



10th IEEE CPMT Symposium Japan (ICSJ2021)

(Formerly VLSI Packaging Workshop in Japan)



November 10-12, 2021

A Hybrid Event of On-site and Virtual Meetings

On-site Venue: Kyoto Univ. Clock Tower Centennial Hall, Kyoto, Japan



Advanced Program

Last update: October 29, 2021

November 10, 2021 (Wednesday)

| | Hall I&II Remote discussion via interactive voice | Room III Remote discussion via chat | Room IV Remote discussion via chat |
|-------------|---|---|---|
| 9:00 | | Registration | |
| 10:10 | | Opening Remark (General Chair) | |
| 10:25 | | Award Ceremony | |
| 10:45-11:30 | Hall I & II Chairperson Eiji Higurashi (AIST) & Shigenori Aoki (LINTEC Corporation) IEEE EPS Special Speech I | | |
| 10:45 | IEEE EPS Special Speech I: Package Design Challenges for 5G and B5G Sam Karikalán (Broadcom Inc.) | | |
| 11:30-12:15 | Hall I & II Chairperson Eiji Higurashi (AIST) & Shigenori Aoki (LINTEC Corporation) 5G & Beyond 5G Special Speech I | | |
| 11:30 | 5G & Beyond 5G Special Speech I: AiP design for 5G: Evolution, Recent Results, and Impact on System-level Applications Alberto Valdes-Garcia (IBM Research) | | |
| 12:15 | Lunch (free time) | | |
| 13:15-14:45 | Session 1: Advanced Packaging/Emerging Technologies Chairperson Kenji Takahashi (AIST) Kiyokazu Yasuda (Osaka University) | Session 2: Optical technology for High density, Mobile Fronthaul & Access Chairperson Hidetoshi Numata (IBM Research - Tokyo) Hideyuki Nawata (Nissan Chemical Corporation) | Session 3: EMC ESD Chairperson Kazuyuki Nakagawa (Renesas Electronics Corp.) Yasuhiro Ikeda (Hitachi, Ltd.) |
| 13:15 | (Invited) 3D Interconnect Technology for Superconducting Quantum Devices Katsuya Kikuchi (AIST) | 25 Gbit/s LiFi with Dual Wavelength Emission, Eye-safe, Laser Based White Light Collimated and Fiber Delivered Light Sources James Raring ¹ , Changmin Lee ¹ , Mohamed Sufyan Islim ² , Sovan Das ² , Adrian Sparks ² , Stefan Videv ² , Binith Shah ¹ , Paul Rudy ¹ , Harald Haas ² (1)KYOCERA SLD Laser, (2)University of Strathclyde | 57 Estimation of Electric Field Radiated from Wire Harness based on Approximation of Common-Mode Current Distribution using Asymmetric Dipole Antenna Hiroki Yamada, Jianqing Wang (Nagoya Institute of Technology) |
| 13:40 | (Invited) Millimeter-Wave Antenna-in-Package Design Validation Solution in Wireless Communication Applications Chen-Chao Wang (ASE Group) | A High Capacity and Cost-Effective OFDM EML TO-CAN for RoF/IFoF transmission systems in Beyond-5G Mobile Fronthaul Hayato Sano, Ryota Fujihara, Fumio Shoda, Seiki Nakamura, Masashi Binkai, Nobuo Ohata (Mitsubishi Electric Corporation) | 62 Transmission Line Pulse Method with Arbitrary Characteristic Impedance for Immunity Evaluation of ESD Protection Device Kyosuke Tanaka, Tohlu Matsushima, Yuki Fukumoto (Kyusyu Institute of Technology) |
