List of Other Research Papers Published Overseas

(From January 2023 to April 2024)

[[Hikari Kyokai] International Conference Bulletin] 2023.1, Japan
ECOC2023 Short Report [Optical Fiber]
Takuya Oda
Fujikura

["Wisdom of LC and LC/MS," the information magazine of LC panel, No.7] 2023.1, Japan
Utilization of Liquid Chromatography in Fujikura
Shinya Ichikawa
Fujikura

[IEEE Microwave and Wireless Technology Letters] 2023.2, Japan
A Ka-Band 64-Element Deployable Active Phased-Array TX on a Flexible Hetero Segmented Liquid Crystal Polymer for Small Satellites
Dongwon You, Xi Fu, Hans Herdian, Xiaolin Wang, Yasuto Narukiyo, Ashbir Aviat Fadila, Hojun Lee, Michihiro Ide, Sena Kato, Zheng Li, Yun Wang, Daisuke Awaji(WR部), Jian Pang, Hiraku Sakamoto, Kenichi Okada, Atsushi Shirane
Fujikura

[7th International Symposium on Extremely Advanced Transmission Technologies] 2023.2, Japan
Multi-core fiber splicing pattern insensitive to polarity
Takuya Oda, Katsuhiro Takenaga, and Kentaro Ichii
Fujikura

[IEEE ACCESS 2023] 2023.4, Japan
A Ka-Band Deployable Active Phased Array Transmitter Mounted on Small-Satellite Enabling Integration of Terrestrial and Non-Terrestrial Network
DONGWON YOU,[1] (Graduate Student Member, IEEE), Xiaolin Wang,[2] (Student Member, IEEE,), Hans Herdian,[2] (Student Member, IEEE,) Xi Fu,[2] (Student Member, IEEE,) Hojun Li,[2] Michihiro, Ide,[2] (Student Member, IEEE,) Carrel da Gomez,[2] (Student Member, IEEE,) Zheng Li,[2] (Student Member, IEEE,) Jill Mayeda,[2] (Member, IEEE,) Daisuke Awaji,[3] Jian Pang,[2] (Student Member, IEEE,) Hiraku Sakamoto,[4] Kenichi Okada,[2] (Fellow, IEEE,) and Atsushi Shirane,[2] (Member, IEEE)
1: Graduate Student Member, IEEE
2: Student Member, IEEE
3: Fujikura

[IEICE TRANSACTIONS on Electronics] 2023.4, 11 pp.625-634
A 24-30GHz Power Amplifier with >20-dBm Psat and <0.1-dB AM-AM Distortion for 5G Applications in 130-nm SiGe BiCMOS
Chihiro KAMIDAKI,† Yuma OKUYAMA,† Tatsuo KUBO,† Wooram LEE,†† Caglar OZDAG,†† Bodhisatwa SADHU††, Yo YAMAGUCHI,† and Ning GUAN†
†: Fujikura Ltd.
††: IBM

[Future Sensing Technologies 2023] 2023.4, Yokohama, Japan
High accuracy inference by an optical neural network implementation
Shun Miura(ARC), Mamoru Otake, Hiroyuki Kusaka, Masahiro Kashiwagi, Yuichiro Kunai, Takahiro Nambara, Yumi Yamada(FJK, ARC)
Fujikura

[Coated Conductors for Applications Workshop of 2023] 2023.4, USA
Homogenous REBCO Coated Conductor Production Developed by Using IBAD and Hot-wall PLD Process
Y. Iijima, M. Ohsugi, K. Kakimoto, S. Muto, W. Hirata, S. Fujita, N. Nakamura, S. Hanyu and M. Daibo (Fujikura)
Fujikura

[International Radar Symposium 2023] 2023.5, Berlin, Germany
Fast Angular Processing for Sparse FMCW Radar Arrays with Non-uniform FFT
G. Schnoering (FTE), C. Höller (FTE), S.Malterer (FTE), T. Kawaguchi (FJK DI部), K. Kawajiri (FJK DI部)
FTE, Fujikura

[7th International Symposium on Extremely Advanced Transmission Technologies] 2023.5, Japan
Production lot dependence of 4-core fiber on splice loss
Mayu Nakagawa, Takuya Oda, Katsuhiro Takenaga, and Kentaro Ichii
Fujikura

[International Radar Symposium 2023] 2023.5, Germany
Calibration of Large Coherent MIMO Radar Arrays: Channel Imbalances and 3D Antenna Positions

