Takumi OHASHI, Ph.D. - Curriculum Vitae

Personal Information

Name:	Takumi Ohashi
Address:	NE-20, 2-12-1 Ookayama, Meguro-ku 152-8550 Tokyo, Japan
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Current Position

Apr. 2021 – Present **Associate Professor**,
Engineering Sciences and Design Course,
Department of Transdisciplinary Science and Engineering,
School of Environment and Society, Institute of Science Tokyo (formerly Tokyo Institute of Technology), Japan

Education

Mar. 2018 **Doctor of Engineering**, Tokyo Institute of Technology, Japan
Mar. 2018 **Master of Management of Technology**, Tokyo Institute of Technology, Japan
Sep. 2015 **Master of Engineering**, Tokyo Institute of Technology, Japan
Mar. 2014 **Bachelor of Engineering**, Tokyo Institute of Technology, Japan
Mar. 2012 **Associate Degree in Engineering**, National Institute of Technology, Nagano College, Japan

Work Experience

Dec. 2023 – Present **Chair**, Future Co-Creation Human Resources Working Group, Leading-edge Semiconductor Technology Center (LSTC), Japan
Feb. 2026 – Present **Board Member**, Institute for Transition Ecosystems, Japan
Apr.2018 – Mar.2021 **Assistant Professor**, Tokyo Institute of Technology, Japan
Aug.2019 – Jul.2020 **Visiting Assistant Professor**, Center for Design Research, Stanford University, US
Jan. 2016 – Dec. 2017 **Board member**, NPO Pacific Rim International Camp, Japan
Apr. 2015 – Mar. 2016 **President**, *International Student-Run Organization* Robogals Tokyo
Dec. 2014 – Mar. 2015 **Project Director**, Japan Bangladesh Sister School Project
Sep. 2013 – Dec. 2013 **Intern**, Chittagong Water Supply & Sewerage Authority (CWASA), Bangladesh

Award

Oct. 2025 **Challenging Research Award**, Institute of Science Tokyo
Mar. 2023 **Engineering Education Award**, Japanese Society for Engineering Education.
Jul. 2022 **Awarded**, DLab Challenge 2022, Tokyo Tech.
Mar. 2022 **Awarded**, Interdisciplinary Research Support for Scientists, Tokyo Tech.

Jul. 2021	**Best Paper Award**, 12th International Conference on Applied Human Factors and Ergonomics (AHFE 2021) and the Affiliated Conference
Mar. 2021	**Tokyo Tech Engineering Teacher Award**, Tokyo Tech.
Nov. 2019	**International Collaboration Research Project Encouragement Award**, School of Environment and Society, Tokyo Tech
Nov. 2018	**Young Researcher Award**, School of Environment and Society, Tokyo Tech
Mar. 2018	**Outstanding Research and Presentation Award**, MOT, Tokyo Tech
Dec. 2017	**Best Presentation Award**, The 6th International Education Forum on Environment and Energy Science
Aug. 2017	**Best Presentation Award**, The 20th Anniversary International Symposium, Honjo International Scholarship Foundation
Jul. 2017	**Best Group Presentation Award**, ASPIRE Forum 2017 Student Workshop
Dec. 2015	**Selected as a delegate from Japan**, Stockholm International Youth Science Seminar
Oct. 2014	**Student Research Award**, Department of Electronics and Applied Physics, Tokyo Tech
Feb. 2014	**Best Poster Award**, IEEE EDS Mini-Colloquium: WIMNACT 39
Oct. 2013	**Tokyo Tech Award for Student Leadership**, Tokyo Tech
Mar. 2012	**Special Fighting Spirit Award**, NIT, Nagano College
Mar. 2012	**Student Award**, IEICE *Shinetsu*-Chapter