| 14:05 | Development of High-Density Organic Hybrid Substrate Using an Interconnect-Layer for Heterogeneous Integration Chia-Yu Peng, John H Lau, Cheng-Ta Ko, Paul Lee, Eagle Lin, Henry Kai-Ming Yang, Puru Bruce Lin, Tim Xia, Leo Chang, Curry Lin, Tzu Nien Lee, Jason Wong, Mike Ma, Tzzy-Jang Tseng (Unimicron) | 4 Densely Integrated 1060nm 2D VCSEL Array for Space-division Multiplexing Toward Co-packaging Optics Transceivers Liang Dong ¹ , Xiaodong Gu ² , Mikito Yoshiki ¹ , Fumio Koyama ¹ (1)Tokyo Institute of Technology, (2)Ambition Photonics Inc.) | 34 |
| 14:30 | Interview with the Authors (Discussion after the session) + Sponsor's Exhibition | Interview with the Authors (Discussion after the session) | Interview with the Authors (Discussion after the session) |
| 14:45 | Coffee break + Sponsor's Exhibition | | |
| 14:55-16:25 | Session 4: Photonics Chairperson Shigenori Aoki (LINTEC Corporation) Junichi Inoue (Kyoto Institute of Technology) | Session 5: Assembly and Bonding Techniques Chairperson Kei Murayama (Shinko Electric Industries Co., Ltd.) Satomi Kawamoto (Namics Corporation) | |
| 14:55 | (Invited) Automated Photonics Testing at Wafer Level Ignazio Piacentini (ficonTEC Service GmbH) | LGA pre Bump Process Elimination Jui Ang Tan ¹ , Chong Seng Foo ¹ , Wen Jie Chen ¹ , Szu Han Tan ¹ , Shu Chao Sun ² , Ailsa Liang ² , Dennis Lidan Lee ² (1)Intel Products Malaysia, (2)Intel China Ltd.) | 31 |
| 15:20 | (Invited) Photonics Packaging Solutions for Silicon-photonics based Short-reach Optical Interconnects Geert Van Steenberge (Ghent University) | (Invited) Technologies for Power Device Packaging by using Solid Liquid Interdiffusion Bonding - SLID Mario Baum ¹ , Joerg Froemel ² , Christian Hofmann ¹ , Maik Wiemer ¹ , Karla Hiller ¹ , Harald Kuhn ¹ (1)Fraunhofer Institute for Electronic Nanosystems ENAS, (2) Tohoku University) | I-14 |
| 15:45 | (Invited) Multi-Gigabit/s LiFi Networking for 6G Harald Haas (University of Strathclyde) | Silver Sintering Technology based on Induction Heating for Chip Level Bonding Christian Hofmann ¹ , Mario Baum ¹ , Maulik Satwara ¹ , Martin Kroll ² , Sushant Panhale ² , Patrick Rochala ² , Soumya-Deep Paul ¹ , Kiyoshi Oi ³ , Kei Murayama ³ , Maik Wiemer ¹ , Harald Kuhn ¹ (1)Fraunhofer Institute for Electronic Nano Systems ENAS, (2)Chemnitz University of Technology, (3)SHINKO Electric Industries Co., Ltd.) | 43 |
| 16:10 | Interview with the Authors (Discussion after the session) + Sponsor's Exhibition | Interview with the Authors (Discussion after the session) | |
| 16:25 | Coffee break + Sponsor's Exhibition | | |
| 16:35-18:25 | Hall I & II Chairperson Hideyuki Nasu (Furukawa Electric Co., Ltd) & Takaaki Ishigure (Keio University) Plenary Speech I & II | | |
| 16:35 | Plenary Speech I: Photonic Integration for Quantum communication, Wireline Communication, and 5/6G Martin Schell (Fraunhofer Heinrich-Hertz-Institute) | | |
| 17:30 | Plenary Speech II: Optical Systems and Technologies for Future Mobile Networks Roberto Sabella (Ericsson) | | |
| 18:25 | Welcome Reception | | |
| 20:25 | Close | | |

