Nan Jiang

Department of Chemistry & Department of Physics
University of Illinois Chicago
845 West Taylor Street
Chicago, IL 60607, USA

Email: njiang@uic.edu
Tel: 312-355-3741
Fax: 312-996-0431
Website: http://jiang.lab.uic.edu

EMPLOYMENT

08. 2025 – present Department of Chemistry, University of Illinois Chicago, Chicago, IL
Professor

08. 2025 – present Department of Physics, University of Illinois Chicago, Chicago, IL
Professor

08. 2021 – 08. 2025 Department of Chemistry, University of Illinois Chicago, Chicago, IL
Associate Professor

02. 2024 – 08. 2025 Department of Physics, University of Illinois Chicago, Chicago, IL
Associate Professor

08. 2015 – 08. 2021 Department of Chemistry, University of Illinois Chicago, Chicago, IL
Assistant Professor

08. 2010 – 08. 2015 Department of Chemistry, Northwestern University, Evanston, IL
Postdoctoral Fellow (Advisor: Professor Richard Van Duyne)

EDUCATION

09. 2004 – 07. 2010 Institute of Physics, Chinese Academy of Sciences, Beijing, China
Ph.D. in Condensed Matter Physics (Advisor: Professor Hongjun Gao)

03. 2008 – 09. 2009 Max Planck Institute for Solid State Research, Stuttgart, Germany
Joint Ph.D. Student (Advisor: Professor Klaus Kern)

09. 2000 – 07. 2004 University of Science and Technology of China, Hefei, China
B.S. in Materials Physics

SELECTED HONORS AND AWARDS

Visiting Professor, Department of Chemistry and Applied Biosciences, ETH, Switzerland, 2026
Visiting Professor, Department of Chemistry, National Taiwan University, ROC, 2025
American Vacuum Society Fellow, 2023
Visiting Professor, Chimie Department at Université Paris Cité, France, 2023
American Chemical Society Richard P. Van Duyne Award in Experimental Physical Chemistry, 2022
The Journal of Chemical Physics Editor's Choice Award, 2021
American Vacuum Society Prairie Chapter Early Career Researcher Award, 2020
National Science Foundation CAREER Award, 2020
Director's Award, Institute of Physics, Chinese Academy of Sciences, 2007

PUBLICATIONS (Total Citations: 3852, h-index: 35)

1. S. Mahapatra, J. Seale, S.Rajak, X. Zhang, **N. Jiang**, J.F. Stoddart, "Chemical and Structural Insights

into Non-Equilibrium Polyrotaxanes Formed by Molecular Pumps", *Nano Letters*, 25, 12343-12350, 2025, https://doi.org/10.1021/acs.nanolett.5c03007.

