

External Awards

Technical Development Award

Winners: Tatsuya Kako, NTT Computer and Data Science Laboratories; Hironobu Chiba, NTT Computer and Data Science Laboratories

Date: May 27, 2023

Organization: Acoustical Society of Japan

For development of open-ear earphones that minimize sound leakage by radiating antiphase sound waves.

SCIS Innovation Paper Award

Winners: Junko Takahashi, NTT Social Informatics Laboratories; Shota Kita, NTT Basic Research Laboratories; Akihiko Shinya, NTT Basic Research Laboratories; Kazumaro Aoki, Bunkyo University; Koji Chida, Gunma University; Fumitaka Hoshino, University of Nagasaki

Date: July 20, 2023

Organization: The Institute of Electronics, Information and Communication Engineers (IEICE) Technical Committee on Information Security (ISEC)

For “Photonic Cryptographic Circuit Technology and Operation Verification.”

Published as: J. Takahashi, S. Kita, A. Shinya, K. Aoki, K. Chida, and F. Hoshino, “Photonic Cryptographic Circuit Technology and Operation Verification,” Proc. of the 40th Symposium on Cryptography and Information Security (SCIS 2023), 1E2-2, Kitakyushu, Fukuoka, Japan, Jan. 2023.

Young Scientist Award

Winner: Hiroyuki Fukumoto, NTT Network Innovation Laboratories

Date: August 21, 2023

Organization: 35th Union Radio-Scientifique Internationale General Assembly and Scientific Symposium (URSI GASS 2023)

For “Implementation of Bidirectional High-rate Underwater Acoustic Communication Systems for Fully Wireless-controlled Remotely Operated Vehicles.”

Published as: H. Fukumoto, R. Okumura, Y. Fujino, S. Ohmori, Y. Ito, T. Ishihara, and Y. Tabata, “Implementation of Bidirectional High-rate Underwater Acoustic Communication Systems for Fully Wireless-controlled Remotely Operated Vehicles,” URSI GASS 2023, Sapporo, Hokkaido, Japan, Aug. 2023.

Engineering Sciences Society Service Award

Winner: Yukihiro Bando, NTT Computer and Data Science Laboratories

Date: September 13, 2023

Organization: IEICE

For contribution to the management and activities of the Technical Committee on Smart Info-Media Systems.

Signal Processing Young Researcher’s Award

Winner: Takayuki Sasaki, NTT Computer and Data Science Laboratories

Date: November 7, 2023

Organization: IEICE Technical Group on Signal Processing

For “Fast Graph Fourier Transform based Graph Signal Denoising.”

Kekicheff Award

Winner: Eikazu Niwano, NTT Social Informatics Laboratories

Date: November 10, 2023

Organization: GlobalPlatform

For his outstanding dedication and commitment to GlobalPlatform. He has been a key part of its organization since 2005, serving on the GlobalPlatform Board of Directors and leading the Japan Task Force. This award recognizes his extraordinary, impactful efforts.

MNC 2022 Most Impressive Presentation Award

Winners: Katsuhiko Nishiguchi, NTT Basic Research Laboratories; Akira Fujiwara, NTT Basic Research Laboratories; Kensaku Chida, NTT Basic Research Laboratories

Date: November 14, 2023

Organization: 35th International Microprocesses and Nanotechnology Conference (MNC 2022)

For “Room-temperature Single-electron Sensor for AC Signals beyond an RC Time Constant ~ Energy Transfer via a Non-leakage DRAM in Non-equilibrium ~.”

Published as: K. Nishiguchi, A. Fujiwara, and K. Chida, “Room-temperature Single-electron Sensor for AC Signals beyond an RC Time Constant ~ Energy Transfer via a Non-leakage DRAM in Non-equilibrium ~,” MNC 2022, 10B-2-1, Tokushima, Japan, Aug. 2023.

MNC 2022 Most Impressive Poster

Winners: Megumi Kurosu, NTT Basic Research Laboratories; Daiki Hatanaka, NTT Basic Research Laboratories; Ryuichi Ohta, NTT Basic Research Laboratories; Keiko Takase, NTT Basic Research Laboratories; Hiroshi Yamaguchi, NTT Basic Research Laboratories; Yoshitaka Taniyasu, NTT Basic Research Laboratories; Hajime Okamoto, NTT Basic Research Laboratories

Date: November 14, 2023

Organization: MNC 2022

For “High-overtone Bulk Acoustic Resonator with Epitaxial AlN Layer Grown on n-SiC.”

Published as: M. Kurosu, D. Hatanaka, R. Ohta, K. Takase, H. Yamaguchi, Y. Taniyasu, and H. Okamoto, “High-overtone Bulk Acoustic Resonator with Epitaxial AlN Layer Grown on n-SiC,” MNC 2022, 11P-4-31, Tokushima, Japan, Aug. 2023.

Best Paper Award

Winner: Shin’ya Yamaguchi, NTT Computer and Data Science Laboratories

Date: November 15, 2023

Organization: The 15th Asian Conference on Machine Learning (ACML 2023)

For “Generative Semi-supervised Learning with Meta-Optimized Synthetic Samples.”

Published as: S. Yamaguchi, “Generative Semi-supervised Learning with Meta-Optimized Synthetic Samples,” Proc. of ACML 2023, Istanbul, Turkey, Nov. 2023.

