



Wei-Hsiang Huang

Assistant Scientist

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Education:

Ph.D. (2019/9~2022/7) Graduate Institute of Applied Science and Technology, National Taiwan
University of Science and Technology (NTUST), Taipei, Taiwan

B.Sc. (2014/9~2018/6) College of Science, National Tsing Hua University (NTHU), Hsinchu, Taiwan

Experience:

2024/10~NOW Assistant Scientist, NSRRC

2023/1~2024/7 Doctoral Researcher, NSRRC

Research Areas:

Time-resolved XAFS, Quick-scanning X-ray Absorption Spectroscopy, Electrochemistry, Energy
conversion

Selective Publications:

1. "Ru Single Atoms and Sulfur Anions Dual-Doped NiFe Layered Double Hydroxides for High-Current-Density Alkaline Oxygen Evolution Reaction" *Advanced Energy Materials* (2025)
2. "Boosting and stabilizing oxygen evolution reaction through Ru single atoms anchored amorphous NiMoOx electrocatalyst" *Nature Communications* (2025)
3. "Revealing and modulating catalyst reconstruction for highly efficient electrosynthesis of ammonia" *Nature Communications* (2025)
4. "High-Entropy Metallene Aerogels: A New Balancer for* H Production and Consumption in Nitrate Reduction Reaction" *Angewandte Chemie* (2025)
5. "Field-Controlled Hydroxide Dynamics Drive High-Valence Surface Reconstruction of Ferromagnetic Alloy Nanocones Toward Efficient Oxygen Evolution" *Advanced Functional Materials* (2025)
6. "Suppressed Proton Insertion Enhances Zinc-Ion Storage Kinetics and Stability in Hydrated Vanadate" *ACS Energy Letters* (2025)
7. "Tailoring the d-Band Center of High-Entropy Perovskite Oxide Nanotubes for Enhanced Nitrate Electroreduction" *Small* (2025)