November 11, 2021 (Thursday)

| | Hall I&II | | Room III | | Room IV | |
|-------------|---|--|---|--|--|--|
| | Remote discussion via interactive voice | | Remote discussion via chat | | Remote discussion via chat | |
| | Registration | | | | | |
| 9:00 | Hall I & II Chairperson Kazuyuki Nakagawa (Renesas Electronics Corporation) & Yutaka Uematsu (Hitachi, Ltd.) 5G & Beyond 5G Special Speech II | | | | | |
| 9:15-10:00 | 5G & Beyond 5G Special Speech II: From Cooperative Driving to Collaborative Mobility - Reducing VRU and Unconnected Vehicle Crashes Robert Gee (Continental) | | | | | |
| 9:15 | S-03 | | | | | |
| 10:00-10:45 | Hall I & II Chairperson Kazuyuki Nakagawa (Renesas Electronics Corporation) & Yutaka Uematsu (Hitachi, Ltd.) 5G & Beyond 5G Special Speech III | | | | | |
| 10:00 | 5G & Beyond 5G Special Speech III: 5G Evolution and 6G Takehiro Nakamura (NTT DOCOMO, INC.) | | | | | |
| 10:00 | S-05 | | | | | |
| 10:45 | Coffee break + Sponsor's Exhibition | | | | | |
| 11:00-12:30 | Session 6: Automotive Sensor Systems Chairperson Yutaka Uematsu (Hitachi, Ltd.) Hajime Kimura (Nissan Motor Co., Ltd.) | | Session 7: Machine Learning/ Wafer Scale Packaging Chairperson Taiji Sakai (Fujitsu Interconnect Technologies Ltd.) Kiyokazu Yasuda (Osaka University) | | Session 8: Material Analysis Techniques Chairperson Shinya Takyu (LINTEC Corporation) Kei Murayama (Shinko Electric Industries Co., Ltd.) | |
| 11:00 | 11:00 (Invited) LiDAR for Automated Driving Era Toshio Ito (Shibaura Institute of Technology) | | I-09 Novel Approach for Machine Learning with Extra Low Energy and Very Light Hardware Kanji Otsuka, Koichi Sato, Yutaka Akiyama, Kaoru Hashimoto, Koshi Sato (Meisei University) | | 7 Electrochemical Analysis of Surface Oxide Layers on Copper Surface in Microelectronics Chi-Hsuan LIN ¹ , Wei-Chen Huang ¹ , Yu-Cheng Ke ¹ , Jenn-Ming Song ¹ , Kiyokazu Yasuda ² (1)National Chung Hsing University 2)Osaka University) | |
| 11:25 | 11:25 Feature Detection Based on Virtual Gradient Using Sensor Fusion for Low-resolution 3D LiDAR Shuncong Shen, Mai Saito, Toshio Ito (Shibaura Institute of Technology) | | 44 Precise Thixotropy Control of Bump Support Film for WLCSF Keisuke Shinomiya, Naoya Saiki, Yosuke Sato, Tomotaka Morishita, Reina Kainuma (LINTEC Corporation) | | 16 Measurement of Poisson's Ratio of Resin Materials Hiroshi Yamaguchi, Toshiaki Enomoto, Takayuki Fujita (Namics Corporation) | |
| 11:50 | 11:50 Method of Diagnosing Abnormalities in Bidirectional Communication Channel by Using Adaptive Decision Feedback Equalizer Soshi Shimomura, Yasuhiro Ikeda, Yutaka Uematsu (Hitachi Ltd.) | | 14 Evaluation of Wafer Bond Strength under Vacuum Kai Takeuchi, Tadatomo Suga (Meisei University) | | 20 | |
| 12:15 | 12:15 Interview with the Authors (Discussion after the session) + Sponsor's Exhibition | | 12:15 Interview with the Authors (Discussion after the session) | | 12:15 Interview with the Authors (Discussion after the session) | |
| 12:30 | Platinum Sponsors' Seminar (with a light meal) @Hall I & II | | | | | |
