

Jialong NING

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EDUCATIONAL BACKGROUND

Wuhan University of Technology (WUT), Wuhan, Hubei, China

09/2018-06/2022

- SCHOOL OF AUTOMOTIVE ENGINEERING
- Bachelor of Engineering in Energy and Power Engineering
- Overall GPA: 3.661/5.0 (Top10%)
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PUBLICATION

Yun Ding, Yi Song, Jiaqi Dong, Chenxi Liu, **Jialong Ning**, Xiaochun Wang, Du Shaojie, Study on the formation mechanism of cracks in the catalyst layer of proton exchange membrane fuel cells(2023)

RESEARCH EXPERIENCES & COURSE PROJECTS

Project: Course Design of Automobile Engine Design

12/2021-01/2022

Supervisor: Helin XIAO (Associate Professor), WUT

- Organize group members to discuss and assign tasks.
- Determined the design process, planned the design plan and performed parameter checks to see if the designed connecting rod parameters met the strength and stiffness checks.
- Optimize the design scheme, improve the mechanical efficiency of the overall design, and reduce the complexity.
- Used Solidworks to simulate the operation of the connecting rod group, used AutoCAD to draw out the parts, and then drew the assembly and parts drawings on the drawings.

Project: Course Design of Mechanical Design B

12/2020

Supervisor: Hui SHI (Lecturer), WUT

- Designed a two-stage decelerator to meet the technical requirements and durable years
- Simulating the operation of two-stage decelerator by using Solidworks
- Presented the draft drawing on AutoCAD, and ended up hand-painting it on the design drawings

INTERNSHIP EXPERIENCES

Sichuan Energy Internet Research Institute Tsinghua University, Chengdu, Sichuan, China

Electrochemical Energy Materials and Devices Research Center

07/2021-09/2021 & 01/2021-02/2021

Laboratory Technician

- Studied the preparation process of PEMFC catalytic layer ink.
- Used comsol to simulate Bipolar membrane electrodialysis for the pH value of the solution.
- Explored the stability of catalytic layer ink, mainly in the direction of the effect of different carbon-loaded platinum on the stability of ink. (Used zeta points, membrane electrode pores, etc. for judgment)
- Made membrane electrodes in PEMFC and explored their performance.
- Assisted in the daily research work in the laboratory.

Automotive Experiment Center, WUT

09/2020-12/2020

Laboratory Technician

- Responsible for the disassembly and assembly of automobile engine and reducer.
- Studied the impact on power output by adjusting the fuel injection quantity and injection time of the engine.

EXTRACURRICULAR ACTIVITIES

Keynote Speaker for Eco Enzyme Promotion

05/2019

Volunteer Students Leader of Wuhan Marathon

04/2019

Planner and Manager of the "Safe Campus and Happy Community" Cultural Show

12/2018-01/2019

HONORS

Outstanding Undergraduate Graduates

06/2022

The 3rd Scholarship for Excellent Student Twice, WUT

11/2019 & 11/2021

Merit Student Twice, WUT

11/2019 & 11/2020

The 2nd Scholarship for Excellent Student, WUT

11/2020

The First Prize of CAD Drawing Competition

12/2018

Outstanding Individual of Student Union for 2018-2019 Academic Year

12/2018

COMPUTER & MATHEMATICAL SKILLS

C Language, Java, Python, Comsol, AutoCAD, SolidWorks, MATLAB, Multisim