



Associate Professor

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Background

- 2010—2012 Lecturer, Ho Chi Minh City University of Technology (HCMUT), Vietnam
- 2012—2015 Completed the Doctoral degree program in Electrical Engineering at Waseda University
- 2015—2017 Postdoctoral Associate (JST-CREST), Faculty of Science & Engineering, Waseda University
- 2017—2020 Postdoctoral Research Fellow, Toyota Technological Institute, Japan
- 2020—2021 Designated Assistant Professor, Graduate School of Engineering, Nagoya University
- 2021—2023 Assistant Professor, Electromagnetic Energy System Lab, Toyota Technological Institute
- 2023— Associate Professor, Department of Mechanical, Electrical and Electronic Engineering, Shimane University, **【concurrent】** Next Generation Tatara Co-Creation Centre.

Research

Motors and drive systems, Power electronics and converters, Electromagnetic analysis & evaluation, Renewable energy, Energy management systems, Intelligent control, Optimization, Electric vehicles

Key papers

1. T.-T. Nguyen, Nguyen Gia Minh Thao*, V.-D. Bui, and H. Cha, “Novel Automatic Current Balancing of Two-Phase Isolated Buck-Boost Converters,” *IEEE Transactions on Industrial Electronics*, pp. 1–11, Dec. 2023, early access, (WoS, Q1 journal).
2. D. C. Huong, V. T. Huynh*, Nguyen Gia Minh Thao, et al., “State Estimation for A New Battery and Motor Circuit Model of An Electric Vehicle Using Event-Triggered Functional Interval Observers,” *IEEE Trans. on Circuits and Systems I: Regular Papers*, Vol. 71, No. 1, pp. 421–430, Jan. 2024, (WoS, Q1 journal).
3. Nguyen Gia Minh Thao*, K. Uchida, K. Kofuji, et al., “An Automatic-Tuning Scheme Based on Fuzzy Logic for Active Power Filter in Wind Farms,” *IEEE Transactions on Control Systems Technology*, Vol. 27, No. 4, pp. 1694–1702, July 2019, (WoS, Q1 journal).
4. Nguyen Gia Minh Thao*, K. Fujisaki, L. Ton-That, and S. Motozuka, “Magnetic Comparison Between Experimental Flake Powder and Spherical Powder for Inductor Cores at High Frequency,” *IEEE Transactions on Magnetics*, Vol. 57, No. 2, pp. 1–7, Feb. 2021, (WoS, Q2 journal).
5. Nguyen Gia Minh Thao*, S. Zhong, K. Fujisaki, et al., “Assessment of Motor Core Loss, Copper Loss and Magnetic Flux Density with PAM Inverter under Dissimilar Excitation Angles,” *IET Electric Power Applications*, Vol. 14, No. 4, pp. 622–637, Apr. 2020, (WoS, Q2 journal).