| 13:30-15:00 | Session 9: Bioelectronics-1 Chairperson Beomjoon Kim (The University of Tokyo) Kiyokazu Yasuda (Osaka University) | | Session 10: Automotive SI/PI/EMC Chairperson Toshio Ito (Shibaura Institute of Technology) Yasuhiro Ikeda (Hitachi, Ltd.) | | Session 11: Dielectric Materials for 5G and 3D Package Chairperson Shinya Takyu (LINTEC Corporation) Eiji Higurashi (AIST) | |
| 13:30 | 13:30 (Invited) Multi-modal Thin-Film-Transistor Bio-sensing Platforms for Bio-medical Investigations Agnes Tixier-Mita (University of Tokyo) | | I-01 Practical Simulation Methods Considering Characteristic Variations of Wires for CISPR 25 Conducted Emission Hidetake Sugo ¹ , Yuta Sarai ¹ , Bibhu P. Nayak ² , Harikiran Munigant ² , Dipanjan Gope ^{2, 3} , Takahiro Tsuda ¹ (1)DENSO CORPORATION, 2)Simyog Technology Pvt. Ltd., 3)Indian Institute of Science) | | 8 Development of Newly Low-dielectric Organic Substrate Material for Millimeter Radar Chie Chikara, Satoshi Yoshiura, Satoshi Kajita, Koji Fujikawa, Taishi Imazato, Tadashi Nagasawa (KYOCERA Corporation) | |
| 13:55 | 13:55 (Invited) Biologically Inspired Ultrathin Array Cameras Ki-Hun Jeong (KAIST) | | I-02 Abnormal-state-discrimination Method for In-vehicle Communication Channel with Power over Coax Circuit Yutaka Uematsu ¹ , Soshi Shimomura ¹ , Yasuhiro Ikeda ¹ , Hidetatsu Yamamoto ² , Hideyuki Sakamoto ¹ (1)Hitachi Ltd., 2)Hitachi Astemo, Ltd.) | | 15 Study of Atomic Layer Deposition of Hafnium Oxide as an Insulation Layer on Cu for Potential Flip Chip Integration Alaric Yohei Kawai, Shingo Katata, Shuichi Shoji, Jun Mizuno (Waseda University) | |
| 14:20 | 14:20 Functional Interfaces for an Openable Artificial Intestinal Tract Device as an Organ-on-a-chip Shingo Ishibashi, Yuki Inoue, Shiho Shimizu, Satoshi Konishi (Ritsumeikan University) | | 9 Improve Inductive Contact Failure Loss of IGBT Module Test Keita Gunji (Nidec-Read Corporation) | | 25 Characterization of Low Loss Dielectric Materials for 5G Applications Tzu Nien Lee, John Lau, Cheng-Ta Ko, Tim Xia, Eagle Lin, Henry Yang, Bruce Lin, Tony Peng, Leo Chang, Jia Shiang Chen, Yi-Hsiu Fang, Li-Yueh Liao, Edward Charn, Jason Wang, Tzzy-Jang Tseng (Unimicron) | |
| 14:45 | 14:45 Interview with the Authors (Discussion after the session) + Sponsor's Exhibition | | 14:45 Interview with the Authors (Discussion after the session) | | 14:45 Interview with the Authors (Discussion after the session) | |
| 15:00 | Coffee break + Sponsor's Exhibition | | | | | |
| 15:10-16:05 | Hall I & II Chairperson Beomjoon Kim (The University of Tokyo) & Shinya Takyu (LINTEC Corporation) Plenary Speech III | | | | | |
| 15:10 | Plenary Speech III: Edge Devices Re-imagined with Powerful AI Devices: Challenges & Opportunities Avi Baum (Hailo) | | | | | |
| 15:10 | P-04 | | | | | |
| 16:05-16:50 | Hall I & II Chairperson Beomjoon Kim (The University of Tokyo) & Shinya Takyu (LINTEC Corporation) IEEE EPS Special Speech II | | | | | |
