Curriculum Vitae – Zhenying (Jane) WANG 王振英

Ph.D, Associate Professor (from June 2025)
Department of Mechanical Engineering,
Kyushu University, Japan
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PROFESSIONAL EMPLOYMENT

Jun 2025 –	**Associate Professor**	Department of Mechanical Engineering, Kyushu Univ.
Apr 2021 –	**Joint Faculty**	Kyushu University Platform of Inter-/Transdisciplinary Energy Research
Apr 2021 – Apr 2025	**Assistant Professor**	Department of Aeronautics and Astronautics, Kyushu Univ.
Aug 2020 – Mar 2021	**Assistant Professor**	I^{2}CNER, Kyushu Univ.
Apr 2020 – Jul 2020	**CREST Postdoctoral Fellow**	Department of Aeronautics and Astronautics, Kyushu Univ.
Sep 2019 – Mar 2020	**JSPS Postdoctoral Research Fellow**	Japan Society for the Promotion of Science
Apr 2018 – Aug 2019	**JSPS Research Fellow DC2**	Japan Society for the Promotion of Science
Jul 2017 – Mar 2018	**Super Research Assistant**	I^{2}CNER, Kyushu Univ.
Apr – Jun 2017	**Research Assistant**	International Research Center for Hydrogen Energy, Kyushu Univ.
Aug – Sep 2016	**Intern Researcher**	Corporate Research Laboratories, KOBELCO Co., Japan
Aug – Sep 2013	**Intern Engineer**	China Shipbuilding Industry Corporation (CSIC)

EDUCATION EXPERIENCE

Apr 2017 – Aug 2019	**Ph.D. (九州大学学生表彰(第 1 号)),** Hydrogen Energy Systems Supervisor: Prof. Yasuyuki Takata Thesis: Mechanisms of vapor absorption into hygroscopic liquid desiccant droplets	**Kyushu University**
Sep 2018 – Feb 2019	**Visiting scholar,** Institute for Multiscale Thermofluids Hosts: Prof. Prashant Valluri, Prof. Khellil Sefiane Research topic: Lubrication model for vapor absorption into hygroscopic droplets	**University of Edinburgh**
Sep 2014 – Mar 2017	**M.S. (with Honors, 1st place),** Engineering Thermophysics Supervisor: Prof. Zhen Li Thesis: Waste heat recovery from industrial flue gases using liquid desiccant technology	**Tsinghua University**
Sep 2010 – Jul 2014	**Bachelor,** Engineering Mechanics Supervisor: Prof. Zhen Li Thesis: Evaluation of data center cooling systems: On the regional and seasonal effects	**Tsinghua University**
Jan 2013 – Jun 2013	**International Exchange Student**	**National University of Singapore**

RESEARCH INTEREST

Phase change and interfacial phenomena

- Experimental study on phase change, fluid dynamics and interfacial phenomena of multi-component liquids
- Mathematical modelling of interfacial and multiphase flows
- Development of visualization techniques of interfacial phenomena from micro to nano scale

Thermal management of high-power-density data centres

- Development and energy analysis of integrated heat pipe systems for efficient data center cooling

Vapor absorption/adsorption systems for low-grade energy utilization

- Development and multi-target optimization of novel energy systems for high-efficiency energy conversion, desalination, and water harvesting
- Numerical and experimental investigation of heat and mass transfer problems within key components

