

# Xin Jing

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## EDUCATION

### University of Michigan Ann Arbor

*Master of Science in Electrical and Computer Engineering*

Coursework: Machine Learning, Computer Vision, Intermediate Programming

**Ann Arbor, MI**

*April 2024*

### Nankai University

*Bachelor of Engineering in Material Chemistry*

Coursework: Classic Statistics, MATLAB Application, Data Structures and Algorithms

**Tianjin, China**

*June 2019*

## PROJECTS

### University of Michigan Ann Arbor

*Course Projects*

**Ann Arbor, MI**

*January 2023 - present*

- Image Colorization
  - To add color to greyscale images via classification
- Real-time Object Detection
  - To improve the performance of YOLO in detecting small objects and cluttered scenes
- Restaurant Recommendation Website
  - To provide personalized recommendations and search based on a user's preferences
- iTunes Store Search Tool
  - Set up an interactive command line search tool for iTunes Store

## PUBLICATIONS

1. **Xin Jing**, Zhuang-Zhang, Tian-Yang Chen, Jing-Shan Luo\*, **A Review of Promising Inorganic Hole Transporting Materials for Perovskite Solar Cells**, *Energy Technology*, 2023
2. Huanhuan Wang, Zhuang Zhang, Jovana V Milić, Liguang Tan, Zaiwei Wang, Rong Chen, **Xin Jing**, Chenyi Yi, Yi Ding, Yuelong Li, Ying Zhao, Xiaodan Zhang, Anders Hagfeldt, Michael Grätzel, Jingshan Luo\*, **Water Stable Haloplumbate Modulation for Efficient and Stable Hybrid Perovskite Photovoltaics**, *Advanced Energy Materials*, 2021

## RESEARCH

### Nankai University / Institute of Optoelectronic Thin Film Devices

*Research Assistant*

**Tianjin, China**

*June 2019 - July 2022*

Independent Research on Inorganic Hole-Transporting Layer of Perovskite Solar Cells

- Fabricated inorganic hole-transporting layer with a series of methods
- Solved interfacing problems between perovskite and hole-transporting layer using novel solid-air reaction method

### Nankai University / Institute of New Energy Materials Chemistry

*Project Leader*

**Tianjin, China**

*June 2016 - April 2019*

Functional Polymers to Improve the Interface Characteristics of Perovskite Solar Cells

- Fabricated organic-inorganic hybrid perovskite solar cells with other two members
- Increased cell efficiency by 11% through smoothing thin-film morphology with micro-doping various polymers

## INTERNSHIP

### Tianjin Vocational Skills Training Center

*3D-print model designer*

**Tianjin, China**

*February 2019 - March 2019*

- Built 3D models with software *Solidworks* and 3D printers

## ACTIVITY

### Student Union in School of Materials Science and Engineering

*Minister*

**Tianjin, China**

*September 2015 - December 2016*

- Led a 16-member team to operate the college's new media platform with subscribers from 0 to 144
- Awarded as 'Top Ten Ministers of Nankai University College Student Union', ranking 2/23

## PROGRAMMING

Python (Intermediate), Julia (Intermediate), MATLAB (Intermediate), C++ (Basic)