| 16:05 | IEEE EPS Special Speech II: Modelling & Simulation: An underpinning technology for Heterogeneous Integration Chris Bailey (University of Greenwich) | | | | | |
| 16:05 | S-01 | | | | | |
| 16:50 | Coffee break + Sponsor's Exhibition | | | | | |
| 17:00-18:30 | Early Career Researcher's (ECR) Session - On-demand viewing available On-site/ on-demand poster presentation | | | | | |
| 17:00 | Tapered Pillar on Single-mode Fiber Facet Fabricated using UV Curable Resin for High Efficiency Coupling to Silicon Photonics Chip Taiga Kurisawa, Yoshiki Kamiura, Chiemi Fujikawa, Osamu Mikami (Tokai University) | | 11 Demonstration of Flexible Polyimide Fibers for Dense Optical Packaging Yuki Okada ¹ , Taro Itatan ² , Yoshinobu Okano ¹ , Takeru Amano ² , Satoshi Suda ² (1)Tokyo City University, 2)AIST) | | 18 Mode-confined ultra thin silicon/polymer hybrid electro-optic modulator Jiawei Mao, Hiromu Sato, Alisa Bannaron, Shiyoshi Yokoyama (Kyushu University) | |
| 17:00 | Application of Polymer Microlens with Pillar for High Efficiency Coupling between Single Mode Fiber and SiPh Chip Yoshiki Kamiura, Taiga Kurisawa, Chiemi Fujikawa, Osamu Mikami (Tokai University) | | 12 Narrow-bandpass Filter using Orthogonally Propagating Guided-mode Resonance with Doubly Periodic Grating Zhiyu Yang ¹ , Ryo Asai ¹ , Junichi Inoue ¹ , Kenji Kintaka ² , Shogo Ura ¹ (1)Kyoto Institute of Technology, 2)AIST) | | 23 Interpolation Method for Sparse Point Cloud at Long Distance Using Sensor Fusion with LiDAR and Camera Mai Saito, Shuncong Shen, Toshio Ito (Shibaura Institute of Technology) | |
| 17:00 | Connection Characteristics of Hollow-Core Fiber Connector Toshiki Maejima ¹ , Hideki Kamitsuna ² , Ryuta Matsuda ¹ , Ryo Nagase ¹ (1)Chiba Institute of Technology, 2)YOKOWO CO., LTD.) | | 13 | | | |
| 17:00 | On-demand poster presentation only | | | | | |
| 17:00 | 3D Metal Printed Deformed Elliptical Cavity Bandpass Filter with an Additional Plate Povilas Vaitukaitis, Kenneth Nai, Jiayu Rao, Jiasheng Hong (Heriot-Watt University) | | 35 3D Metal Printed Corrugated Waveguide Antenna Array With High Gain and Enhanced Bandwidth Jiayu Rao ¹ , Kenneth Nai ² , Povilas Vaitukaitis ¹ , Jiasheng Hong ¹ (1)Heriot-Watt University, 2)Renishaw PLC) | | 32 Modification of Polyurethane-based Binder for Stabilizing Electrical Conductivity of Silver-filled Stretchable Printed Wires During Cyclic Tensions Kaito Oodzutsumi, Hikaru Watanabe, Rena Ohshima, Masahiro Inoue (Gunma University) | |
| 17:00 | Development of the h-BN Manufacturing Process for 3D-LSI Masashi Yokoi, Satoko Shinkai, Satoshi Matsumoto (Kyushu Institute of Technology) | | 17 Modeling of Polarization Rotation Based All Optical Logic Switch Using Ring Resonator Gaurav Kumar Bhatti, Ramesh Kumar Sonkar (Indian Institute of Technology) | | 47 Electrical Conductivity of Air-curable Electrically Conductive Adhesive Containing Copper Fillers Using Mixed Surfactants Yukari Matsunami, Daisuke Otajima, Kenta Kawarai, Yuki Saito, Masahiro Inoue (Gunma University) | |
| 18:30 | Close | | | | | |