List of Publications and Presentations

1. International Full Paper Articles (peer-reviewed)

1) A. Laosunthara, K. Saengtabtim, A. Suppasri, N. Leelawat, T. Ohashi, “Disaster management in a shrinking society: The 2024 Noto Peninsula Earthquake's holiday shutdown, challenges and lessons learned,” International Journal of Disaster Risk Reduction, 125, 105582 (2025).
2) S. Takagi, T. Ohashi, M. Saijo, “Consumer segmentation and participation drivers in community-supported agriculture: A choice experiment and partial least squares structural equation modelling approach,” International Journal of Gastronomy and Food Science, 40, 101129 (2025).
3) T. Ohashi, M. Saijo, K. Suzuki, S. Arafuka, “From conservatism to innovation: The sequential and iterative process of smart livestock technology adoption in Japanese small-farm systems,” Technological Forecasting and Social Change, 209, 123692 (2024).
4) S. Takagi, Y. Numazawa, K. Kawakami, T. Ohashi, M. Saijo, “Theorizing the socio-cultural dynamics of consumer decision-making for participation in community-supported agriculture,” Agricultural and Food Economics, 12, 28 (2024).
5) W. Liu, R. Huang, J. Wang, Y. Chen, T. Ohashi, T. Li, Z. Liu, X. Qiu, B. Yu, J. Zhang, A. Al Mahmud, L. Leifer, “Empathy Design Thinking: Cultivating creative minds in primary education,” Frontiers in Education, 9, 1376305 (2024).
6) Wei Liu, Yancong Zhu, Ruonan Huang, Takumi Ohashi, Jan Auernhammer, Xiaonan Zhang, Ce Shi, Lu Wang, Designing interactive glazing through an engineering psychology approach: Six augmented reality scenarios that envision future car human-machine interface, Virtual Reality & Intelligent Hardware, Volume 5, Issue 2, 157 (2023)
7) Matteo Zallio, Takumi Ohashi, P John Clarkson, “Designing the Metaverse: a Scoping Review to Map Current Research Effort on Ethical Implications,” AHFE Open Access, vol 99, 92 (2023).
8) Takuya Washio, Miki Saijo, Hiroyuki Ito, Ken-ichi Takeda, Takumi Ohashi, “Meat the challenge: Segmentation and profiling of Japanese beef mince and its substitutes consumers,” Meat Science 197, 109047 (2023).
9) Takumi Ohashi, Haruna Kusu, Mai Inoue, Hikaru Tsukagoshi, Ryuta Takeda, Miki Saijo, “Enhancing Graduate Student Entrepreneurial Intention: A Designed Workshop Based on Exploratory Factor Analysis,” Lecture Notes in Networks and Systems 488, 839 (2023).
10) Nao Takizawa, Takuya Washio, Masamoto Fukawa, Ken-ichi Takeda, Hiroyuki Ito, Miki Saijo, Takumi Ohashi, “Human-centered design of cattle behavior monitoring system for grazing in abandoned farmland,” Human Factors in Accessibility and Assistive Technology 37, 117 (2022).
11) Matteo Zallio, Takumi Ohashi, “The Evolution of Assistive Technology: A Literature Review of Technology Developments and Applications,” Human Factors in Accessibility and Assistive Technology 37, 85 (2022).
12) Chao Li, Korkut Kaan Tokgoz, Ayuka Okumura, Jim Bartels, Kazuhiro Toda, Hiroaki Matsushima, Takumi Ohashi, Ken-ichi Takeda, Hiroyuki Ito, “A data augmentation method for cow behavior estimation systems using 3-axis acceleration data and neural network technology,” IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences 105, 4, 655 (2022).
13) T. Ohashi, J. Auernhammer, W. Liu, W. Pan, L. Leifer, “NeuroDesignScience: Systematic Literature Review of Current Research on Design using Neuroscience Techniques,” Design Computing and Cognition’20, 575 (2022).
14) Gorn Perapalanunt, Jirat Viriyataranon, Chinnakrit Channok, Bhumibhat Imsamran, Ampan Laosunthara, Danai Jattawa, Thanathip Suwanasopee, Skorn Koonawootrittriron, Takumi Ohashi, Natt Leelawat, Jing Tang, “Towards Data-Driven Dairy Farming in Thailand: A Preliminary Survey of Farmer’s Needs Based on In-Depth Interviews,”

Social and Occupational Ergonomics, Vol. 65, 190 (2022).

