utaka, *Waseda Univ.*
- PO-60 Proposal and analysis of Si/CaF₂ distributed feedback waveguide for near- and mid- infrared applications**
G. Tei, K. Kitamura, L. Liu, Y. Koyanagi, D. Sugawara, and M. Watanabe, *Tokyo Institute of Technology*

13:15–14:15 Session M: Optical Processing (2)

Chairs: TBD
TBD

M-1 Optical excitation and detection of picometer-order longitudinal motion in sub- μm

13:15 **plasmomechanical resonator**

S. Lee and M.-K. Seo, *Korea Advanced Institute of Science and Technology*

M-2 Plasmonic color modulation of crystalline Ag nanocube monolayer by dynamic control of stretchable substrate

13:30

A. Mizuno^{1,2} and A. Ono¹, ¹*Shizuoka Univ.* ²*JSPS*

M-3 Symmetric two-mode waveguide directional coupler on thin-film lithium niobate for electro-optic mode switching

13:45

M. Zhang¹, K. Chen¹, M. Wang¹, H. Yao¹, and K. S. Chiang², ¹*Univ. of Electronic Science and Technology of China*, ²*City Univ. of Hong Kong*

M-4 Color-selective photodetector based on hexagonal-lattice silver nanodisk array

14:00

Z. Wu, Y. Zhai, and Q. Wang, *Southeast Univ.*

Break (14:15–14:30)

14:30–15:30 Session N: Silicon Photonics

Chairs: TBD
TBD

N-1 Ultracompact autocorrelator with pulse-width-range switch function integrated on a silicon photonic chip

14:30

K. Kondo and H. Oshima, *Utsunomiya Univ.*

N-2 High-efficiency focusing double-etched SiN grating coupler for trapped ion qubit manipulation

14:45

M. Shirao¹, D. Klawson¹, S. Mouradian², and M. C. Wu¹, ¹*Univ. of California*, ²*Univ. of California, Berkeley*

N-3 High extinction ratio Si optical modulator loaded with integrated polarizer

15:00

H. Kojima¹, J. Fujikata², and T. Kita¹, ¹*Waseda Univ.*, ²*Tokushima Univ.*

N-4 A unique combination of microlens and pillar on fiber facet using UV-curable resin for high optical coupling to silicon photonics

15:15

Y. Kamiura, T. Kurisawa, C. Fujikawa, and O. Mikami, *Tokai Univ.*

Break (15:30–15:45)

15:45–16:30 Session PD: Postdeadline Session

Chairs: TBD
TBD

16:30–16:45 Award Ceremony

16:45–17:00 Closing Remarks

Program Co-chairs:

T. Watanabe, *Kagoshima Univ.*

T. Sato, *NTT Corp.*