

Xiang Shi

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EDUCATION

University of Science and Technology of China (USTC)

Hefei, China

School of Chemistry and Materials Science

Sept. 2020 – present

Major in Physical chemistry at Lu Jiaxi Talent Program (B.S. expected)

Overall GPA: **3.86** / 4.30 (**90.16** / 100) Major rank: **2/28** Rank (chemical school): **3/97**

TOEFL: **109** (R 29; L 29; S 24; W 27)

GRE: **330** (V 160; Q 170)

Awards:

※ National Scholarship 2021 (top1%)

※ Minglong Huang Scholarship 2022 (top5%)

※ Talent award, Institute of Chemistry, Chinese Academy of Sciences 2022 (top5%)

PUBLICATION

Wenjie Wang⁺, Tianpei Zhou⁺, Chun Wang, **Xiang Shi**, Shihao Liu, Qinghua Liu, Youxue Xie, Hu Feng, Yang Wang, Guixin Ma, Chen Ye, Wensheng Yan, Yangchao Tian, Yi Xie, Wangsheng Chu^{*} and Changzheng Wu^{*}, Sulfur-induced dynamic reconstruction of iron-nitrogen species for highly active neutral oxygen reduction reactions, *Science China Chemistry*, 2022 <https://doi.org/10.1007/s11426-022-1384-1>

Wenjie Wang⁺, **Xiang Shi**, Lin Wang, Yi Xie^{*} and Changzheng Wu^{*}, MOF-derived Fe-Ce Single-Atom Pairs Doped Electrocatalyst for Hydrogen-Oxygen Fuel Cells (*submitted*)

RESEARCH EXPERIENCE

Lab experience at Dept. of Chemistry, iChEM (Collaborative Innovation Center of Chemistry for Energy Materials)

Single Atom Catalyst@Piezocatalyst & Pyrocatalyst

Sept. 2022 – present

Undergraduate researcher advised by Prof. Yuen Wu

- Working as principal researcher, in charge of the whole project

Lab experience at Dept. of Chemistry

Research into Modified Layered BiTeBr and its Thermoconductivity Behavior

Jun. 2022 – present

Undergraduate researcher advised by Prof. Changzheng Wu

- Determined the favorable intercalation and exfoliation conditions
- Modification of single-layer BiTeBr to BiTeSe and BiTeO

MOF-derived Fe-Ce Single-Atom Pairs Doped Electrocatalyst for Hydrogen-Oxygen Fuel Cells

Undergraduate researcher advised by Prof. Changzheng Wu

Jun. 2021 – Jun. 2022

- Undertook synthesis and characterization of Ce-Fe single atom pairs @ZIF
- Performed Fuel cell testing

Planar FeS₁N₃ Sites with Adjacent Sulfur Anions Realizing Superior Neutral Zinc-air Batteries

Performance

Apr. 2021 – Jun. 2021

Undergraduate researcher advised by Prof. Changzheng Wu

- Undertook synthesis and characterization of S-doped-FeN₄
- Performed ORR testing

SUMMER RESEARCH EXPERIENCE

Online Research Program at UT Austin

Undergraduate researcher advised by Prof. Guihua Yu

Jun. 2022 – Sep. 2022

- Studied hydrogel, Li⁺ storage, Ni-N-P for HER

ADDITIONAL INFORMATION

- Common characterization like TEM, UV-Vis, SEM, EDS, XRD, XPS, IR, XAFS
- Operation of electrochemical testing station and fuel cell system
- MATLAB, Origin, Photoshop, Premier, Audition, Latex

EXTRACURRICULAR ACTIVITIES

- Chair of the Student Union of the School of Chemistry and Materials Science at USTC
- Assistant leader of USTC Chorus