Research Interests

- **Ultrafast laser-driven photoemission**
- **Dynamics of emission electrons**
- **Emerging plasma and Electron beam-based devices**

Education Background

- **2022.08～present Michigan State University, East Lansing, the USA**
  Major: Electrical & Computer Engineer. Ph.D. student
- **2015.08～2017.01 Co-trained Student in Institute of Physics, Chinese Academy of Sciences, Beijing, China**
- **2014.09～2017.06 Yunnan University, Kunming, China**
  Major: Physical Electronics Master of Science
- **2010.09～2014.07 Yunnan University, Kunming, China**
  Major: Fundamental Science of Mathematics and Physics Bachelor of Science

Work Experience

2022.08～present Michigan State University

Position: Graduate Research Assistant

2022.01～2022.07 Michigan State University

Position: part-time Research Assistant

Duties: Doing research on theory and modeling of electron emission and charge transport

2018.04～2019.09 Chuzhou HKC Photoelectric Technology Co., Ltd. R&D engineer

Position: Panel Design Engineer

Duties: Display Panel Mask Design and Simulation of TFT-LCD**;** Panel Analysis**;** Design Lab Administrator

Published Articles

- [1] **L. Jin**, Y. Zhou, and Peng Zhang, "Direct density modulation of photo-assisted field emission from an RF cold cathode", J. Appl. Phys. 134, 074904 (2023).
- [2] Jiang-Ling Yang, Yun Long, Wei-Wei Gao, **Lan Jin**, Zhan-Chun Zuo, Ru-Quan Wang. Enhanced loading of ^{40}K from natural abundance potassium source with a high performance 2D＋MOT[J]. Chinese Phys. Lett. 35 033701, 22-24 (2018).
- **Patents:**

  [1] **Jin Lan**, Zheng Jiayang. Display panel and display equipment: China, 201920865304.2[P].20200107.

  [2] **Jin Lan**, Yang Chunhui. Display panel and displayer: China, 201920864409.2[P].20200107.

Conference and Symposium

[1] **Lan Jin** and Peng Zhang, “Effects of Laser Pulse Length on Photoemission Spectra from a Biased Metal Surface”, Combined 25th Annual IEEE International Vacuum Electronics Conference (IVEC) + 15th Annual International Vacuum Electron Sources Conference, April 22-25, 2024, Monterey, California, USA. [Oral]

[2] **Lan Jin,** Yang Zhou, and Peng Zhang, “Beam Density Modulation During Emission Using RF and Laser Fields”, 14th Annual Michigan Institute for Plasma Science and Engineering (MIPSE) Graduate Student Symposium, November 15, 2023, Ann Arbor, Michigan, USA. [Poster]

[3] **Lan Jin**, Yang Zhou, and Peng Zhang, “Beam Density Modulation During Emission Using RF and Laser Fields”, The 76th Annual Gaseous Electronics Conference, October 9 - 13, 2023, Ann Arbor, Michigan, USA. [Poster]

[4] **Lan Jin,** Yang Zhou, and Peng Zhang. "Modulated Electron Beam Emission Under RF and Laser Fields." In 2023 IEEE 36th International Vacuum Nanoelectronics Conference (IVNC), pp. 51-52. IEEE, 2023. [Poster]

[5] **Lan Jin,** Yang Zhou, and Peng Zhang. " Density Modulation Eletron Emission Using RF and Laser Fields." 50th IEEE International Conference on Plasma Science (ICOPS), May 21-25, 2023, Santa Fe, New Mexico, USA. [Oral]

Professional Memberships

Member, IEEE Nuclear and Plasma Sciences Society (NPSS) (Since 10/2022)

Member, IEEE (Since 10/2022)