2. S. Mahapatra, L. Li, **N. Jiang**, "Surface Characterization of N-Heterocyclic Carbenes on Gold and Silver: Exploring Distinct Crystalline Facets", *ChemPhysChem*, 00, e202500227 (1-8), 2025, https://doi.org/10.1002/cphc.202500227.
3. S. Rajak, C. Siribaddana, **N. Jiang**, "Probing diffusivity and configurational flexibility of a tetrabenzoporphyrin on metal surfaces by tip-enhanced Raman spectroscopy", *Optics Communications*, 591, 132037 (1-6), 2025, https://doi.org/10.1016/j.optcom.2025.132037.
4. L. Li, J. F. Schultz, S. Mahapatra, D. Liu, X. Zhang, **N. Jiang**, "Optical Spectroscopic Probing and Atomic Visualization of the Motion of N-Heterocyclic Carbenes on Ag(111)", *ACS Nano*, 19, 15363-15370, 2025, https://doi.org/10.1021/acsnano.4c14363 [Cover]
5. S. Rajak, J. F. Schultz, L. Li, **N. Jiang**, "Atomistic Insight into Elemental 2D Material Interfaces and Heterostructures", *Annual Review Physical Chemistry*, 76, 83-102, 2025, https://doi.org/10.1146/annurev-physchem-082423-124941.
6. L. Li, S. Mahapatra, J.F. Schultz, X. Zhang, **N. Jiang**, "Single-Molecule Spectroscopic Probing of N-heterocyclic Carbenes on a Two-Dimensional Metal", *Chem*, 11, 102290 (1-9), 2025, https://doi.org/10.1016/j.chempr.2024.08.013.
[UIC Today report: https://today.uic.edu/studying-new-2d-materials-one-molecule-at-a-time]
7. L. Li, S. Mahapatra, J. F. Schultz, X. Zhang, **N. Jiang**, "Chemically Interrogating N-Heterocyclic Carbenes on a Metal Surface Using Single-Molecule Vibrational Spectroscopy", *ACS Nano*, 18, 32118–32125, 2024, https://doi.org/10.1021/acsnano.4c10942 [Cover]
8. S. Mahapatra, C. Siribaddana, L. Li, S. Rajak, X. Zhang, **N. Jiang**, "Charge Recognition in $Ru(bpy)_3^{2+}$ on a Metal Surface via Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", *The Journal of Physical Chemistry C*, 128, 13900–13908, 2024, https://doi.org/10.1021/acs.jpcc.4c02758.
9. K. Wang, S. Choyal, J. F Schultz, J. McKenzie, L. Li, X. Liu, **N. Jiang**, "Borophene: Synthesis, Chemistry, and Electronic Properties", *ChemPlusChem*, e202400333 (1-28), 2024, https://doi.org/10.1002/cplu.202400333.
10. D. Liu, L. Li, **N. Jiang**, "Nanoscale Chemical Probing of Metal-Supported Ultrathin Ferrous Oxide via Tip-Enhanced Raman Spectroscopy and Scanning Tunneling Microscopy", *Chemical & Biomedical Imaging*, 2, 345–351, 2024, https://doi.org/10.1021/cbmi.4c00015. [Cover]
11. K. Wang, D. Liu, M.K. Manna, G. Yang, L. Li, X. Zhang, A.J.L. Ayitou, **N. Jiang**, "Substrate effects in the self-assembling of N,N-diphenylquinodimethyl thioamide on transition metals", *The Journal of Physical Chemistry C*, 127, 16339-16345, 2023, https://doi.org/10.1021/acs.jpcc.3c01663. [Cover]
12. L. Li, J.F. Schultz, S. Mahapatra, X. Liu, X. Zhang, M. Hersam, **N. Jiang**, "Atomic-Scale Insights into the Interlayer Characteristics and Oxygen Reactivity of Bilayer Borophene", *Angewandte Chemie International Edition*, 62, e2023065 (1-7), 2023, https://doi.org/10.1002/anie.202306590.
13. B. Hou, T. Zhang, H. Yang, X. Han, L. Liu, L. Li, C. Grazioli, X. Wu, **N. Jiang**, Y. Wang, "Advances in probing single biomolecules: From DNA bases to glycans", *Interdisciplinary Materials*, 2, 511-528, 2023, https://doi.org/10.1002/idm2.12106.
14. S. Mahapatra, D. Liu, C. Siribaddana, K. Wang, L. Li, **N. Jiang**, "Localized Surface Plasmon Controlled Chemistry at and beyond the Nanoscale ", *Chemical Physics Reviews*, 4, 021301 (1-16), 2023, https://doi.org/10.1063/5.0143947. [Featured Article] [Cover]
15. D. Liu, L. Li, B.S.A. Gedara, M. Trenary, **N. Jiang**, "The selective blocking of potentially catalytically-active sites on surface-supported iron oxide catalysts", *Materials Chemistry Frontiers*, 7, 476-482, 2023, https://doi.org/10.1039/D2QM01025A. [Frontiers Emerging Investigators Series]