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HONORS AND AWARDS

Japan society of Mechanical Engineers (JSME) Young Engineers Award 日本機械学会奨励賞（研究）	2024
Kyushu University Young Female Researchers Awards 九州大学 女性教职员伊藤早苗賞 最優秀賞	2024
Best Presentation Award for Young Scholars, Droplets 2023 - 6th International Conference on Droplets	2023
Curel Crescent Award for Female Researchers	2022
Young Researcher Award of the Heat Transfer Society of Japan (2 recipients each year in Japan)	2021
Chinese Government Award for Outstanding Students Abroad (20 from all Chinese students in Japan)	2019
Research Achievement Award, Kyushu University (3 from 253 PhD graduates)	2019
Best Presentation Award – 1st place (€600), 5th European Conference on MicroFluidics, Strasbourg, France	2018
Best Poster Award, 2018 Energy Week, Kyushu University	2018
Excellent Master's Thesis, Tsinghua University (1st place at Engineering Thermophysics division, 1/151)	2017
Graduate with Honors, Tsinghua University (1st place at School of Aerospace)	2017
Top Student Paper Award, ASHRAE Winter Conference, Las Vegas, US	2017
China National Scholarship for Graduate Students (top 3%), Tsinghua University	2016
China National Scholarship for Graduate Students (top 3%), Tsinghua University	2015
Excellent Student Leader Award, Tsinghua University	2014
Lab Contribution Award, Tsinghua University	2016
Lab Contribution Award, Tsinghua University	2014
JASSO Honors Scholarship, JASSO, Japan	2017
Kyushu University Doctoral Program Scholarship	2017
Research Encouragement Award, Kyushu University Platform of Inter/Transdisciplinary Energy Research	2017
Friends of Tsinghua – Qu Yu-Zhi Scholarship	2013
Friends of Tsinghua – Huang Yi-Cong Scholarship	2012
Friends of Tsinghua – Huang Yi-Cong Scholarship	2011

学術論文:

[1] Kamada, Y., **Wang, Z.**, Inoue, C., & Senoo, S. "Time-variant planar laser-induced fluorescence for thickness measurement of wavy liquid films: A calibration-free and threshold-free method." ***Experiments in Fluids*** 66.3 (2025): 58.

[2] Kamada, Y., Murakami, K., **Wang, Z.**, Inoue, C., & Senoo, S. "Relationship Between Wavy Liquid Film Dynamics and Droplet Formation from Trailing Edge." ***Journal of Engineering for Gas Turbines and Power*** 147.3 (2025).

[3] Yue, T., Zhu, M., Hu, X., Yu, W., **Wang, Z.**, & Lei, H. "A novel photothermal composite membranes for solar pervaporation desalination." ***Journal of Cleaner Production*** (2025): 145290.

[4] **Wang, Z.***, Karapetsas, G., Valluri, P., & Inoue, C. "Role of volatility and thermal properties in droplet spreading: a generalisation to Tanner's law." ***Journal of Fluid Mechanics*** 987 (2024): A15. (**Press Release at Kyushu University website and EurekAlert!**)

[5] **Wang, Z.***, Karapetsas, G., Valluri, P., & Inoue, C. "Flow structure near three phase contact line of low-contact-angle evaporating droplets." ***Applied Physics Letters*** 124.10 (2024). (**Editor's Pick, Rising Star Collection**)

[6] Tanimoto, T., Uchida, N., Ren, M., **Wang, Z.**, Inoue, C., Horiuchi, J., ... & Yodoshi, N. "Direct imaging of gas atomization process accompanying surface oxidation of tin droplets." ***Materials & Design*** 247 (2024): 113413.

[7] Ren, M., Yasuhara, H., **Wang, Z.**, & Inoue, C. "Viscous-capillary thinning of molten metal ligament stimulated by surface oxidation." ***International Journal of Heat and Mass Transfer*** 233 (2024): 126043.

[8] Cheng, K., Li, Q. Y., **Wang, Z.**, Fukunaga, T., Teshima, H., & Takahashi, K. "Temperature-dependent water slip flow combined with capillary evaporation in graphene nanochannels**."** ***International Journal of Heat and Mass Transfer*** 225 (2024): 125451.

[9] Huang, T. E., Lu, Y., Wei, Z., Li, D., Li, Q. Y., **Wang, Z.**, ... & Zhang, P. "Ultrahigh Subcooling Dropwise Condensation Heat Transfer on Slippery Liquid-like Monolayer Grafted Surfaces." ***ACS Applied Materials & Interfaces*** 16.39 (2024): 53285-53298.

[10] Tauchi, S., Inoue, C., **Wang, Z.**, Daimon, Y., & Fujii, G. "Optimal Liquid Engine Architecture by Performance-Cooling Tradeoff Analysis." ***Journal of Propulsion and Power*** (2024): 1-11.