15) Wei Liu, Yancong Zhu, Ruonan Huang, Takumi Ohashi, Jan Auernhammer, Xiaonan Zhang, Ce Shi, Lu Wang, “Designing Interactive Glazing through an Engineering Psychology Approach: Six Augmented Reality Scenarios That Envision Future Car Human-Machine Interface,” Virtual Real. Intell. Hardw 5, 1 (2022).
16) Di Zhu, Bowen Zhang, Jiayi Wu, Liuyi Zhao, Yuchen Jing, Dahua Wang, Wei Liu, Abdullah Al Mahmud, Li Qiao, Jan Auernhammer, Takumi Ohashi, “Social inclusion in an aging world: Envisioning elderly-friendly digital interfaces,” Proceedings of the 5th International Virtual Conference on Human Interaction and Emerging Technologies, 1082 (2021).
17) Chao Li, Korkut Kaan Tokgoz, Masamoto Fukawa, Jim Bartels, Takumi Ohashi, Ken-ichi Takeda, Hiroyuki Ito, “Data augmentation for inertial sensor data in CNNs for cattle behavior classification,” IEEE Sensors Letters 5, 11, 1 (2021).
18) Jeerawan Punwaree, Natt Leelawat, Jing Tang, Ampan Laosunthara, Takumi Ohashi, “Improvement of Organic Fresh Milk System through Willingness to Purchase: A Comparison between Thailand and Japan,” Proceedings of the International MultiConference of Engineers and Computer Scientists, (2021).
19) T. Ohashi, Y. Ito, D. Kurabayashi, and M. Saijo, “Designing an Abnormal Posture Detection System to Prevent Accidents During Meal Assistance for Older Adults: A User-centered Design Approach,” In: Kalra J., Lightner N.J., Taiar R. (eds) Advances in Human Factors and Ergonomics in Healthcare and Medical Devices. AHFE 2021. Lecture Notes in Networks and Systems **263**, 345–352, Springer, Cham., (2021).
20) T. Ohashi, M. Watanabe, Y. Takenaka, and M. Saijo, “Real-Time Assessment of Causal Attribution Shift and Stay Between Two Successive Tests of Movement Aids,” Integrative Psychological and Behavioral Science **55**, 541–565, (2021).
21) T. Washio, T. Ohashi, M. Saijo, “What Promotes Intention? Factors Influencing Consumers’ Intention to Purchase Animal-Welfare Friendly Beef in Japan,” In: Fred A., Salgado A., Aveiro D., Dietz J., Bernardino J., Filipe J. (eds) Knowledge Discovery, Knowledge Engineering and Knowledge Management. IC3K 2019. Communications in Computer and Information Science, vol 1297. Springer, Cham. (2021).
22) M. Watanabe, T. Washio, M. Iwasaki, T. Arai, M. Saijo, T. Ohashi, “How Effectively Do Experts Predict Elderly Target-users of Assistive Devices? Importance of Expert Knowledge in Device Development,” In Design, User Experience, and Usability. Interaction Design, HCII 2020. Lecture Notes in Computer Science, 12200, 278 (2020).
23) T. Washio, T. Ohashi, M. Saijo, “Consumers’ Willingness to Purchase High Animal-Welfare Beef Products in Japan: Exploratory Research Based on the Theory of Planned Behavior,” 11th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management, KMIS19-RP-55, Vienna, Austria, (2019).
24) N. Kobayashi, M. Iwasaki, Y. Ito, A.-L. Lindborg, T. Ohashi, and M. Saijo, “Applying User Test Video Analysis to Extract Information for Device Improvement: Case Study of a Robotic Assistive Device for the Frail Elderly,” The 3rd IET International Conference on Technologies for Active and Assisted Living (TechAAL), Session 3, (2019).
25) C. Zhang, T. Ohashi, M. Saijo, J. Solis, Y. Takeda, A.-L. Lindborg, R. Takeda, and Y. Tanaka, “A Monte Carlo based Computation Offloading Algorithm for Feeding Robot IoT System,” The 3rd International Conference on Smart Computing and Communication (SmartCom), Session 2, (2018).
26) J. Shimizu, T. Ohashi, K. Matsuura, I. Muneta, K. Kakushima, K. Tsutsui, N. Ikarashi, and H. Wakabayashi, “Low-Temperature MoS_2 Film Formation using Sputtering and H_2S Annealing,” Journal of the Electron Devices Society **7**, 1, 2 (2018).

27) K. Matsuura, J. Shimizu, M. Toyama, T. Ohashi, I. Muneta, S. Ishihara, K. Kakushima, K. Tsutsui, A. Ogura, and H. Wakabayashi, “Sputter-Deposited-MoS_2 nMISFETs with Top-Gate and Al_2O_3 Passivation under Low Thermal Budget for Large Area Integration,” Journal of the Electron Devices Society **6**, 1251, (2018).

28) M. Toyama, T. Ohashi, K. Matsuura, J. Shimizu, I. Muneta, K. Kakushima, K. Tsutsui, and H. Wakabayashi, “Ohmic Contact between Titanium and Sputtered MoS_2 Films achieved by Forming-Gas Annealing,” Jpn. J. Appl. Phys. 57, 07MA04 (2018).

