

1. Name: Nan Zhang

2. Degrees

Degree	Discipline	Institution	Year
Ph.D.	Mechanical Engineering	West Virginia University	2021
M.S.	Materials Science and Engineering	Harbin Institute of Technology	2014

3. Academic Experience

Institution	Rank & Title	Period
University of West Florida	Assistant Professor	2024-
National Energy Technology Laboratory	Research Fellow	2016-2020
West Virginia University	Research Assistant	2015-2016
Harbin Institute of Technology	Research and Teaching Assistant	2012-2014

4. Non-Academic Experience

Company	Job Title & Position Description	Period
Saint-Gobain	Senior Engineer & Group Leader - Research and evaluate new technology applications of ceramic and refractory materials, drive the reduction of carbon footprint of materials processing	2022-2024

5. Certifications or Professional Registrations

- Saint-Gobain Higgins Grinding Technology Center Training Level 3 and Level 4 Certificates.

6. Current Memberships in Professional Organizations

- Member, American Ceramic Society.
- Member, American Electrochemical Society.

7. Honors and Awards

- Oak Ridge Institute for Science and Education Fellowship, 2016-2020.

- Principal Investigator for the Project on Neutron Scattering Characterization of the Advanced Catalytic Materials, Oak Ridge National Laboratory.
- West Virginia University Scholarship, 2015-2016.

8. Service Activities (within and outside of the institution)

- Reviewer of papers: *Frontiers in Energy Research*, *Ceramics International*, *International Journal of Hydrogen Energy*.
- Saint-Gobain “Sustainability Education/Communication Committee”, Committee Leader (2022-2023)
- Member of Saint-Gobain “Marketing Intelligence Community” (2022-2023)
- Assisted and interpreted the U.S.-China Clean Coal Industry Forum organized by the U.S. Department of Energy and China’s National Energy Administration, (2017, 2019)

9. List the Most Important Publications and Presentations

- Zhang, N., Li, W., Berry, D., Surdoval, W., Shekhawat, D., & Liu, X. (2017). A New Insight into the Oxygen Reduction Reaction on High-Performance Cation-Ordered PBCO Perovskite as IT-SOFC Cathode. *ECS Transactions*, 78(1), 643.
- Zeng, Z., Li, W., Chen, X., Zhang, N., Qi, H., & Liu, X. (2020). Nanosized FeS₂ Particles Caged in the Hollow Carbon Shell as a Robust Polysulfide Adsorbent and Redox Mediator. *ACS Sustainable Chemistry & Engineering*, 8(8), 3261-3272.
- Hu, S., Finklea, H., Li, W., Li, W., Qi, H., Zhang, N., & Liu, X. (2020). Alternating Current Electrophoretic Deposition of Gadolinium Doped Ceria onto Yttrium Stabilized Zirconia: A Study of the Mechanism. *ACS Applied Materials & Interfaces*, 12(9), 11126-11134.
- Hu, S., Li, W., Li, W., Zhang, N., & Liu, X. (2019). A Study on the Electrophoretic Deposition of Gadolinium Doped Ceria on Polypyrrole Coated Yttrium Stabilized Zirconia, *Journal of Colloid and Interface Science* 555, 115-123.
- Hu, S., Li, W., Li, W., Zhang, N., & Liu, X. (2019). Aqueous Electrophoretic Deposition of Gadolinium Doped Ceria. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 579, 123717.
- Qi, H., Thomas, T., Li, W., Li, W., Xia, F., Zhang, N., ... & Liu, X. (2019). Reduced thermal expansion and enhanced redox reversibility of La_{0.5}Sr_{1.5}Fe_{1.5}Mo_{0.5}O_{6-δ}

Anode material for solid oxide fuel cells. ACS Applied Energy Materials, 2(6), 4244-4254.

- Li, W., Guan, B., Ma, L., Hu, S., Zhang, N., & Liu, X. (2018). High-performing triple-conductive Pr₂NiO_{4+δ} anode for proton-conducting steam solid oxide electrolysis cell. Journal of Materials Chemistry A, 6(37), 18057-18066.
- Li, W., Guan, B., Yang, T., Zhang, N., Zhang, X., & Liu, X. (2017). On the bulk transport process and its impact on the electrode behavior of mixed conducting electrodes for SOFCs. Physical Chemistry Chemical Physics, 19(34), 23218-23228.
- Li, W., Guan, B., Yan, J., Zhang, N., & Liu, X. (2016). Enhanced surface exchange activity and electrode performance of (La_{2-2x}Sr_{2x})(Ni_{1-x}Mn_x)O_{4+δ} cathode for intermediate temperature solid oxide fuel cells. Journal of Power Sources, 318, 178-183.
- Zhang, N., Li, & Liu, X. (2016). Oxygen Reduction Reaction Kinetics of PrBaCo₂O_{5+δ} As SOFC Cathode. ECS Meeting Abstracts, 28, 1368-1368.
- “Oxygen Reduction Reaction on High-Performance Cation-ordered LBCO Perovskite as IT-SOFC Cathode.” Poster Presentation at the 2018 Gordon Research Conference in Solid State Studies in Ceramics, South Hadley, MA. Aug 2018.
- “A New Insight into the Oxygen Reduction Reaction on High-Performance Cation-Ordered PBCO Perovskite as IT-SOFC Cathode.” 2017 Fuel Cell Seminar & Energy Exposition, Long Beach, CA. Nov 2017.
- “The Crucial Role of Cation Ordered in LnBaCo₂O_{5+δ} Perovskite Materials Used as SOFC Cathode.” 41st International Conference and Exposition on Advanced Ceramics and Composites, Daytona Beach, FL. Jan 2017
- “Oxygen Reduction Reaction Kinetics of NdBaCo₂O_{5+δ} as Solid Oxide Fuel Cell Cathode.” 229th ECS Meeting, San Diego, CA. May 2016

10. List the Most Recent Professional Development Activities

- Participated in the 243rd ECS Meeting and 18th International Symposium on Solid Oxide Fuel Cells (SOFC-XVIII), Boston, MA, May 2023.
- Participated in Gordon Research Conference in Solid State Studies in Ceramics, South Hadley, MA, August 2022.