[11] Zuo, Z., Zhu, F., Wang, L., Wang, Z., Zhao, J., Ji, Z., An, M., Ye, Y., Yu, W., **Wang, Z.**, Wang, Y., & Zheng, Q. "Trapping waste metal ions in a hydrogel/coal powder composite for boosting sewage purification via solar-driven interfacial water evaporation with long-term durability." ***Chemical Engineering Journal*** (2024): 148524.

[12] Ichimura, T., Inoue, C., **Wang, Z.**, Kuwabara, G., & Tahara, K. "In-situ 1-kHz real-time particle tracking velocimetry using high-speed streaming camera." ***Flow Measurement and Instrumentation*** (2023): 102361.

[13] **Wang, Z.***, Orejon, D., Sefiane, K., & Takata, Y. "Wetting and Evaporation of Multi-Component Droplets." ***Physics Reports***, 960 (2022): 1-37. （**ESI Highly Cited Paper**）

[14] Hikita, W., Hirayama, S., Inoue, C., **Wang, Z.**, Nakaseko, M., & Takashita, T. "Fragmentation and solidification of fusible alloy melt by water spray." ***Powder Technology*** 409 (2022): 117778.

[15] **Wang, Z.**, Karapetsas, G., Valluri, P., Sefiane, K., Williams, A., & Takata, Y. "Dynamics of hygroscopic aqueous solution droplets undergoing evaporation or vapour absorption." ***Journal of Fluid Mechanics*** 912 (2021): A2.

[16] **Wang, Z.***, Orejon, D., Sefiane, K., & Takata, Y. “Effect of substrate conductivity on the transient thermal transport of hygroscopic droplets during vapor absorption.” ***Micromachines*** 11.2 (2020): 193.

[17] **Wang, Z.**, Orejon, D., Sefiane, K., & Takata, Y. "Water vapor uptake into hygroscopic lithium bromide desiccant droplets: mechanisms of droplet growth and spreading." ***Physical Chemistry Chemical Physics*** 21 (2019): 1046-1058. （**Back Cover**）

[18] **Wang, Z.***, Orejon, D., Sefiane, K., & Takata, Y. “Coupled thermal transport and mass diffusion during vapor absorption into hygroscopic liquid desiccant droplets.” ***International Journal of Heat and Mass Transfer*** 134 (2019): 1014-1023.

[19] Josyula, T., **Wang, Z.**, Askounis, A., Orejon, D., Harish, S., Takata, Y., ... & Pattamatta, A. "Evaporation kinetics of pure water drops: Thermal patterns, Marangoni flow, and interfacial temperature difference." ***Physical Review E*** 98.5 (2018): 052804.

[20] **Wang, Z.**, Zhang, X., Han, J., & Li, Z. "Waste heat and water recovery from natural gas boilers: Parametric analysis and optimization of a flue-gas-driven open absorption system." ***Energy Conversion and Management*** 154 (2017): 526-537.

[21] **Wang, Z.**, Zhang, X., & Li, Z. "Investigation on the coupled heat and mass transfer process between extremely high humidity air and liquid desiccant in the counter-flow adiabatic packed tower." ***International Journal of Heat and Mass Transfer*** 110 (2017): 898-907.

[22] Zhang, X., **Wang, Z.**, & Li, Z. "A novel flue gas heat recovery system based on low-pressure regeneration liquid desiccant cycle." ***International Journal of Low-Carbon Technologies*** 13.1 (2017): 1-5.

[23] **Wang, Z.**, Karapetsas, G., Valluri, P., Sefiane, K., & Takata, Y. "Lubrication Model for Vapor Absorption/Desorption of Hygroscopic Liquid Desiccant Droplets." ***Advances in Heat Transfer and Thermal Engineering***, Springer, Singapore, (2021): 67-70.

[24] Inoue, T., Kamada, Y., Inoue, C., & **Wang, Z.** "Parametric analysis of interfacial friction factor for liquid film dynamics sheared by turbulent gas flow." ***International Journal of Gas Turbine, Propulsion and Power Systems*** 13.3 (2022): 1-6).