16. S. Mahapatra and **N. Jiang**, "Precise Tracking of Tip-Induced Structural Variation at the Single-Chemical-Bond Limit", *Light: Science & Applications*, 12, 21 (1-2), 2023, https://doi.org/10.1038/s41377-022-01055-5.
17. M. Pálmai, J. Beckwith, N. Emerson, T. Zhao, E. Kim, S. Yin, P. Parajuli, K. Tomczak, K. Wang, B. Sapkota, M. Tien, **N. Jiang**, R. Klie, H. Yang, P. Snee, "Parabolic Potential Surfaces Localize Charge Carriers in Non-blinking Long-lifetime "Giant" Colloidal Quantum Dots", *Nano Letters,* 22, 9470-9476, 2022, https://doi.org/10.1021/acs.nanolett.2c03563.
18. P. El-Khoury, **N. Jiang**, Z. Schultz, "Nanophotonics for Chemical Imaging and Spectroscopy", *The Journal of Physical Chemistry C*, 126, 17471-17473, 2022, https://doi.org/10.1021/acs.jpcc.2c06603 [Cover]
19. J.F. Schultz and **N. Jiang**, "Characterizations of two-dimensional materials with cryogenic ultrahigh vacuum near-field optical microscopy in the visible range", *JVST A: Journal of Vacuum Science and Technology*, 40, 040801 (1-17), 2022, https://doi.org/10.1116/6.0001853. [Featured Article]
20. S. Mahapatra, J.F. Schultz, L. Li, X. Zhang, **N. Jiang**, "Chemical Characterization of a Three-Dimensional Double-Decker Molecule on Surface via Scanning Tunneling Microscopy Based Tip-Enhanced Raman Spectroscopy", *The Journal of Physical Chemistry C*, 126, 8734-8741, 2022, https://doi.org/10.1021/acs.jpcc.2c01434. [Cover]
21. L. Li, J.F. Schultz, S. Mahapatra, Z. Lu, X. Zhang, **N. Jiang**, "Chemically identifying single adatoms with single-bond sensitivity during oxidation reactions of borophene", *Nature Communications*, 13, 1796 (1-9), 2022, https://doi.org/10.1038/s41467-022-29445-8.
22. J.F. Schultz, L. Li, S. Mahapatra, **N. Jiang**, "Chemically imaging nanostructures formed by the covalent assembly of molecular building blocks on a surface with ultrahigh vacuum tip-enhanced Raman spectroscopy", *Journal of Physics: Condensed Matter*, 34, 204008 (1-10), 2022, https://doi.org/10.1088/1361-648X/ac57d8. [Emerging Leaders 2021 Special Issue]
23. S. Mahapatra, J.F. Schultz, L. Li, X. Zhang, **N. Jiang**, "Controlling Localized Plasmons via an Atomistic Approach: Attainment of Site-Selective Activation inside a Single Molecule", *Journal of the American Chemical Society,* 144, 5, 2051-2055, 2022, https://doi.org/10.1021/jacs.1c11547. [Cover] [C&EN News Article]
24. H.-T. Zhang, T.J. Park, A.N.M.N. Islam, D.S.J. Tran, S. Manna, Q. Wang, S. Mondal, H. Yu, S. Banik, S. Cheng, H. Zhou, S. Gamage, S. Mahapatra, Y. Zhu, Y. Abate, **N. Jiang**, S.K.R.S. Sankaranarayanan, A. Sengupta, C. Teuscher, and S. Ramanathan, "Reconfigurable perovskite nickelate electronics for artificial intelligence", *Science*, 375, 6580, 533-539, 2022, https://doi.org/10.1126/science.abj7943.
25. J.F. Schultz and **N. Jiang**, "Noble Metal Substrate Identity Effects on the Self-Assembly, Dynamics, and Dehydrocyclization Reaction of Octaethylporphyrin Molecules", *The Journal of Physical Chemistry C*, 125, 43, 23680-23687, 2021, https://doi.org/10.1021/acs.jpcc.1c05814.
26. M. Li, D. Liu, X. Chen, Z. Yin, H. Shen, A. Aiello, K. McKenzie, **N. Jiang**, X. Li, M. Wagner, D. Durkin, H. Chen, D. Shuai, "Radical-Driven Decomposition of Graphitic Carbon Nitride Nanosheets: Light Exposure Matters", *Environmental Science & Technology*, 55, 18, 12414–12423, 2021, https://doi.org/10.1021/acs.est.1c03804.
27. L. Li, J.F. Schultz, S. Mahapatra, C. Shaw, X. Liu, X. Zhang, M. Hersam, **N. Jiang**, "Probing interfacial interactions in an organic/borophene heterostructure with angstrom resolution", *Journal of the American Chemical Society*, 143, 38, 15624-15634, 2021, https://doi.org/10.1021/jacs.1c04380. [Cover]
28. L. Li and **N. Jiang**, "Proximity and single-molecule energetics", *Science*, 373, 392-393, 2021, https://doi.org/10.1126/science.abj5860.
29. L. Li, S. Mahapatra, D. Liu, Z. Lu, **N. Jiang,** "On-Surface reaction with single molecule resolution: Progress, Challenges, and Opportunities", *ACS Nano*, 15, 3578-3585, 2021,

https://doi.org/10.1021/acsnano.0c08148.