Christian Greiff*, David Mateos-Núñez*,
Renato Simoni*, María González-Huici*,
Stephan Kruse**, J. Christoph Scheytt**,
Karl Kolk***, Christian Höller***,
Heiko Gustav Kurz****,
Marc-Michael Meinecke****,
Thomas Gisder****
*: FHR
**: Paderborn Univ.
***: FTE
****: VW

[The Journal of Adhesion] 2023.6,
Analyzing Deformation of a Cationic Photopolymerized Epoxy Adhesive during the Curing Process in UV Irradiation and Dark Reaction based on Finite Element Method and Measurement

A. Takahashi, Y. Sekiguchi, N. Taki,
M. Okamura and C. Sato
Fujikura

[International Microwave Symposium 2023] 2023.6, USA
Validating a CATR benchtop OTA test system for 5G FR2 phased array antenna R&D test

Fabrício Dourado,[1]
Shinnosuke Tsuchiya,[2]
Luc Langlois[3]
1: Rohde & Schwarz GmbH & Co KG
2: Fujikura Ltd.
3: Avnet Inc.

[Spring 2023 Society of Low Temperature Engineering and Superconductivity] 2023.6, Japan
Development of Large Diameter 10 T Class REBCO Magnet (3) Quench Test of 10 T Class Test Coil

Shinji Fujita, Shogo Muto,
Naotomi Nakamura, Masatoshi Daiho
Fujikura

[Spring 2023 Society of Low Temperature Engineering and Superconductivity] 2023.6, Japan
Development of HTS Magnets for Accelerators (10-1) — Overview —

Kiyosumi Tsuchiya, Kyodo Wang,
Akio Terashima, Yasushi Arimoto,
Norito Ouchi, Sosenkuni, Mika Masuzawa
(KEK); Akihiro Kikuchi (NIMS); Shinji
Fujita (Fujikura)
KEK, NIMS, Fujikura

[Spring 2023 Society of Low Temperature Engineering and Superconductivity] 2023.6, Japan
Development of HTS Magnet for Accelerator (10-2) — Excitation Test of Special Hexapolar Magnet —

Wang Kyodo, Tsuchiya Kiyosumi,
Terashima Akio, Arimoto Yasushi,
Ouchi Norito, Soseki Kuni (KEK); Kikuchi
Akihiro (NIMS); Fujita Shinji (Fujikura)
KEK, NIMS, Fujikura

[Laser Research (Journal of the Laser Society)] 2023.7, Japan
Development Trends for Practical Application of Multicore Fiber Technology

Hiroyuki Kamata
Fujikura

[The 28th Optoelectronics and Communications Conference] 2023.7, China
Field-deployment of high-density 288 fiber cable link using 4-core multicore fiber and its link loss evaluation

Takuya Oda(OC部)
Fujikura

[Department of Mechanical Engineering, Tokyo Institute of Technology] 2023.7, Japan
Research on Precise Adhesion Technology for Laser Optical Components

Akari Takahashi
Fujikura

[The First Materials Workshop of Japan Low Temperature Engineering Society 2023] 2023.7, Japan
Development of Practical REBCO Coated Wire Using High Speed Vapor Phase Deposition by PLD Method

Yasuhiro Iijima
Fujikura

[Department of Mechanical Engineering, Tokyo Institute of Technology] 2023.8,
Research on Precise Adhesion Technology for Laser Optical Components

Akari Takahashi
Fujikura

[Institute of Electronics, Information and Communications Technology] 2023.8, Japan
Core number management method for weakly coupled Multicore fiber with simplified polarity management

Oda Takuya, Takenaga Katsuhiro,
Ichii Kentaro
Fujikura

[Institute of Electronics, Information and Communications Technology
Optical Communication Systems Research Society (OCS) August Workshop] 2023.8, Japan
Possibility of Small-Diameter Cladding of Weakly Coupled Four-Core MCF
Kajikawa Shota, Oda Takuya,
Takenaga Katsuhiro, Ichii Kentaro
Fujikura

[Hikari Alliance December 2023 issue scheduled] 2023.9,
Multi-Core fiber manufacturing technology
Katsuhiro Takenaga
Fujikura

[IEEE Transactions on Applied Superconductivity] 2023.9,
Evaluation and analysis of a 10T-class small coil using REBCO coated conductors laminated with thick copper tapes
Shogo Muto, Shinji Fujita, Yasuhiro Iijima,
Masanori Daibo (Fujikura)
Fujikura

[IEEE Transactions on Applied Superconductivity] 2023.9,
Evaluation of AC loss characteristics of multifilamentary REBCO tapes by mechanical scratching of MgO_2 areas
Ryoma Oishi, Kodai Jingami,
Hiroshi Miyazaki, Masataka Iwakuma,
Shun Miura, Hiromasa Sasa,
Koichi Yoshida (Kyushu University).
Masanori Daibo, Shinji Fujita (Fujikura)
Kyushu University, Fujikura

[Journal of Lightwave Technology] 2023.9,
Random Polarization-Mode Coupling Effects in Heterogeneous Multi-Core Fibers with Different Cladding Diameters
Gustavo Ocampo,[1] Takanori Sato,[1]
Mayu Iizuka,[2] and Kunimasa Saitoh[1]
1: Hokkaido University
2: Fujikura Ltd.