[25] **Wang, Z.**, Cao, H., & Li, Z. Cold source selection and efficiency analysis of data center cooling systems. ***Journal of Engineering Thermophysics***, 38(2) (2017): 326-333.

[26] **Wang, Z.**, Zhang, X., & Li, Z. "Simulation of a flue gas driven open absorption system for waste heat recovery from fossil fuel boilers." ***ASHRAE Transactions*** 123.1 (2017).

[27] **Wang, Z.**, Zhang, X., & Li, Z. "Evaluation of a flue gas driven open absorption system for heat and water recovery from fossil fuel boilers." ***Energy Conversion and Management*** 128 (2016): 57-65.

[28] **Wang, Z.**, Zhang, X., Li, Z., & Luo, M. "Analysis on energy efficiency of an integrated heat pipe system in data centers." ***Applied Thermal Engineering*** 90 (2015): 937-944.

Invited Talks:

[1] **Wang, Z.** Wetting and Evaporation: From Single to Multi-Component Droplets, 29th research seminar on phase change and interfaces 相变化界面研究会, Japan Heat Transfer Society, 2024, Yamaguchi, Japan.

[2] **Wang, Z.** Wetting and Evaporation: From Single to Multi-Component Droplets, Fudan University, 2024, Shanghai, China.

[3] **Wang, Z.** Wetting and Evaporation: From Single to Multi-Component Droplets, Shanghai Polytechnic University, 2024, Shanghai, China.

[4] **Wang, Z.** Flow structure and spreading law: From oil to flash-evaporating droplets, MicroFIP 2024, Hong Kong, China.

[5] **Wang, Z.** Wetting and Evaporation: From Single to Multi-Component Droplets, Hong Kong Polytechnic University (PolyU), 2024, Hong Kong, China.

[6] **Wang, Z.** Spreading Law of Evaporating Droplets, Micro/Bio/Nanofluidics Unit, Okinawa Institute of Science and Technology (OIST), 2024, Okinawa, Japan.

[7] **Wang, Z.** Wetting and Evaporation: From Single to Multi-Component Droplets, Thermal Transport Café, Massachusetts Institute of Technology (MIT), 2023, Online Webinar, US.

[8] **Wang, Z.** Wetting and Evaporation of Complex Thermofluids, Department of Mechanical Engineering, Southeast University, 2023, Nanjing, China.

[9] **Wang, Z.** Wetting and Spreading of Volatile Droplets: A Generalization to Tanner's Law, International Joint Seminar on Mechanical Engineering 2022 - JST Sakura Science Exchange Program, 2022, Kyushu Institute of Technology (KIT), Kitakyushu, Japan.

[10] **Wang, Z.** Analysis of droplet dynamics and heat transfer along with vapor absorption, 7th research seminar on phase change and interfaces, Japan Heat Transfer Society, 2020, online webinar.

[11] **Wang, Z.** Vapor Absorption into Hygroscopic Liquid Desiccant: From Industrial Innovation to Microscale Mechanisms, Department of Mechanical Engineering, KAIST, 2019, Daejeon, Korea.

国際会議

[1] **Wang, Z.**, Karapetsas G., Valluri P., Inoue C. Intricate Role of Thermal Properties and Volatility in Droplet Spreading: A Generalization to Tanner's Law, 76th Annual Meeting of the American Physical Society's Division of Fluid Dynamics, 2023, Washington DC, US. (Oral)

[2] **Wang, Z.**, Karapetsas G., Valluri P., Inoue C. Spreading Law of Evaporative Droplets, Droplets 2023 conference, Beijing, China. (Oral, **Best Presentation Award for Young Scholars**)

[3] **Wang, Z.**, Karapetsas G., Valluri P., Inoue C. Droplet Spreading Revisited: A Generalization to Tanner's Law, 11th International Conference on Boiling and Condensation Heat Transfer, 2023, Edinburgh, UK. (Poster**,**)

