

Chia-Hsin Wang



Associate Scientist

Nano Science group, Scientific Research Division, National Synchrotron Radiation Research Center (NSRRC)

101 Hsin-Ann Road, Hsinchu 300092 Taiwan

Office: S323, Research and Development Bldg.

Tel: +886-3-5780281, Ext 7323

Email: wang.ch@nsrrc.org.tw

Webpage: https://www.nsrrc.org.tw/english/personal.aspx?ID=00215&Dept_UID=7&Type=D

Education:

PhD (2004/2~ 2007/7) Department of Applied Chemistry, National Chiao Tung University, Taiwan

M.S. (2002/7~ 2004/1) Department of Applied Chemistry, National Chiao Tung University, Taiwan

B.S. (1998/9~ 2002/6) Department of Applied Chemistry, National Chi Nan University, Taiwan

Experience:

(2021.01~ present) Nano Science group leader, NSRRC

(2020.01~ present) Associate Scientist, NSRRC

(2013.01~ 2019.12) Assistant Scientist, NSRRC

(2012.07~ 2012.12) Researcher, Prototype& Application, Nanotechnology Research Center,
Industrial Technology Research Institute (ITRI)

(2008.01~ 2012.06) Post-doctoral Fellow, NSRRC

(2007.08~ 2007.10) Post-doctoral Fellow, Department of Applied Chemistry, NCTU

Research Areas:

X-ray photoelectron spectroscopy, (Near) Ambient pressure X-ray photoelectron spectroscopy, CO₂ hydrogenation, Electrocatalyst, Energy Materials

Selective Publications:

1. “Insight into the oxygen evolution reaction mechanism catalyzed by phosphate-substituted FeCo₂O₄ nanosheets: proton-coupled electron transfer assisted adsorbate evolution mechanism investigated by in situ NAP-XPS”, *J. Mater. Chem. A*, **2025**, *13*, 29900.
2. “Heterogeneous Interfaces of Ni₃Se₄ Nanoclusters Decorated on Ni₃N Surface Enhance Efficient and Durable Hydrogen Evolution Reactions in Alkaline Electrolyte”, *J. Am. Chem. Soc.* **2025**, *147*, 16047.
3. “Revealing the Surface Species Evolution on Low-loading Platinum in an Electrochemical Redox Reaction by Operando Ambient-Pressure X-ray Photoelectron Spectroscopy”, *ChemCatChem* **2023**, *15*, e202300359.
4. “Local synergetic collaboration between Pd and local tetrahedral symmetric Ni oxide enables ultra high- performance CO₂ thermal methanation”, *J. Mater. Chem. A*, **2020**, *8*, 12744.