30. S. Mahapatra, L. Li, J.F. Schultz, **N. Jiang**, "Methods to Fabricate and Recycle Plasmonic Probes for Ultrahigh Vacuum Scanning Tunneling Microscopy Based Tip-Enhanced Raman Spectroscopy", *Journal of Raman Spectroscopy*, 52, 573-580, 2021, https://doi.org/10.1002/jrs.5951.
31. J.F. Schultz, B. Yang, **N. Jiang**, "On-surface formation of metal-organic coordination networks with C···Ag···C and C=O···Ag interactions assisted by precursor self-assembly", *The Journal of Chemical Physics*, 154, 044703 (1-20), 2021, https://doi.org/10.1063/5.0038559. [Featured Article] [2020 JCP Emerging Investigators Special Collection]
32. J.F. Schultz, S. Li, S. Jiang, **N. Jiang**, "Scanning Probe-Based Optical Imaging and Spectroscopy", *Journal of Physics: Condensed Matter*, 32, 463001 (1-24), 2020, https://doi.org/10.1088/1361-648X/aba8c7. [Cover]
33. J. F. Schultz, S. Mahapatra, L. Li, **N. Jiang**, "The Expanding Frontiers of Tip-Enhanced Raman Spectroscopy", *Applied Spectroscopy*, 74, 1313-1340, 2020, https://doi.org/10.1177/0003702820932229.
34. S. Mahapatra, L. Li, J.F. Schultz, **N. Jiang**, "Tip-Enhanced Raman Spectroscopy: Chemical Analysis from Nanoscale to Angstrom Scale", *The Journal of Chemical Physics*, 153, 010902 (1-10), 2020, https://doi.org/10.1063/5.0009766. [Editor' Choice Award] [Featured Article] [Cover]
35. J.F. Schultz, B. Yang, **N. Jiang**, "Direct Observation of the Geometric Isomer Selectivity of a Reaction Controlled via Adsorbed Bromine", *Nanoscale*, 12, 2726-2731, 2020, https://doi.org/10.1039/C9NR09857G.
36. J.F. Schultz, L. Li, S. Mahapatra, C. Shaw, X. Zhang, **N. Jiang**, "Defining Multiple Configurations of Rubrene on a Ag(100) Surface with 5 Angstrom Spatial Resolution via Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", *The Journal of Physical Chemistry C*, 124, 2420-2426, 2020, https://doi.org/10.1021/acs.jpcc.9b09162. [Cover]
37. S. Mahapatra, J.F. Schultz, Y. Ning, J.-L. Zhang, **N. Jiang**, "Probing Surface Mediated Configurations of Nonplanar Regioisomeric Adsorbates using Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", *Nanoscale*, 11, 19877-19833, 2019, https://doi.org/10.1039/C9NR06830A.
38. J. Zhou, J. Zhang, H. Yang, Z. Wang, J. Shi, W. Zhou, **N. Jiang**, G. Xian, Q. Qi, Y. Weng, C. Shen, Z. Cheng, S. He, "Plasmon-induced hot electron transfer in Au–ZnO heterogeneous nanorods for enhanced SERS", *Nanoscale*, 11, 11782-11788, 2019, https://doi.org/10.1039/C9NR02969A.
39. S. Mahapatra, Y. Ning, J.F. Schultz, L. Li, J.-L. Zhang, **N. Jiang**, "Angstrom Scale Chemical Analysis of Metal Supported *Trans*- and *Cis*-Regioisomers by Ultrahigh Vacuum Tip-Enhanced Raman Mapping", *Nano Letters*, 19, 3267-3272, 2019, https://doi.org/10.1021/acs.nanolett.9b00826.
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41. P.J. Whiteman, J.F. Schultz, Z.D. Porach, H. Chen, **N. Jiang**, "Dual Binding Configurations of Subphthalocyanine on Ag(100) Substrate Characterized by Scanning Tunneling Microscopy, Tip-Enhanced Raman Spectroscopy and Density Functional Theory", *The Journal of Physical Chemistry C*, 122, 5489-5495, 2018, https://doi.org/10.1021/acs.jpcc.7b12068.
42. N. Chiang, **N. Jiang (co-first author)**, L.R. Madison, E.A. Pozzi, M.R. Wasielewski, M.A. Ratner, M.C. Hersam, T. Seideman, G.C. Schatz, R.P. Van Duyne, "Probing Intermolecular Vibrational Symmetry Breaking in Self-Assembled Monolayers with Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", *Journal of the American Chemical Society*, 139, 18664-18669, 2017, https://doi.org/10.1021/jacs.7b10645.
43. E.A. Pozzi, G. Goubert, N. Chiang, **N. Jiang**, C.T. Chapman, M. McAnally, A. Henty, T. Seideman, G. C. Schatz, M. C. Hersam, R. P. Van Duyne, "Ultrahigh Vacuum Tip-Enhanced Raman

Spectroscopy", *Chemical Reviews*, 117, 4961-4982, 2017, https://doi.org/10.1021/acs.chemrev.6b00343. [Cover]