[4] **Wang, Z.**, Karapetsas G., Valluri P., Inoue C. Lubrication Type Model for Wetting Dynamics of Multicomponent Droplets, the 11th International Conference on Multiphase Flow, 2023, Kobe, Japan. (Oral)

[5] **Wang, Z.**, Karapetsas G., Valluri P., Inoue C. Quantifying the interacting mechanisms in shape evolution of sessile volatile droplets, 75th Annual Meeting of the American Physical Society's Division of Fluid Dynamics, 2022, Indianapolis, US. (Oral)

[6] **Wang, Z.**, Karapetsas G., Valluri P., Sefiane, K., & Takata, Y. Spreading of hygroscopic ionic solution droplets during vapor absorption, 73rd Annual Meeting of the American Physical Society's Division of Fluid Dynamics, 2020, Chicago, US. (Oral)

[7] **Wang, Z.**, Karapetsas G., Valluri P., Williams A., Sefiane, K., & Takata, Y. Lubrication model for vapor absorption into hygroscopic liquid desiccant droplets, 72nd Annual Meeting of the American Physical Society's Division of Fluid Dynamics, 2019, Seattle, US. (Oral)

[8] **Wang, Z.**, Karapetsas G., Valluri P., Williams A., Sefiane, K., & Takata, Y. Lubrication model for vapor absorption/desorption of hygroscopic liquid desiccant droplets, 16th UK Heat Transfer Conference, 2019, Nottingham, UK. (Oral)

[9] **Wang, Z.**, Orejon, D., Sefiane, K., & Takata, Y. Vapor absorption into hygroscopic liquid desiccant droplets: Mechanisms of droplet growth and spreading, 6th ASME Micro/Nanoscale Heat & Mass Transfer International Conference, 2019, Dalian, China. (Oral)

[10] **Wang, Z.**, Orejon, D., Sefiane, K., & Takata, Y. Coupled thermal transport and mass diffusion during vapor absorption into hygroscopic liquid desiccant droplets, 7th International Symposium on Micro and Nano Technology, 2019, Qingdao, China. (Oral)

[11] **Wang, Z.**, Orejon, D., Takata, Y., & Sefiane, K. Vapor absorption into hygroscopic liquid desiccant droplets and guidance for packed tower design, 5th International Conference on Polygeneration, 2019, Fukuoka, Japan. (Poster)

[12] **Wang, Z.**, Orejon, D., Sefiane, K., & Takata, Y. Coupled thermal transport and mass diffusion during vapor absorption at the droplet scale, 71st Annual Meeting of the American Physical Society's Division of Fluid Dynamics, 2018, Atlanta, US. (Oral)

[13] **Wang, Z.**, Orejon, D., Sefiane, K., & Takata, Y. Vapor absorption phenomenon onto liquid desiccant droplet driven by vapor pressure difference, 5th European Conference on MicroFluidics, 2018, Strasbourg, France. (Oral, **Best Presentation Award - Ranked No.1**)

[14] **Wang, Z.**, Orejon, D., Sefiane, K., & Takata, Y. How do single liquid desiccant droplets behave during vapour absorption? Kyushu University Energy Week, 2018, Fukuoka, Japan. (Poster, **Best Poster Award**)

[15] **Wang, Z.**, Orejon, D., Sefiane, K., & Takata, Y. Effect of surface wettability and relative humidity on the vapor absorption process onto liquid desiccant droplets, 10th International Conference on Boiling and Condensation Heat Transfer, 2018, Nagasaki, Japan. (Oral)

[16] **Wang, Z.**, Orejon, D., Sefiane, K., & Takata, Y. Vapor absorption phenomenon into sessile liquid desiccant droplets, 16th International Heat Transfer Conference, 2018, Beijing, China. (Poster)

[17] **Wang, Z.**, Orejon, D., Sefiane, K., & Takata, Y. Coupled thermal transport and mass diffusion during vapor absorption at the droplet scale, 3th KU-NCU Joint Student Workshop 2018, Fukuoka, Japan. (Oral)

[18] **Wang, Z.**, Zhang, X., & Li, Z. Total heat recovery from industrial flue gases with varied moisture contents using the liquid desiccant technology, ASHRAE Winter Conference, 2017, Las Vegas, US. (Oral, **Top Student Paper Award**)