November 12, 2021 (Friday)

| Hall I&II | | Room III | | Room IV | |
|---|---|--|---|--|------|
| Remote discussion via interactive voice | | Remote discussion via chat | | Remote discussion via chat | |
| 9:00 | | Registration | | | |
| 9:05 | | ECR Award Ceremony | | | |
| 9:15-10:10 | Hall I & II Chair person Shinya Takyu (LINTEC Corporation) & Taiji Sakai (Fujitsu Interconnect Technologies Ltd.) Plenary Speech IV | | | | |
| 9:15 | Plenary Speech IV: Chiplet Design and Heterogeneous Integration Packaging John H. Lau (Unimicron) | | | | P-02 |
| 10:10 | Coffee break + Sponsor's Exhibition | | | | |
| 10:25-12:20 | Session 12: Wide-gap Semiconductor Power Devices and their Heat Dissipation Methods Chairperson Masafumi Yokoyama (SCIOCS) Kentaro Kaneko (Kyoto Univ.) | Session 13: Optical Interconnect in Data Center Chairperson Shigenori Aoki (LINTEC Corporation) Hideyuki Nasu (Furukawa Electric Co., Ltd) | | | |
| 10:25 | (Invited) Development of High Thermal Conductive Ceramics and High Thermal Conductive Resins Using Fibrous Aluminum Nitride Filler Toru Ujihara (Nagoya University) | I-08 | Optical Interconnect Ecosystems and Challenges in Co-Packaged Optics Tiger Ninomiya ¹ , Bernard HL Lee ² , Stan Lee ³ , Gavin Hsu ³ , Richard Pitwon ⁴ (1)Senko Advanced Components, Inc., 2)Senko Advanced Components (HK), Ltd., 3)Senko Advanced Components (Shenzhen), Ltd., 4)Resolute Photonics, Ltd.) | 2 | |
| 10:50 | Evaluation of Half-Bridge Power Module with POL-kW Shingo Hayashibe ¹ , Kei Murayama ¹ , Koji Bando ¹ , Hitoshi Ito ¹ , Hirotosugu Suzuki ² , Takanori Sugita ² (1)SHINKO ELECTRIC INDUSTRIES CO., LTD., 2)HeadSpring Inc.) | | 38 | System Transmission over Multicore Fiber for Datacom Optical Interconnect Applications Yi Sun, Robert Lingle Jr., Bob Holland, Roman Shubochkin, Kumar Bansal, David DiGiovanni (OFS Fitel LLC) | 36 |
| 11:15 | Study on Deep Traps in α -Ga ₂ O ₃ on m-plane Sapphire by Photocapacitance Method and Deep Level Optical Spectroscopy Hitoshi Takane ¹ , Kentaro Kaneko ¹ , Takashi Shinohe ² , Shizuo Fujita ¹ (1)Kyoto University, 2)FLOSFIA INC.) | | 6 | Reliability and Bend Loss of Optical Fibers in Tight Bend Applications Scott Bickham, G. Scott Glaesemann, Yin Shu, Garth Scannell (Corning Research and Development Corporation) | 26 |
| 11:40 | (Invited) Creating Low Thermal Resistance Interfaces In Wide Bandgap Semiconductors Through Bonding Samuel Graham (Georgia Institute of Technology (Currently University of Maryland)) | I-12 | High-efficiency Optical Coupling between VCSEL and 90-degree-bent Graded-Index Core Polymer Waveguide with Numerical Aperture Optimization Naohiro Kohmu ¹ , Maho Ishii ² , Takaaki Ishigure ² (1)Hitachi, Ltd., 2)Keio University) | 24 | |
| 12:05 | Interview with the Authors (Discussion after the session) + Sponsor's Exhibition | | Interview with the Authors (Discussion after the session) | | |
| 12:20 | Lunch (free time) | | | | |
| 13:20-14:50 | Session 14: New Process and Materials Chairperson Kei Murayama (Shinko Electric Industries Co., Ltd.) Shinya Takyu (LINTEC Corporation) | Session 15: Bioelectronics-2 Chairperson Shigenori Aoki (LINTEC Corporation) Beomjoon Kim (The University of Tokyo) | | | |