29) K. Matsuura, T. Ohashi, I. Muneta, S. Ishihara, K. Kakushima, K. Tsutsui, A. Ogura, and H. Wakabayashi, “Low-Carrier-Density Sputter-MoS_2 Film by Vapor-Phase Sulfurization,” Journal of Electrical Materials **47**, 7, 3497 (2018).

30) Y. Hibino, S. Ishihara, N. Sawamoto, T. Ohashi, K. Matsuura, H. Machida, M. Ishikawa, H. Sudoh, H. Wakabayashi, and A. Ogura, “Investigation on $Mo_{1-x}W_xS_2$ Fabricated by Co-Sputtering and Post-Deposition Sulfurization with (t-$C_4H_9)_2S_2$,” Jpn. J. Appl. Phys. **57,** 06HB04 (2018).

31) N. Hayakawa, I. Muneta, T. Ohashi, K. Matsuura, J. Shimizu, K. Kakushima, K. Tsutsui, and H. Wakabayashi, “Reduction of conductance mismatch in Fe/Al_2O_3/MoS_2 system by tunneling-barrier thickness control,” Jpn. J. Appl. Phys. **57,** 04FP13, (2018).

32) Y. Hibino, S. Ishihara, N. Sawamoto, T. Ohashi, K. Matsuura, H. Machida, H. Wakabayashi, and A. Ogura, “Band gap-tuned $MoS_{2(1-x)}Te_{2x}$ thin films synthesized by a hybrid Co-sputtering and post-deposition tellurization annealing process,” Journal of Materials Research **32**, 16, 3021 (2017).

33) T. Ohashi, I. Muneta, K. Matsuura, S. Ishihara, Y. Hibino, N. Sawamoto, K. Kakushima, K. Tsutsui, A. Ogura, and H. Wakabayashi, “Quantitative relationship between sputter-deposited-MoS_2 properties and underlying-SiO_2 surface roughness,” Appl. Phys. Express **10**, 041202 (2017).

34) J. Shimizu, T. Ohashi, K. Matsuura, I. Muneta, K. Kakushima, K. Tsutsui, and H. Wakabayashi, “High-mobility and low-carrier-density sputtered MoS_2 film formed by introducing residual sulfur during low-temperature in 3%-H_2 annealing for three-dimensional ICs,” Jpn. J. Appl. Phys. **56**, 4S, 04CP06, (2017).

35) Y. Hibino, S. Ishihara, N. Sawamoto, T. Ohashi, K. Matsuura, H. Machida, M. Ishikawa, H. Sudo, H. Wakabayashi, and A. Ogura, “Investigation on $MoS_{2(1-x)}Te_{2x}$ Mixture Alloy Fabricated by Co-sputtering Deposition,” MRS Advances, **2** (29), 1557 (2017).

36) S. Ishihara, Y. Hibino, N. Sawamoto, T. Ohashi, K. Matsuura, H. Machida, M. Ishikawa, H. Sudo, H. Wakabayashi, and A. Ogura, “Effects of Reaction Conditions on MoS_2 Thin Film Formation Synthesized by Chemical Vapor Deposition using Organic Precursor,” MRS Advances, **2** (29), 1533 (2017).

37) S. Ishihara, Y. Hibino, N. Sawamoto, T. Ohashi, K. Matsuura, H. Machida, M. Ishikawa, H. Wakabayashi, and A. Ogura, “Large Scale Uniformity of Sputtering Deposited Single- and Few-Layer MoS_2 Investigated by XPS Multipoint Measurements and Histogram Analysis of Optical Contrast,” ECS J. Solid State Sci. Technol., **5** (11), Q3012 (2016).

38) S. Ishihara, Y. Hibino, N. Sawamoto, K. Suda, T. Ohashi, K. Matsuura, H. Machida, M. Ishikawa, H. Sudoh, H. Wakabayashi, and A. Ogura, “Properties of single-layer MoS_2 film fabricated by combination of sputtering deposition and post deposition sulfurization annealing using (t-$C_4H_9)_2S_2$,” Jpn. J. Appl. Phys. **55**, 06GF01, (2016).

39) S. Ishihara, Y. Hibino, N. Sawamoto, K. Suda, T. Ohashi, K. Matsuura, H. Machida, M. Ishikawa, H. Sudoh, H. Wakabayashi, and A. Ogura, “Improving crystalline quality of sputtering-deposited MoS_2 thin film by postdeposition sulfurization annealing using (t-$C_4H_9)_2S_2$,” Jpn. J. Appl. Phys. **55**, 04EJ07, (2016).