[19] **Wang, Z.**, Zhang, X., & Li, Z. Investigation on the coupled heat and mass transfer process between extremely high humidity air and liquid desiccant in the counter-flow adiabatic packed tower, 4th International Forum on Heat Transfer, 2016, Sendai, Japan. (Oral)

国内学会

[1] **Wang, Z.**, Karapetsas G., Valluri P., Inoue C. 三相界線近傍の流れ場の可視化とシミュレーション Visualization and Simulation of Flow Field near Three Phase Contact Line, 日本機械学会熱工学コンファレンス2023, Kobe, Japan. (Oral)

[2] **Wang, Z.**, Karapetsas G., Valluri P., Inoue C. Droplet Spreading Revisited: A Generalization to Tanner's Law, 第60回日本伝熱シンポジウム, 2023, Fukuoka, Japan. (Oral)

[3] **Wang, Z.**, Karapetsas G., Valluri P., Inoue C. Dropwise to Filmwise Transition in Low Contact Angle Condensation, 日本機械学会熱工学コンファレンス, 2022, Tokyo, Japan. (Oral)

[4] **Wang, Z.**, Karapetsas G., Valluri P., Inoue C. Quantitative analysis on the interacting mechanisms in wetting dynamics of sessile volatile droplets, 日本機械学会流体工学部門講演会, 2022, Kumamoto, Japan. (Oral)

[5] **Wang, Z.**, Sakata, R., Ikuta, T., Li, Q., Takahashi, K., & Takata, Y. Pattern formation of plasmonic nanoparticles from drying droplets controlled by solar radiation, 第58回日本伝熱シンポジウム, 2021, online, Japan. (Oral)

[6] **Wang, Z.**, Karapetsas G., Valluri P., Williams A., Sefiane, K., & Takata, Y. Lubrication model for vapor absorption into hygroscopic liquid desiccant droplets, 第56回日本伝熱シンポジウム, 2019, Tokushima, Japan. (Oral)

[7] **Wang, Z.**, Orejon, D., Sefiane, K., & Takata, Vapor absorption into liquid desiccant droplets: Analysis on the heat and mass transfer process, 第55回日本伝熱シンポジウム, 2018, Sapporo, Japan. (Oral)

[8] **Wang, Z.**, Cao, H., & Li, Z. Cold source selection and efficiency analysis of data center cooling systems, China Annual Conference on Heat and Mass Transfer, 2016, Beijing, China. (Oral)

[9] **Wang, Z.**, Li, Z., & Zhang, X. Heat recovery from flue gases with varied moisture contents using the open absorption system, China Annual Conference on Refrigeration, 2015, Chengdu, China. (Oral)

[10] **Wang, Z.**, Li, Z., & Zhang, X. Numerial simulation and optimization of an adiabatic dehumidifier for high humidity conditions based on rational distribution of fluid flow and NTU, China Annual Conference on Refrigeration, 2015, Chengdu, China. (Poster)

特許

[1] Li, Z., Liu, X., **Wang, Z.** A device for heat and water recovery from industrial flue gases, China, ZL 2014 2 0360041.7.

その他

[1] GB/T 32910.3-2016《Resource Unitization in Date Center Part III: Energy efficiency and measurement method》No.6 and No.8 part，published in Sep. 2016, carried out in Mar. 2017. (Chinese National Standard, Fulfilling tasks in data analysis and calculation)

教育経験:

- 担当教員：Specialized English（専門英語）, 九州大学基幹教育科目，2022年度から，セメスター科目（2単位），単独で担当
- 担当教員：航空宇宙工学実験（学生実験），定在波管による音響インピーダンスの測定，2022年度から

所属学会:

- Heat Transfer Society of Japan (HTSJ) 日本伝熱学会
- Japan Society of Mechanical Engineers (JSME)日本機械学会
- American Physical Society (APS) アメリカ物理学会

研究集会等の運営:

- 第60回 日本伝熱シンポジウム実行委員会 委員
- 第60回 日本伝熱シンポジウム セッション B31　座長
- 熱工学コンファレンス2023 日本機械学会 OS-13 濡れ性制御と液滴ダイナミクス 座長
- 76th Annual Meeting of the Division of Fluid Dynamics, American Physical Society, Washington DC, 2023, Session A19: Heat Transfer, Evaporation and Buoyancy Effects I　座長 Chair

❖ 科研費（獲得済み）

研究代表者 (Principal Investigator)

[1] JSPS KAKENHI No. 24K17218, 科学研究費助成事業（科研費）若手研究（2024年度）, Grant-in-Aid for Early-Career Scientists, 研究課題名：直接数値計算による滴状凝縮の機構解明と高性能凝縮面の創出 (Development of high performance condensation surfaces with in-depth mechanism elucidation by direct numerical simulation), 研究代表者 Principal Investigator, 2024/04-2026/03.

[2] JSPS KAKENHI No. 21K14097, 科学研究費助成事業（科研費）若手研究Grant-in-Aid for Early-Career Scientists, 原子間力顕微鏡による三相界線ナノ構造のダイナミック解析 (Investigation on dynamic nanostructure of three phase contact line using Atomic Force Microscopy), 研究代表者 Principal Investigator, 2021/04-2023/03.

[3] JSPS KAKENHI No. 18J11928, 科学研究費助成事業（科研費）特別研究員奨励費, Dynamics of a microscale droplet impinging onto hot surfaces with oxide layers, 研究代表者 Principal Investigator, 2018/04-2020/03.

研究分担者 (Co-Investigator)

[1] JSPS KAKENHI No. 24K00806, 科学研究費助成事業（科研費）基盤研究(B) Grant-in-Aid for Scientific Research (B), 気液界面の薄い熱物質拡散層が律速する液体金属微粒子の分裂と凝固のダイナミクス (Splitting and solidification of liquid metal microparticles scaled by thin thermal-mass diffusion layer at gas-liquid interfaces), 研究分担者 Co-Investigator, 2024/04 – 2027/03，研究代表者　井上智博（九州大学）.

[2] JSPS KAKENHI No. 21H01251, 科学研究費助成事業（科研費）基盤研究(B) Grant-in-Aid for Scientific Research (B), 金属液滴に発現する連鎖分裂カスケードの機構解明と数理モデル開発 (Elucidation and modeling of successive fragmentation cascade of metal droplets), 研究分担者 Research Contributor, 2021/04 – 2024/03，研究代表者　井上智博（九州大学）.

[3] JSPS KAKENHI No. 22K18771, 科学研究費助成事業（科研費）挑戦的研究(萌芽) Grant-in-Aid for Challenging Research (Exploratory), 高速温度計測とInfi-TOFの複合分析による金属液滴連鎖分裂の凝縮相反応流解析 (Investigation on condensed phase reaction flow of successive metal droplet fragmentation combining high-speed temperature measurement and Infi-TOF analysis), 研究分担者 Research Contributor, 2021/04 – 2024/03，研究代表者　井上智博（九州大学）.

❖ その他外部資金（獲得済み）

研究代表者 (Principal Investigator)

[1] 2024年度内藤記念研究助成金，Fingerprint Fluidics: 生体液滴の自発的な成分分離に基づく疾患検出の理論的基盤の構築，研究代表者 Principal Investigator, 2024/10-2028/09.

[2] 公益財団法人豊田理化学研究所　2023年度豊田理研スカラー研究助成金, Thermofluid physics in evaporation-type fabrication of perovskite solar cells, 研究代表者 Principal Investigator, 2023/04-2024/03.

[3] 公益財団法人花王芸術・科学財団 Kao Foundation for Arts and Culture, 女性研究者支援プログラム 花王 Crescent award, 研究代表者 Principal Investigator, 2022/04-2024/03.

[4] OIST SHINKA Project, Multistimuli-Responsive Self-Assembly of Functional Polymers near Three Phase Contact Line, 研究代表者 Principal Investigator, Collaborator: Prof. Amy Shen at OIST, 2024/06-2025/03.