[49th European Conference on Optical Communications] 2023.9, United Kingdom
Core Number Management of Weakly Coupled Multicore Fibre Supporting Uniform Transmission Among Cores
Takuya Oda, Katsuhiro Takenaga, and
Kentaro Ichii
Fujikura

[IEICE 2023] 2023.9, Japan
Production Lot Dependence of Fused Connection Loss in Four-Core Fibers
Nakagawa Mayu, Oda Takuya,
Takenaga Katsuhiro, Ichii Kentaro
Fujikura

[IEICE Society Conference] 2023.9, Japan
Confinement Loss of Small Clad Weakly Coupled MCF
Kajikawa Shota, Oda Takuya,
Takenaga Katsuhiro, Ichii Kentaro
Fujikura

[The 72 Annual Meeting of the Japan Society of Analytical Chemistry] 2023.9, Japan
Elemental analysis by LC-ICP-MS using IEC/CEC columns
Ichikawa Shinya, Onabe Kazunori
Fujikura

[2023 Cryogenic Engineering Conference and International Cryogenic Materials Conference] 2023.9, USA
Mechanical Property Evaluation of 2G HTS Tapes at Fujikura
Kunihito Kikuchi, Shinji Fujita,
Shogo Muto, Wataru Hirata,
Yasuhiro Iijima,
Masanori Daibo (Fujikura)
Fujikura

[16th European Conference on Applied Superconductivity] 2023.9, Italy
Recent status of 2G HTS tapes at Fujikura
Shinji Fujita, Shogo Muto, Satoru Hanyu,
Yutaka Adachi, Kazuomi Kakimoto,
Ryo Kikutake, Yasuhiro Iijima,
Masanori Daibo (Fujikura)
Fujikura

[MT-28 International Conference on Magnet Technology] 2023.9, France
Evaluation and analysis of a 10T-class small coil using REBCO coated conductors laminated with thick copper tapes
Shogo Muto, Shinji Fujita, Yasuhiro Iijima,
Masanori Daibo (Fujikura)
Fujikura

[MT-28 International Conference on Magnet Technology] 2023.9, France
Recent Status of 2G HTS Tapes at Fujikura
Masanori Daibo, Shinji Fujita,
Shogo Muto, Yutaka Adachi,
Kazuomi Kakimoto
Fujikura

[MT-28 International Conference on Magnet Technology] 2023.9, France
Performance test of a special sextupole magnet using high-temperature superconducting wires
Xudong Wang, Kiyosumi Tsuchiya,
Yasushi Arimoto, Akio Terashima,
Norihito Ohuchi, Zhanguo Zong (KEK)
Shinji Fujita (Fujikura)
KEK, Fujikura

[MT-28 International Conference on Magnet Technology] 2023.9, France
Evaluation of AC loss characteristics of multifilamentary REBCO tapes by mechanical scratching of MgO2 areas
Ryoma Oishi, Kodai Jingami,
Hiroshi Miyazaki, Masataka Iwakuma,
Shun Miura, Hiromasa Sasa,
Koichi Yoshida (Kyushu University).
Masanori Daibo, Shinji Fujita (Fujikura)
Kyushu University, Fujikura

[Open Workshop of the Internal Components Committee of the Implementation Society] 2023.9, Japan
Built-in Polyimide Multilayer Wiring Board WABE Package®
Satoru Onai (Search G)
Fujikura

[The European Microwave Conference (EuMC)] 2023.9, Germany
28 GHz Phased Array Antenna Module with Analog Optimized Design to Relieve Calibration Effort.
Yoshiharu FUJISAKU
Fujikura

[72nd annual IWCS Cable & Connectivity Industry Forum] 2023.9, USA
Single jacket armored Wrapping Tube Cable® with easy fiber access
Yusuke Tsujimoto, Mizuki Isaji,
Noritaka Ukiya and Akira Kori (Fujikura)
Fujikura