40) T. Ohashi, K. Suda, S. Ishihara, N. Sawamoto, S. Yamaguchi, K. Matsuura, K. Kakushima, N. Sugii, A. Nishiyama, Y. Kataoka, K. Natori, K. Tsutsui, H. Iwai, A. Ogura and H. Wakabayashi, “Multi-layered MoS_2 film formed by high-

temperature sputtering for enhancement-mode nMOSFETs," Jpn. J. Appl. Phys. **54**, 04DN08, (2015).

2. International Conferences (peer-reviewed)

41) S. Fukuoka, D. Sakuma, T. Ohashi, "Exploring the Use of Language Models for Open Coding: A Comparative Study of Fine-Tuned T5 and GPT-5," 10th World Conference on Qualitative Research (WCQR 2026), Jan. 2026.
42) T. Komori, D. Sakuma, M. Saijo, T. Ohashi, "Promoting Sustained Use of Assistive Technology Among the Elderly Through Language of Care," IC3K 2024, Porto, Portugal, 2024.
43) T. Huang, T. Kano, N. Takizawa, T. Ohashi, "Enhanced Fall Prevention in Nursing Facilities: Assisting Caregivers Through Real-Time Posture Monitoring," AHFE 2025.
44) T. Ohashi, F. Noda, T. Tomura, A. Laosunthara, K. Suzuki, Y. Tanaka, M. Kishimoto, R. Seto, H. Sakamoto, G. K. Tran, A. Shirane, "No Victim Left Behind: Developing a Dual-Use LEO Satellite System for Real-Time Population Mapping and Everyday Connectivity," ISCIT 2024, Bangkok, Thailand, Sep. 2024.
45) R. Yanagase, N. Takizawa, T. Ohashi, M. Saijo, "The Development of a Care Assistive Device Based on Design Thinking Approaches for Understanding Seniors," AHFE 2024.
46) W. Liu, R. Huang, D. Zhu, Y. Chen, J. Wang, J. Zhang, A. Al Mahmud, T. Ohashi, "Exploring NeuroDesign in Cultivating Empathy and Creativity in Primary Education in China," ACM UbiComp/ISWC 2024.
47) S. Takagi, H. Hayashi, Y. Morishita, K. Hamaya, T. Ohashi, M. Saijo, "Designing an Abnormal Posture Warning System using a Pose Estimation Model for Meal Assistance for Older Adults," 2021 International Conference on Frontiers of Artificial Intelligence and Machine Learning, (2021).
48) J. Auernhammer, W. Liu, T. Ohashi, L. Leifer, E. Byler, W. Pan, "NeuroDesign: Embracing Neuroscience Instruments to Investigate Human Collaboration in Design," The Advances in Intelligent Systems and Computing series, Vol. 1253, (2021).
49) Chao Li, Korkut Kaan Tokgoz, Ayuka Okumura, Jim Bartels, Kazuhiro Toda, Hiroaki Matsushima, Takumi Ohashi, Ken-ichi Takeda, and Hiroyuki Ito, "Data Augmentation for Cow Behavior Estimation Systems Based on Neural Network Technology," International Workshop on Smart Info-Media Systems in Asia, RS4-1, Dec. 17-18, (2020).
50) Y. Hao, M. Tanaka, M. Okochi, M. Saijo, T. Ohashi, "Agile Peptide Sequence Design by Deep Neural Network for Controlled Biomineralization of Gold Nanoparticles," 2nd International Conference on Frontiers of Artificial Intelligence and Machine Learning (FAIML), Berlin, Germany, (2020).
51) M. Kobayashi, T. Washio, R. Nakagawa, H. Kimoto, T. Ohashi, M. Saijo, "Diversification of agricultural business management: triggers and issues for Japanese dairy farmers," Book of Abstracts of the 11th Business & Management Conference, Dubai, 19 (2020).
52) T. Washio, M. Saijo, H. Ito, K. Takeda, and T. Ohashi, "Development of a theoretical model to explain consumers' willingness to purchase animal welfare products in Japan," The 53rd Congress of the International Society for Applied Ethology (ISAE2019), Bergen, Norway, 305 (2019).
53) H. Ito, N. Saito, C. Huang, S. Hata, A. Okumura, K. Toda, H. Matsushima, J. Asakawa, L. Chao, T. Ohashi, and K. Takeda, "Development Scheme for Cattle Behavior Estimation by Deep Learning in an Edge Device," Proceedings of the 2nd International Precision Dairy Farming Conference, 87, (2019).
54) T. Ohashi, A. Laosunthara, T. Washio, A. Yun, J. Punwaree, J. Tang, N. Leelawat, and M. Saijo, "Diffusion of IoRT innovation in dairy farming: Fieldwork experiences in Thailand," International Conference on Robotics and Automation 2019 Full-day Workshop, Montreal, Canada, (2019).