| 13:20 | (Invited) Advanced Packaging Materials for 5G Applications Dongshun Bai (Brewer Science, Inc.) | I-07 | Gold Coated Optical Microneedles Lens Array for Photothermal Therapy Kotaro Shobayashi, Xiaobin Wu, Jongho Park, Beomjoon Kim (The University of Tokyo) | 28 | |
| 13:45 | (Invited) LCP Technology in 5G era- MetroCirc Takashi Noma (Murata Manufacturing Co., Ltd.) | I-06 | A Rapid COVID-19 Diagnostic Device Integrating Porous Microneedles and the Paper-based Immunoassay Biosensor Lilei Bao, Jongho Park, Soonjin Shim, Misako Yoneda, Chieko Kai, Beomjoon Kim (The University of Tokyo) | 30 | |
| 14:10 | Control of Electrical Behavior of Stretchable Films Printed Using Electrically Conductive Pastes During Cyclic Tensions Masahiro Inoue, Hikaru Watanabe, Kaito Oodzutsumi (Gunma University) | | 60 | | |
| 14:35 | Interview with the Authors (Discussion after the session) + Sponsor's Exhibition | | Interview with the Authors (Discussion after the session) | | |
| 14:50 | Coffee break + Sponsor's Exhibition | | | | |
| 15:00-16:55 | Session 16: Signal Integrity Chairperson Kazuyuki Nakagawa (Renesas Electronics Corp.) Yasuhiro Ikeda (Hitachi, Ltd.) | Session 17: Novel Polymer Technology for Advanced Optical Components Chairperson Takaaki Ishigure (Keio University) Hideyuki Nawata (Nissan Chemical Corporation) | | | |
| 15:00 | (Invited) Improvements in Measurement Accuracy of On-wafer Measurements from Millimeter-wave to Terahertz Frequencies Ryo Sakamaki (AIST) | I-03 | Design and Fabrication of Y-branched Polymer Waveguide based Optical Coupler Ryosuke Hatai, Hiroki Hama, Takaaki Ishigure (Keio University) | 19 | |
| 15:25 | Effect of Surface Treatment of Transmission Line on Frequency Characteristics Junpei Miike, Akira Kon, Makoto Miyoshi, Takatoshi Yagisawa (Fujitsu Optical Components Limited) | | 29 | Development of 3-Dimensional Single-mode Core Over-Crossing Polymer Optical Waveguides Using the Mosquito Method Md Omar Faruk Rasel ¹ , Takaaki Ishigure ² (1)Khulna University, 2)Keio University) | 21 |
| 15:50 | The Electrical Analysis on Ultra High Density IO Fan-Out Design Po-I Wu, Chen-Chao Wang, Chih-Yi Huang, Hung-Chun Kuo, Ming-Fong Jhong (Advanced Semiconductor Engineering, Inc.) | | 33 | Fabrication of the Electro-optic Polymer Modulator for O-band Intra-datacenter Communications Alisa Bannaron, Hiromu Sato, Shiyoshi Yokoyama (Kyushu University) | 37 |
| 16:15 | Noise Reduction Termination for RFI Induced Channel Resonance using Common-mode Choke and Differential Signal Balancer Masaaki Kameya, Eishi Gofuku, Kazuyuki Nakamura (Kyushu Institute of Technology) | | 50 | O-band Silicon-polymer Hybrid EO Modulator Hiromu Sato, Alisa Bannaron, Shiyoshi Yokoyama (Kyushu University) | 40 |
| 16:40 | Interview with the Authors (Discussion after the session) + Sponsor's Exhibition | | Interview with the Authors (Discussion after the session) | | |
| 16:55 | Close | | | | |