Runner-up rank

Winners: Takumi Fukami, NTT Social Informatics Laboratories; Yuusuke Yamasaki, NTT Social Informatics Laboratories; Ifan Tyou, NTT Social Informatics Laboratories; Kenta Niwa, NTT Communication Science Laboratories

Date: November 15, 2023

Organization: NeurIPS 2023 competition on “Privacy Preserving Federated Learning Document VQA” (PFL-DocVQA)

For “Differential Privacy Analysis for DP-CLGECL.”

IDSAs Ambassador

Winner: Koki Mitani, NTT Social Informatics Laboratories

Date: November 22, 2023

Organization: International Data Spaces Association (IDSAs)

For outstanding commitment to promoting international development and cooperation of data spaces driven by IDSAs.

Best Paper Award

Winners: Atsushi Taniguchi, NTT Network Innovation Laboratories; Yasuhiro Mochida, NTT Network Innovation Laboratories; Sakae Chikara, NTT Social Informatics Laboratories; Yasuyuki Sanari, NTT Network Innovation Laboratories; Keizo Murakami, NTT Social Informatics Laboratories; Momoko Miura, NTT Network Innovation Laboratories; Hirokazu Takahashi, NTT Network Innovation Laboratories; Koichi Takasugi, NTT Network Innovation Laboratories; Hiroki Itoh, NTT Social Informatics Laboratories; Daigoro Yokozeki, NTT Social Informatics Laboratories

Date: November 30, 2023

Organization: International Conference on Emerging Technologies for Communications (ICETC) 2023

For “Disaggregation Architecture of Quantum-safe Security for Optical & Packet Transport Equipment.”

Published as: A. Taniguchi, Y. Mochida, S. Chikara, Y. Sanari, K. Murakami, M. Miura, H. Takahashi, K. Takasugi, H. Itoh, and D. Yokozeki, “Disaggregation Architecture of Quantum-safe Security for Optical & Packet Transport Equipment,” Proc. of ICETC 2023, Sapporo, Hokkaido, Japan, Nov./Dec. 2023.

IEEE MTT-S Japan Chapter Young Engineer Award

Winner: Masahito Nakamura, NTT Device Technology Laboratories

Date: November 30, 2023

Organization: IEEE Microwave Theory and Technology Society (MTT-S) Japan Chapter

For “Broadband Dielectric Spectroscopy for Quantitative Analysis of Glucose and Albumin in Multicomponent Aqueous Solution.”

Published as: M. Nakamura, T. Tajima, and M. Seyama, “Broadband

Dielectric Spectroscopy for Quantitative Analysis of Glucose and Albumin in Multicomponent Aqueous Solution,” IEEE JERM, Vol. 6, No. 1, pp. 86–93, Mar. 2022.

IACR Asiacrypt Test-of-Time Award

Winners: Yu Sasaki, NTT Information Sharing Platform Laboratories (At the time of writing the paper); Kazumaro Aoki, NTT Information Sharing Platform Laboratories (At the time of writing the paper)

Date: December 6, 2023

Organization: The International Association for Cryptologic Research (IACR)

For “Preimage Attacks on 3, 4, and 5-Pass HAVAL.”

Published as: Y. Sasaki and K. Aoki, “Preimage Attacks on 3, 4, and 5-Pass HAVAL,” ASIACRYPT 2008, LNCS, Vol. 5350, pp. 253–271, 2008.

Globecom 2023 Best Paper Award

Winners: Katsuaki Higashimori, NTT Network Innovation Laboratories; Takafumi Tanaka, NTT Network Innovation Laboratories; Takeru Inoue, NTT Network Innovation Laboratories

Date: December 7, 2023

Organization: IEEE Global Communications Conference (GLOBECOM) 2023

For “Efficient Routing Method for Reducing Significant Outages in Optical Networks.”

Published as: K. Higashimori, T. Tanaka, and T. Inoue, “Efficient Routing Method for Reducing Significant Outages in Optical Networks,” GLOBECOM 2023, Kuala Lumpur, Malaysia, Dec. 2023.

IOP Trusted Reviewer status

Winner: Takuya Hatomura, NTT Basic Research Laboratories

Date: December 12, 2023

Organization: IOP Publishing

2023 IEICE Communications Society OCS Young Researchers Award

Winner: Akira Kawai, NTT Network Innovation Laboratories

Date: December 14, 2023

Organization: IEICE Technical Committee on Optical Communication Systems (OCS)

For “Precise Signal Demodulation in Dynamic Environments Using Partially Frozen MIMO Adaptive Equalizers.”

Published as: A. Kawai, M. Nakamura, M. Takahashi, T. Kobayashi, and Y. Miyamoto, “Precise Signal Demodulation in Dynamic Environments Using Partially Frozen MIMO Adaptive Equalizers,” IEICE Tech. Rep., Vol. 122, No. 332, OCS2022-69, pp. 51–55, Jan. 2023.

Papers Published in Technical Journals and Conference Proceedings

Northcott Numbers for the Weighted Weil Heights

M. Okazaki and K. Sano

Atti Accad. Naz. Lincei Rend. Lincei Mat. Appl., Vol. 34, No. 1, pp. 127–144, July 2023.

We answer the question of Vidaux and Videla about the distribution of the Northcott numbers for the Weil height. We solve the same

problem for the weighted Weil heights. These heights generalize both the absolute and relative Weil height. Our results also refine those of Pazuki, Technau, and Widmer.
