

Biographical Sketch – Xiaofeng Feng

Xiaofeng Feng
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(a) Professional Preparation

A list of the individual's undergraduate and graduate education and postdoctoral training as indicated below:

Peking University	Beijing, China	Physics	B.S., 2007
Tsinghua University	Beijing, China	Physics	M.S., 2009
University of California, Berkeley	Berkeley, CA	Materials Science and Engineering	Ph.D., 2013
Stanford University	Stanford, CA	Chemistry	Postdoc, 2014–2016

(b) Appointments

In reverse chronological order, list the individual's academic/professional appointments.

2022–Present	Associate Professor, Department of Physics and Renewable Energy and Chemical Transformations (REACT) Cluster, Secondary Joint Appointments with Chemistry and Materials Science & Engineering, University of Central Florida, Orlando, FL, USA
2016–2022	Assistant Professor, Department of Physics and Renewable Energy and Chemical Transformations (REACT) Cluster, Secondary Joint Appointments with Chemistry and Materials Science & Engineering, University of Central Florida, Orlando, FL, USA

(c) Products

- (i) List up to five (5) publications/products that are the **most current** ones related to your field
- Xing, Z.; Shi, K.; Parsons, Z. S.; Feng, X. Interplay of active sites and microenvironment in high-rate electrocatalysis of H₂O₂ on doped carbon. *ACS Catal.* **2023**, *13*, 2780–2789.
 - Hu, L.; Pillai, H. S.; Feit, C.; Shi, K.; Gao, Z.; Banerjee, P.; Xin, H.; Feng, X. Identification of active sites for ammonia electrocatalysis on ruthenium. *ACS Energy Lett.* **2022**, *7*, 4290.
 - Xing, Z.; Shi, K.; Hu, X.; Feng, X. Beyond catalytic materials: Controlling local gas/liquid environment in the catalyst layer for CO₂ electrocatalysis. *J. Energy Chem.* **2022**, *66*, 45–51.
 - Xing, Z.; Hu, X.; Feng, X. Tuning the microenvironment in gas-diffusion electrodes enables high-rate CO₂ electrocatalysis to formate. *ACS Energy Lett.* **2021**, *6*, 1694–1702.
 - Xing, Z.; Hu, L.; Ripatti, D. S.; Hu, X.; Feng, X. Enhancing carbon dioxide gas-diffusion electrocatalysis by creating a hydrophobic catalyst microenvironment. *Nat. Commun.* **2021**, *12*, 136.

(ii) List up to five (5) other significant publications/products.

- Hu, L.; Xing, Z.; Feng, X. Understanding the electrocatalytic interface for ambient ammonia synthesis. *ACS Energy Lett.* **2020**, *5*, 430–436.
- Shultz, L. R.; Hu, L.; Preradovic, K.; Beazley, M. J.; Feng, X.; Jurca, T. A broader-scope analysis of the catalytic reduction of nitrophenols and azo dyes with noble metal nanoparticles. *ChemCatChem* **2019**, *11*, 2590–2595.
- Wang, J.; Yu, L.; Hu, L.; Chen, G.; Xin, H.; Feng, X. Ambient ammonia synthesis via palladium-catalyzed electrohydrogenation of dinitrogen at low overpotential. *Nat. Commun.* **2018**, *9*, 1795.
- Hu, L.; Khaniya, A.; Wang, J.; Chen, G.; Kaden, W. E.; Feng, X. Ambient electrochemical ammonia synthesis with high selectivity on Fe/Fe oxide catalyst. *ACS Catal.* **2018**, *8*, 9312–9319.
- Wang, J.; Khaniya, A.; Hu, L.; Beazley, M.; Kaden, W. E.; Feng, X. A bifunctional catalyst for efficient dehydrogenation and electro-oxidation of hydrazine. *J. Mater. Chem. A* **2018**, *6*, 18050–18056.

(d) Graduate teaching experience

- PHZ 6439: Interfacial Physics, Fall 2021.

(e) Graduate students mentored

- Most recent – Chair of thesis/dissertation committees (overall number = **4**):
 - Lin Hu, Ph.D. in Materials Science and Engineering, graduated in Fall 2020.
 - Zackary Parsons, Ph.D. in Physics, graduated in Spring 2023.
 - Kaige Shi, Ph.D. candidate in Physics.
 - Zhen Meng, Ph.D. candidate in Chemistry.
- Up to 5 most recent – Member of thesis/dissertation committees (overall number = **16**):
 - Azina Rahmani, Ph.D. in Chemistry (2022).
 - Saisaban Fahad, Ph.D. in Materials Science and Engineering (2022).
 - Caicai Zhang, Ph.D. in Materials Science and Engineering (2021).
 - Weiwei Gao, Ph.D. in Chemistry (2021).
 - Zhiyuan Wei, Ph.D. in Chemistry (2021).
- Total number of graduate students mentored on thesis/dissertation committees: **20**

(f) Other synergistic activities related to Graduate Education

- Recruited and mentored undergraduate and graduate students in research, including female and minority students who have received fellowships and awards for research.
- Promoted interdisciplinary research, education, and outreach activities on renewable energy through the Renewable Energy and Chemical Transformations (REACT) Cluster at UCF.
- Served in the Physics Graduate Recruitment Committee, Graduate Admission Committee, and Written Candidacy Exam Committee to enhance the Physics Graduate Program.
- Co-development and improvement (with Dr. William Kaden) of an interdisciplinary new graduate course (PHZ 6439: Interfacial Physics) that attracted graduate students from Physics, Chemistry, and Engineering.
- Lin Hu, the first Ph.D. student I mentored, received the Outstanding Dissertation Award and the College of Engineering & Computer Science Graduate Excellence Award.