[72nd annual IWCS Cable & Connectivity Industry Forum] 2023.9, USA
Indoor-Outdoor Air Blown Optical Cable
Naoya Maehara, Okimi Mukai,
Yusuke Yamaki, Akira Namazue and
Akira Kori (Fujikura)
Fujikura

[49th European Conference on Optical Communications] 2023/10/1, United Kingdom
Design of 100-µm-Cladding 4-Core Multi-Core Fibre with 160-µm-Coating
Shota Kajikawa, Takuya Oda,
Katsuhiro Takenaga, and Kentaro Ichii
Fujikura

[IEEE RADAR CONFERENCE] 2023.11,
Experimental Verfication of Rainfall Influences on Sparse Array Radar
Takuya Kawaguchi(Fujikura Ltd.),
Kazuki Shinotsuka(Fujikura Ltd.) and
Stefan Malterer(Fujikura Technology Europe)
Fujikura, Fujikura Technology Europe

[28th International Conference on Optical Fiber Sensors] 2023.11, Japan
Long-gauge FBG array for high performance distributed sensing
Tomoki Yamanaka, Mikhail Illarionov,
Yoshimichi Amma, Satoshi Okude, and
Kenichi Ohmori
Fujikura

[IEEE Photonics Conference 2023] 2023.11, USA
Polarization-Mode Dispersion of Different Core Types in Heterogeneous Multi-Core Fibers
G. Ocampo,[1] T. Sato,[1] Y. Amma,[2] and
K. Saitoh[1]
Fujikura

[Japan Institute of Electronics, Information and Communications Technology (OPE)] 2023.11, Japan
[Invited Lecture] ECOC2023 Report -Optical Fiber-
Oda Takuya, Ichii Kentaro
Fujikura

[36th International Symposium on superconductors (ISS2023)] 2023.11, New Zealand
High-rate and Homogenous Production of BMO-doped REBCO Coated Conductor by IBAD and Hot-wall PLD Process
Y. Iijima, M. Ohsugi, K. Kakimoto, S. Muto, W. Hirata, S. Fujita, N. Nakamura, Satoru Hanyu and Masanori Daibo (Fujikura)
Fujikura

[1st International Workshop on Irradiation effects on high temperature superconductors (IREF23)] 2023.11, Italy
Development of Coated Conductors by IBAD/PLD process Suitable for High Field Applications
Yasuhiro Iijima, M. Ohsugi, K. Kakimoto, S. Muto, W. Hirata, S. Fujita, N. Nakamura, and M. Daibo (Fujikura)
Fujikura

[30th International Superconductivity Industry Summit (ISIS-30)] 2023.11, South Korea
Recent Status of 2G HTS Tapes at Fujikura
Kunihito Kikuchi, Shinji Fujita, Shogo Muto, Yutaka Adachi, Kazuomi Kakimoto, Ryo Kikutake, Yasuhiro Iijima, Masanori Daibo (Fujikura)
Fujikura

[Liquid Chromatography Workshop 2023] 2023.12, Japan
ICP detection
Shinya Ichikawa
Fujikura

[Symposium on Dramatic Advancement of Optical Communications Infrastructure] 2023.12, Japan
Recent Trends and Future Prospects of SDM Connection and Optical Cable Research
Katsuhiro Takenaga
Fujikura

[Fall 2023 Japan Society of Low Temperature Engineering and Superconductivity] 2023.12, Japan
Basic Study of REBCO Spiral Conductors
Shinji Fujita, Yuki Nakadai, Shogo Muto, Naotomi Nakamura, Masatoshi Daiho
Fujikura

[2023 FY Japan Heat Pipe Association Lecture] 2023.12, Japan
Development and Performance Evaluation of 3DVC for Server Cooling
Harutoshi Hagino, Fan Tanlon, Takeshi Oshio, Yoji Kawahara
Fujikura

[Optical Technology Trend Survey Report, Optical Technology Promotion Association] 2024.1,
Development of high-power single-mode fiber laser
Yasuhiro Masghiko
Fujikura

[The 44 Annual Meeting of the Laser Society] 2024.1, Japan
A 10 kW superfiber laser with high efficiency and low M2
Yasuhiro Mashiko, Rintaro Kitahara, Wataru Kiyoyama, Yuki Shirakura, Takuya Kobayashi, Yuya Takubo, Tatsuya Yamamoto, Tomoyuki Fujita
Fujikura

[Photonics west 2024] 2024.1, USA
PANDA polarization maintaining fiber with a mechanical reinforcing outer layer
S. Matsunaga,[1] K. Yoshimaru,[1] K. Taniuchi,[1] N. Hasegawa,[1] S. Matsuo[1]
1: Rohde & Schwarz GmbH & Co KG
2: Fujikura Ltd.
3: Avnet Inc.