55) T. Sakamoto, T. Ohashi, K. Matsuura, I. Muneta, K. Kakushima, K. Tsutsui, Y. Suzuki, N. Ikarashi, and H. Wakabayashi, “Mechanism for High Hall-Effect Mobility in Sputtered-MoS_2 Film Controlling Particle Energy,” IEEE SOI-3D-Subthreshold Microelectronics Technology Unified Conference (S3S), (2018).

56) M. Hamada, K. Matsuura, T. Sakamoto, H. Tanigawa, T. Ohashi, I. Muneta, T. Hoshii, K. Kakushima, K. Tsutsui, and H. Wakabayashi, “Hall-Effect Mobility Enhancement of Sputtered MoS_2 Film by Vapor Phase Sulfurization through Al_2O_3 Passivation Film,” IEEE SOI-3D-Subthreshold Microelectronics Technology Unified Conference (S3S), (2018).

57) Y. Hibino, S. Ishihara, Y. Oyanagi, N. Sawamoto, T. Ohashi, K. Matsuura, H. Wakabayashi, and A. Ogura, “Suppression of Sulfur Desorption of High-Temperature Sputtered MoS2 Film by Applying DC Bias,” ECS Transactions **85**, 13, 531 (2018).

58) S. Ishihara, Y. Hibino, Y. Oyanagi, N. Sawamoto, T. Ohashi, K. Matsuura, H. Wakabayashi, and A. Ogura, “Stimulating Raman Spectra of Sputtering Deposited Polycrystalline MoS_2 Films by Phonon Confinement Model,” MRS Fall Meeting & Exhibit, (2018).

59) Y. Oyanagi, Y. Hibino, S. Ishihara, N. Sawamoto, T. Ohashi, K. Matsuura, H. Wakabayashi, and A. Ogura, “Fabrication of WS_2 Film by DC Bias Applied High-Temperature Sputtering,” MRS Fall Meeting & Exhibit, (2018).

60) K. Matsuura, J. Shimizu, M. Toyama, T. Ohashi, I. Muneta, S. Ishihara, K. Kakushima, K. Tsutsui, A. Ogura, and H. Wakabayashi, “Chip-Level-Integrated nMISFETs with Sputter-Deposited-MoS_2 Thin Channel Passivated by Al_2O_3 Film and TiN Top Gate,” IEEE 2nd Electron Devices Technology and Manufacturing Conference (EDTM), pp. 104–106, (2018).

61) T. Ohashi, R. Takeda, H. Kusu, M. Inoue, H. Tsukagoshi, and M. Saijo, “Entrepreneurial Education for Graduate Students to Nurture New Energy Innovation,” The 6th International Education Forum on Environment and Energy Science, A123, (2017).

62) M. Toyama, T. Ohashi, K. Matsuura, J. Shimizu, I. Muneta, K. Kakushima, K. Tsutsui, and H. Wakabayashi, “TiN/Ti Ohmic Contact for Sputtered-MoS_2 Film using Forming-Gas Annealing,” Advanced Metallization Conference (ADMETA), 4-3, (2017).

63) N. Hayakawa, I. Muneta, T. Ohashi, K. Matsuura, J. Shimizu, K. Kakushima, K. Tsutsui, and H. Wakabayashi, “Conductance control by tunneling-barrier thickness optimizations in Fe/Al_2O_3/MoS_2 structure,” International Conference on Solid State Devices and Materials, J-3-04, (2017).

64) Y. Okada, S. Yamaguchi, T. Ohashi, I. Muneta, K. Kakushima, K. Tsutsui, and H. Wakabayashi, “Resistivity Reduction of Low-Carrier-Density Sputtered-MoS_2 Film using Fluorine Gas,” Ext. Abs. the 17th International Workshop on Junction Technology, S4-3, (2017).

65) T. Ohashi, M. Watanabe, and M. Saijo, “An Interaction Analysis of User-Testing to Extract Salient User Experience with the Robotic Assistive Device *Life-Walker*,” Proceeding of International Conference on Robotics and Automation 2017 (ICRA2017) Workshop on Advances and challenges on the development, testing and assessment of assistive and rehabilitation robots: Experiences from engineering and human science research, pp. 57-59, (2017).

