# Xin Jing

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## **EDUCATION**

## **University of Michigan Ann Arbor**

Ann Arbor, MI

Master of Science in Electrical and Computer Engineering

April 2024

Coursework: Machine Learning, Computer Vision, Intermediate Programming

Nankai University

Tianjin, China

Bachelor of Engineering in Material Chemistry

June 2019

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

## **PROJECTS**

# **University of Michigan Ann Arbor**

Ann Arbor, MI

Course Projects

January 2023 - present

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

Tianjin, China

Research Assistant

June 2019 - July 2022

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

Tianjin, China

Project Leader

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**

Tianjin, China

3D-print model designer

February 2019 - March 2019

• Builded 3D models with software Solidworks and 3D printers

# **ACTIVITY**

# Student Union in School of Materials Science and Engineering

Tianjin, China

Minister

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**

C++, Python, MATLAB, Julia

**Academic Transcript of:** Page 1 Hours MSH Grade NON-UNIVERSITY OF MICHIGAN ACADEMIC EXPERIENCE Elections as of: 07-Apr-2023 0.00 Special Topics 0.00 Nankai University VLSI for Comm & Machine Tianjin Learning 0.00 0.00 Database App Design 3.00 0.00 **Total Elected Term Hours** 7.00 0.00 0.00 0.00 Fall 2022 Rackham Hours MSH **CTP** MHP Grade **End of Transcript EECS** 4.00 4.00 13.20 Prob&Random Proc **EECS** 551 Matrix Meth Sig Proc 4.00 4.00 4.00 9.20 **Term Total** 8.00 8.00 8.00 22.40 Rackham 8.00 **Cumulative Tota** 8.00 22.40 **MHP** Hours MSH CTP Elections as of: 07-Apr-2023 0.00 442 4.00 0.00 0.00 **EECS** 470 4.00 0.00 0.00 0.00 **EECS EECS** 545 3.00 0.00 0.00 0.00 Machine Learn (CSE) 553 3.00 0.00 0.00 0.00 **EECS EECS** 559 Optim in Sig Pro MI 3.00 0.00 0.00 0.00 **EECS** 586 4.00 0.00 0.00 0.00 SI 3.00 0.00 0.00 0.00 507 SI 618 3.00 0.00 0.00 0.00 27.00 0.00 **Term Total** 

## TRANSCRIPT GUIDE

## DEFINITION OF AN OFFICIAL TRANSCRIPT

An Official Transcript is one that has been received directly from the issuing institution. It must bear the University seal, date and signature of the registrar. Transcripts received that do not meet these requirements should not be considered official and should be routinely rejected for any permanent use. This definition of an official transcript has been endorsed by the Michigan Association of Collegiate Registrars and Admissions Officers.

## ACCREDITATION

The three campuses of the University of Michigan are accredited by the North Central Association of Colleges and Schools - Higher Learning Commission. Many of the departments and programs within the University are also accredited by various agencies. Detailed information about these agencies and the accreditation process is available from the Dean's office of each academic unit.

### **CALENDAR**

The University of Michigan operates under the trimester calendar. A unit of credit is a semester hour.

### ELIGIBILITY FOR ENROLLMENT

Unless otherwise indicated, a student is eligible to enroll.

### EXPLANATION OF COLUMN HEADINGS

HRS = Elected Hours/Units; MSH = GPA Semester Hours; CTP = Credit Toward Program; MHP = GPA Honor Points.

### ABBREVIATIONS FOR CREDIT CONDITIONS

AGC = Approved for Graduate Credit; CBE = Credit by Exam; DCO = Degree Credit Only; NDC = Not for Undergraduate degree credit; NFC = Not for Credit;

NGD = Not for Graduate Degree Credit; REP = Repetition.

### STUDY ABROAD

Study abroad credit is considered upper level unless otherwise noted.

### LETTER GRADES

9.0 GRADING SCALE (A+ through B = Pass unless otherwise noted)

A + = 9.0; A = 8.0; A = 7.0; B + = 6.0; B = 5.0; B = 4.0; C = 2.0; C = 2.0; C = 1.0; D + = 0.0; D =

### 4.4 GRADING SCALE

A + = 4.4; A = 4.0; A - = 3.7; B + = 3.4; B = 3.0; B - = 2.7; C + = 2.4; C = 2.0; C - = 1.7; D + = 1.4; D = 1.0; D - = 0.7; E = 0.0.

#### 4.3 GRADING SCALE

A + = 4.3; A = 4.0; A - = 3.7; B + = 3.3; B = 3.0; B - = 2.7; C + = 2.3; C = 2.0; C - = 1.7; D + = 1.3; D = 1.0; D - = 0.7; E = 0.0.

## 4.0 GRADING SCALE

A + = 4.0; A = 4.0; A - = 3.7; B + = 3.3; B = 3.0; B - = 2.7; C + = 2.3; C = 2.0; C - = 1.7; D + = 1.3; D = 1.0; D - = 0.7; E = 0.0.

### ADDITIONAL GRADES

EX = EXCELLENT; GD = GOOD; PS = PASS; LP = LOW PASS; F = FAIL (EX, GD, PS and LP = Pass)

 $CR = Credit; \ NC = No \ credit; \ S = Satisfactory; \ U = Unsatisfactory; \ P = Pass; \ F = Fail$ 

I = Incomplete (I OR IL followed by a letter grade indicates an initial incomplete that has been given a final grade.); NR = No grade reported;

## = Grade not submitted; ED = Unofficial drop; VI = Audit or Visit; W = Withdrew from course; Y = Extended multi-term class

M = Marginal; IPL = Incomplete Permanent Lapse; NRC = No Record COVID, a non-passing grade used to address a global pandemic

COMPUTATIONS FOR TERM OR CUMULATIVE GPA: Term GPA = Term MHP/Term MSH; Cumulative GPA = Cumulative MHP/Cumulative MSH; Example: 42.0 MHP/12.0 MSH = 3.5 GPA.