[Society of Electronics, Information and Communications Technology (OCS) February workshop] 2024.2, Japan
Intercore Crosstalk Calculation Method in Loopback OTDR Method
Iizuka Mayu, Takenaga Katsuhiro, Oda Takuya, Ichii Kentaro
Fujikura

[Society of Electronics, Information and Communications Technology (OCS) February workshop] 2024.2, Japan
Analyzing the Impact of Stress Distribution on Polarization-Mode Dispersion in Multi-Core Fibers
Gustavo OCAMPO, Mayu IIZUKA, and Kunimasa SAITOH
Fujikura

[Society of Electronics, Information and Communications Technology (OCS) February workshop] 2024.2, Japan
180 μm Coated 4 Core Multicore Optical Fiber for Further Densification of Cables
Takehana Daiki, Kajikawa Shota,
Oda Takuya, Takenaga Katsuhiro,
Ichii Kentaro
Fujikura

[EXAT Study Group February 2024] 2024.2, Japan
Intercore XT Measurement Method of Weakly Coupled MCF Using OTDR
Naoto Norita, Katsuhiro Takenaga,
Kentaro Ichii
Fujikura

[Society of Electronics, Information and Communications Technology (OCS) February workshop] 2024.2, Japan
Small diameter clad weakly coupled 4-core MCF for O-band
Shota Kajikawa, Mayu Iizuka,
Takuya Oda, Katsuhiro Takenaga,
Kentaro Ichii
Fujikura

[The 8th lecture of the Screening Analysis Research Council] 2024.2, Japan
Practical Analysis in In-House Labs
Daisuke Suzuki
Fujikura

[OFC2023 (Optical Fiber Communication Conference and Exposition 2023)] 2024.3, USA
Stress Distribution Effects on Polarization-Mode Dispersion in Multi-Core Fibers
G. Ocampo,[1] Y. Amma,[2] and K. Saitoh[1]
1: Graduate School of Information Science and Technology, Hokkaido University
2: Optical Technologies R&D Center, Fujikura Ltd.

[Optical Fiber Communication Conference 2024] 2024.3, USA
Development of four-core MCFs with standard cladding diameter from high-core-count MCFs
Kazuhiko Aikawa, Takuya Oda,
Shota Kajikawa, Kohei Ozaki,
Mayu Iizuka, Katsuhiro Takenaga,
Akito Nishimura, and Kentaro Ichii
Fujikura

[Optical Fiber Communication Conference 2024] 2024.3, USA
Polarity-Insensitive Multicore Fibers Core Number Management Method Using Asymmetric Markers
Takuya Oda and Kentaro Ichii
Fujikura

[Optical Fiber Communication Conference 2024] 2024.3, USA
High-Density Weakly-Coupled 4-core MCF with 160-μm Coating for O-band Application
Shota Kajikawa, Mayu Iizuka,
Takuya Oda, Katsuhiro Takenaga, and
Kentaro Ichii
Fujikura

[2024 IEICE General Meeting] 2024.3, Japan
Accuracy of Intercore Crosstalk Calculation by Loopback OTDR Method
Iizuka Mayu, Takenaga Katsuhiro,
Oda Takuya, Ichii Kentaro
Fujikura

[2024 IEICE General Meeting] 2024.3, Japan
12 core and 24 core optical connectors using 4 core multicore fiber
Hiroki Nakane, Yasushi Koike,
Takahiko Sabano, Akito Nishimura
Fujikura

[Sponsored by Japan Electronics and Information Technology Industries Association (JEITA) and "Semiconductor System Solution Technology Committee/Semiconductor Structural Design Technology SC/Thermal Design Technology WG"] 2024.3, Japan
Seminar "Semiconductor Thermal Design in the Era of Carbon Neutrality"
Yuji Saito
Fujikura

[The 38 Spring Lecture Meeting of the Electronics Packaging Society] 2024.3, Japan
Development of environmentally friendly flexible circuit boards
Kentaro Nomachi
Fujikura

[The 38 Spring Lecture Meeting of the Electronics Packaging Society] 2024.3, Japan
Development of three-dimensional wiring
Jun'ichi Torii
Fujikura

[Laser Research, Japan Laser Society, Vol. 52, No. 9] 2024.4, 52 9

High-Density Multicore Fiber and Peripheral Technologies

Oda Takuya, Kajikawa Shota, Ozaki Kohei,
Iizuka Mayu, Takenaga Katsuhiro,
Ichii Kentaro
Fujikura