66) S. Hirano, J. Shimizu, K. Matsuura, T. Ohashi, I. Muneta, K. Kakushima, K. Tsutsui, and H. Wakabayashi, “Crystallinity improvement using migration-enhancement methods for sputtered-MoS_2 films,” IEEE Electron Device Technology and Manufacturing Conference (EDTM), pp.234-235, (2017).

67) J. Shimizu, T. Ohashi, K. Matsuura, I. Muneta, K. Kakushima, K. Tsutsui, N. Ikarashi, and H. Wakabayashi, “Low-carrier density sputtered-MoS_2 film by H_2S annealing for normally-off accumulation-mode FET,” IEEE Electron Device Technology and Manufacturing Conference (EDTM), pp.222-223, (2017).

68) Y. Hibino, S. Ishihara, N. Sawamoto, T. Ohashi, K. Matsuura, H. Machida, M. Ishikawa, H. Sudoh, H. Wakabayashi, and A. Ogura, “Investigation of $MoS_{2(1-x)}Te_{2x}$ Mixture Alloy Fabricated by Co-sputtering Deposition,” MRS Spring Meeting & Exhibit, (2016).

69) S. Ishihara, Y. Hibino, N. Sawamoto, K. Suda, T. Ohashi, K. Matsuura, H. Machida, M. Ishikawa, H. Sudoh, H. Wakabayashi, and A. Ogura, “Effects of Reaction Conditions on MoS_2 Thin Film Formation Synthesized by Chemical Vapor Deposition using Organic Precursor,” MRS Spring Meeting & Exhibit, (2016).

70) M. Saijo, M. Watanabe, T. Ohashi, H. Kusu, H. Tsukagoshi, and R. Takeda, “How Do Young Researchers Take the Steps toward Startup Activities? – A Case Study of a One-day Workshop for Entrepreneur Education,” Proc. of the 8th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management (IC3K 2016) – Volume 3: KMIS, pp. 215-222, (2016).

71) S. Ishihara, Y. Hibino, N. Sawamoto, T. Ohashi, K. Matsuura, H. Wakabayashi, and A. Ogura, “Centimeter-scale high-performance few-layer MoS_2 fabricated by RF magnetron sputtering and subsequent post-deposition annealing,” International Conference on Solid State Devices and Materials, PS-13-06, (2016).

72) J. Shimizu, T. Ohashi, K. Matsuura, I. Muneta, K. Kakushima, K. Tsutsui, and H. Wakabayashi, “High-Mobility and Low-Carrier-Density Sputtered-MoS_2 Film by Low-Temperature Forming-Gas Annealing for 3D-IC,” International Conference on Solid State Devices and Materials, PS-13-04, (2016).

73) S. Ishihara, Y. Hibino, N. Sawamoto, T. Ohashi, K. Matsuura, H. Wakabayashi, and A. Ogura, “Low-temperature solid-phase crystallization of sputtering deposited quasi-layered MoS_2 thin film,” The 18th International Conference on Crystal Growth and Epitaxy (ICCGE18), ThP-T03-7, (2016).

74) K. Matsuura, T. Ohashi, I. Muneta, S. Ishihara, N. Sawamoto, K. Kakushima, K. Tsutsui, A. Ogura, and H. Wakabayashi, “Sulfurization in Sulfur Vapor for Sputtered-MoS_2 Film,” Proc. of 47th IEEE Semiconductor Interface Specialists Conference (SISC), 3.6, (2016).

75) Y. Hibino, S. Ishihara, N. Sawamoto, T. Ohashi, K. Matsuura, H. Machida, M. Ishikawa, H. Sudoh, H. Wakabayashi, and A. Ogura, “Low Temperature Formation of Layered MoS_2 by Sulfurization of E-Beam Evaporated Mo Thin Film Using $(t\text{-}C_4H_9)_2S_2$,” MRS Fall Meeting & Exhibit, (2015).

76) S. Ishihara, Y. Hibino, N. Sawamoto, K. Suda, T. Ohashi, K. Matsuura, H. Machida, M. Ishikawa, H. Sudoh, H. Wakabayashi, and A. Ogura, “Fabrication of High-Quality Single- and Few-Layer MoS_2 Films by Combination of Sputtering Deposition and Post-Deposition Sulfurization Annealing,” MRS Fall Meeting & Exhibit, (2015).

77) S. Ishihara, Y. Hibino, N. Sawamoto, K. Suda, T. Ohashi, K. Matsuura, H. Machida, M. Ishikawa, H. Sudoh, H. Wakabayashi, and A. Ogura, “Properties of Single-Layer MoS_2 Film Fabricated by Combination of Sputtering Deposition and Post-Deposition Sulfurization Annealing Using $(t\text{-}C_4H_9)_2S_2$,” International Microprocesses and Nanotechnology Conference (MNC), 13P-11-19, (2015).

