

Curriculum Vitae

Fengxian Wang

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Education Background

- Ph.D. student Hebei University of Technology Electrical Engineering 2021.9 – Now
- M.S. Tiangong University Electrical Engineering 2018.9 - 2021.6
- B.S. Tiangong University Electrical Engineering 2014.9 - 2018.6

Research Interests

- **Wireless Power Transfer Technology**
- **Engineering Electromagnetic Fields and Magnetic Technology**

Publications

- [1] **F. Wang**, Q. Yang, X. Zhang*, Z. Yuan, and X. Ni, "Optimizing Levitation Devices for Wireless Power Transfer : An Fe-NCS Grid Structure Approach," *IEEE TRANSACTIONS ON POWER ELECTRONICS*, vol. 38, no. 10, pp. 11859-11869, 2023. (Q1 TOP)
- [2] X. Zhang, **F. Wang***, X. Ni, Y. Ren, and Q. Yang, "Structure Electromagnetic Force Analysis of WPT System Under Fault Conditions," *IEEE ACCESS*, vol. 8, no. pp. 152990-153000, 2020. (Q2)
- [3] X. Zhang, **F. Wang***, D. Han, H. Meng, B. Wei, S. Wang, Y. Li, M. Xue, and Q. Yang, "Finite element method and coupled mode theory coupling for accurate analysis of frequency splitting in wireless power transmission," *JOURNAL OF INTELLIGENT & FUZZY SYSTEMS*, vol. 38, no. 1, pp. 463-469, 2020. (Q2)
- [4] X. Zhang, G. Li, T. Chen, **F. Wang***, Q. Yang, and W. Xu, "A High-Efficiency Underwater Hybrid Wireless Power Transfer System with Low Plate Voltage Stresses," *IEEE Transactions on Power Electronics*, Early access. (Q1 TOP)
- [5] **F. Wang**, X. Zhang*, Q. Yang, L. Sha, N. Ren, and Z. Fu, "Research on Energy Harvesting Method Without Blind Spots for a Twodimensional Omni-directional Wireless Power Transfer System WithIntegrated LCC-S Topology," *Transactions of China Electrotechnical Society*, vol. 37, no. 1, pp. 141-151, 2022. (EI)
- [6] X. Zhang, R. Wang, **F. Wang***, C. Yuan, M. Li, Q. Yang, and Z. Dai, "Research on Energy Harvesting Method Without Blind Spots for a Twodimensional Omni-directional Wireless Power Transfer System WithIntegrated LCC-S Topology," *Proceedings of the CSEE*, Early access. (EI)
- [7] X. Zhang, W. Xu, **F. Wang***, C. Yuan, Q. Yang, and Z. Dai, "Research on Self-decoupling

Segmented Coil Rail and Dual-mode Switching Strategy of Dynamic Wireless Charging System,” *Proceedings of the CSEE*, Early access. (EI)

Participating Projects

- **The National Natural Science Foundation of China under Grant 51807138.**
Research on the Mechanism and Smoothing Method of High Frequency Electromagnetic Force in the Process of Dynamic Wireless Power Coupling
- **The National Natural Science Foundation of China under Grant 51977147.**
Research on High Performance Electromagnetic Coupling Method for Wireless Charging Based on Novel Flexible Laminated Nanocrystals
- **The National Natural Science Foundation of China under Grant 52122701**
Research on Fundamental Problems of Wireless Power Transmission in Near-Field Electromagnetic Fields
- **The Key Program of Natural Science Foundation of Tianjin under Grant 22JCZDJC00620.**
Research on Key Issues of Wireless Charging System Based on The Unified Topology-Scale-Performance Modeling Theory
- **The Hebei Provincial Central Guidance Local Science and Technology Development Project under Grant 236Z5201G.**
Research on Magnetic Thermal Equalization Method for High Performance Electric Vehicle Wireless Charging System

Scholarship awards

- 2022 School-level Interdisciplinary Fund. Hebei University of Technology.
- 2023-2024 Hebei University of Technology Academic Scholarship First Prize
- 2022-2023 Hebei University of Technology Academic Scholarship First Prize
- 2021-2022 Hebei University of Technology Academic Scholarship First Prize
- 2019-2020 National Scholarship for Graduate Students
- 2020-2021 Outstanding Graduates of Tiangong University
- 2019-2020 Tiangong University School-level Three Good Students
- 2018-2019 Tiangong University Graduate Student Academic Scholarship First Prize
- 2019-2020 Tiangong University Graduate Student Academic Scholarship Second Prize
- 2016 First Prize of Photovoltaic Group in the North China Region of the 11th National Intelligent Vehicle Competition for College Students

Academic activities

- The 10th Academic Forum on Frontiers in Electrotechnology (FAFEE 2022), the virtual conference held on December 7-8, 2022.
- The 20th Biennial Conference on Electromagnetic Field Computing (CEFC 2022), the virtual conference held on October 9-12, 2022.
- The 2019 National Academic Conference on Theory and New Technologies in Electrotechnics (CTATEE 2019), Zhangjiakou, Hebei Province, China, July 22-26, 2019.