

RUIHAO BI

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EDUCATION

College of Chemistry, Xiamen University (XMU)

Xiamen, China

Bachelor of Chemistry

Sept. 2017 — Jun. 2021

- 1st Year: College of Materials, 2nd–4th Year: College of Chemistry.
- Overall GPA: 3.79/4.00, Major GPA: 3.85/4.00, Rank: 3/96.
- Fluent English, TOEFL iBT: 100 (R29, L28, S22, W21), Jun. 2019.

Research Assistant, XMU

Jul. 2021 – now

Relevant Courses:

- Calculus I (100/100, top 1%), Calculus II (95/100, top 2%), Physics I (93/100, top 1%), Physical Chemistry II (95/100, top 3%), Chemical Kinetics & Reaction Dynamics (95/100, top 1%)

RESEARCH EXPERIENCE

Synthetic Study towards Clonastatin B

Jun. 2019 – May 2021

Prof. Yandong, Zhang

Zhang Group Website

- Optimized procedures for a facial-selective epoxydation reaction, increasing desired product yield by two times.

MLP of Rutile Water Interface Model and its Application

Jul. 2021 – now

Prof. Jun, Cheng

Cheng Group Website

- Trained machine learning potential (MLP) for terraced rutile 110 - water interface system;
- Developed adsorbed water dissociation degree analysis on MLP propagated trajectory;
- Found that adsorbed water has spatial preference towards one side of bridge oxygen, agreeing with collaborating experiment result.

SOFTWARE SKILLS

Programming Language: shell, Python

- Familiar with shell and python scripting;
- Able to execute statistic analysis on MD trajectories (`numpy`, `ase`, `VMD`).

Calculation Packages: DeePMD-kit series, CP2K, LAMMPS

- Familiar with DeePMD MLP training and dataset construction.

SELECTED AWARDS

- The *Wang Laoji* Scholarship, XMU (2/96)

Apr. 2021

- *Successful Participant* of Mathematical Contest in Modelling

May 2020

- The *Elite Undergraduate Program of Chemistry* Scholarship, XMU (15/168)

2017–2021, 4 times