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82) T. Kasuga, Y. Saito, T. Ohashi, S. Yamada, and H. Inoue, "Measurement method of near electric field from LED bulb and power line," Proc. of Intl. Symp. on Electromagnetic Compatibility, pp.481–484, (2012).
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3. Invited Presentations

84) T. Ohashi, "Deep Tech の社会実装を加速させるデザインの役割 – トランジションデザインの観点から," TECHNIUM Global Conference, Tokyo, Japan, May 2025.
85) T. Ohashi, "技術と社会の共進化: 持続可能な畜産を支える半導体技術とそのデザイン," IEICE General Conference 2025, Symposium Session, Mar. 2025.
86) T. Ohashi, "Deep Tech の社会実装を加速するトランジションデザイン," International Open & Close Strategy Symposium, Feb. 2025.
87) T. Ohashi, Keynote, 13th imec Handai International Symposium, Leuven, Belgium, Jan. 2025.
88) T. Ohashi, Panelist, "食の行動変容を考える," SKS JAPAN 2024 - Global Foodtech Summit, Nov. 2024.
89) T. Ohashi, "持続可能なタンパク質供給システムに向けたトランジションデザイン," Japan Ethological Society Symposium, Sep. 2024.
90) T. Ohashi, "Transdisciplinary co-design to realize animal welfare: A case of cattle farming industry," 2nd Nano-Bio Research-Industry (NBRI) International Symposium 2019, Chung-Ang University, South Korea, (2019).
91) T. Ohashi, "Sputter-deposited MoS_2 film for future high-performance nanoelectronic devices," Stockholm International Youth Science Seminar, Stockholm, Sweden (2015).
92) T. Ohashi, "Sputter-deposited MoS_2 film for future high-performance nanoelectronic devices," Stockholm International Youth Science Seminar, Stockholm, Sweden (2015).

4. International/Domestic Conferences (w/o review; domestic publications are in Japanese)

93) Laosunthara Ampan, 大橋匠, Saengtabtim Kumpol, Leelawat Natt, "令和５年梅雨前線による大雨及び台風第２号発生時の Twitter データ分析," 第 42 回日本自然災害学会学術講演会, 第 42 回日本自然災害学会学術講演会講演概要集, 日本自然災害学会, pp. 189-190, Sept. 2023.
94) 尾﨑豊, LAOSUNTHARA AMPAN, 西條美紀, 大橋匠, "指定外避難所への避難に関するスコーピングレビュー," 第 42 回日本自然災害学会学術講演会, 第 42 回日本自然災害学会学術講演会講演概要集, 日本自然災害学会, pp. 101-102, Sept. 2023.
95) 大橋匠, 内山瑛美子, 干場功太郎, 舛屋賢, 三浦智, 菅原雄介, "デザインドリブンイノベーションによる未来の支援機器コンセプトの創出," LIFE2022 講演論文集, (2022).
96) 北原廉, 山極大葵, 赤羽真和, 宇多裕太, 春日貴志, 大橋匠, "ニューラルネットワークを用いた GHz 帯差動線路の伝送特性予測に関する基礎検討, " 超高速・高周波エレクトロニクス実装研究会, 5 (2019).
97) 北原廉, 山極大葵, 宇多裕太, 赤羽真和, 春日貴志, 大橋匠, "ニューラルネットワークを用いた差動線路の伝送特性の予測, " Proceedings of the 2019 IEICE Society Conference, B-4-49, (2019).
98) 北原廉, 髙木聡太, 松浦賢太朗, 鷲尾拓哉, 西條美紀, 大橋匠, "次世代 AI 人材育成に向けた機械学習ワークショップデザイン, " 第 66 回応用物理学会春季学術講演会, 11p-PA7-18, (2019).
99) 髙木聡太, 北原廉, 松浦賢太朗, 鷲尾拓哉, 西條美紀, 大橋匠, "機械学習ワークショップ設計に向けた高専生の意識調査, " 第 66 回応用物理学会春季学術講演会, 11p-PA7-17, (2019).
100) 大橋匠, Leelawat Natt, Laosunthara Ampan, "日本式高専システムのタイ輸出に際する課題—タイ高専コース学

生に対する質問紙調査から―，” 日本教育工学会研究報告書，JSET18-5，149，(2018).

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