44. N. Chiang, X. Chen, G. Goubert, D.V. Chulhai, X. Chen, E.A. Pozzi, **N. Jiang**, M.C. Hersam, T. Seideman, L. Jensen, R.P. Van Duyne, "Conformational Contrast of Surface-Mediated Molecular Switches Yields Angstrom-Scale Spatial Resolution in Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", *Nano Letters*, 16, 7774-7778, 2016, https://doi.org/10.1021/acs.nanolett.6b03958. [C&EN News Article]
45. **N. Jiang**, D. Kurouski, E. A. Pozzi, N. Chiang, M.C. Hersam, R.P. Van Duyne, "Tip-Enhanced Raman Spectroscopy: From Concepts to Practical Applications", *Chemical Physics Letters*, 659, 16-24, 2016, https://doi.org/10.1016/j.cplett.2016.06.035. [Frontiers Article] [Cover]
46. E.A. Pozzi, N.L. Gruenke, N. Chiang, **N. Jiang**, T. Seideman, G.C. Schatz, M.C. Hersam, R.P. Van Duyne, "Operational Regimes in Picosecond and Femtosecond Pulse-Excited Ultrahigh Vacuum SERS", *The Journal of Physical Chemistry Letters*, 7, 2971-2976, 2016, https://doi.org/10.1021/acs.jpclett.6b01151.
47. **N. Jiang**, N. Chiang, L. R. Madison, E. A. Pozzi, M. R. Wasielewski, T. Seideman, M. A. Ratner, M. C. Hersam, G. C. Schatz, R. P. Van Duyne, "Nanoscale Chemical Imaging of a Dynamic Molecular Phase Boundary with Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", *Nano Letters,* 16, 3898-3904, 2016, https://doi.org/10.1021/acs.nanolett.6b01405.
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49. N. Chiang, **N. Jiang**, D. Chulhai, E. Pozzi, M. Hersam, L. Jensen, T. Seideman, R.P. Van Duyne, "Molecular-Resolution Interrogation of Porphyrin Monolayer by Ultrahigh Vacuum Tip-Enhanced Raman and Fluorescence Spectroscopy", *Nano Letters*, 15, 4114-4120, 2015, https://doi.org/10.1021/acs.nanolett.5b01225.
50. M.D. Sonntag, E.A. Pozzi, **N. Jiang**, M.C. Hersam, R.P. Van Duyne, "Recent Advances in Tip-Enhanced Raman Spectroscopy", *The Journal of Physical Chemistry Letters*, 5, 3125-3130, 2014, https://doi.org/10.1021/jz5015746.
51. E.A. Pozzi, M.D. Sonntag, **N. Jiang**, N. Chiang, T. Seideman, M.C. Hersam, R.P. Van Duyne, "Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy with Picosecond Excitation", *The Journal of Physical Chemistry Letters*, 5, 2657-2661, 2014, https://doi.org/10.1021/jz501239z.
52. J.M. Klingsporn, **N. Jiang (co-first author)**, E.A. Pozzi, M.D. Sonntag, D. Chulhai, T. Seideman, L. Jensen, M.C. Hersam, R.P. Van Duyne, "Intramolecular Insight into Adsorbate-Substrate Interactions via Low Temperature, Ultrahigh Vacuum Tip -Enhanced Raman Spectroscopy", *Journal of the American Chemical Society*,136, 3881-3887, 2014, https://doi.org/10.1021/ja411899k.
53. E. Pozzi, M. Sonntag, **N. Jiang**, J. Klingsporn, M. Hersam, R.P. Van Duyne, "Tip-Enhanced Raman Imaging: An Emergent Tool for Probing Biology at the Nanoscale", *ACS Nano*, 7, 885-888, 2013, https://doi.org/10.1021/nn400560t.
54. M.N. Faraggi, **N. Jiang (co-first author)**, N. Gonzalez-Lakunza, A. Langner, S. Stepanow, K. Kern, A. Arnau, "Bonding and charge-transfer in metal-organic coordination networks on Au(111) with strong acceptor molecules", *The Journal of Physical Chemistry C*, 116, 24558-24565, 2012, https://doi.org/10.1021/jp306780n.
55. **N. Jiang**, E.T. Foley, J.M. Klingsporn, M.D. Sonntag, N.A. Valley, J.A. Dieringer, T. Seideman, G.C. Schatz, M.C. Hersam, R.P. Van Duyne, "Observation of Multiple Vibrational Modes in Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy Combined with Molecular-Resolution Scanning Tunneling Microscopy", *Nano Letters*, 12, 5061-5067, 2012, https://doi.org/10.1021/nl2039925. [Cover]

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57. L.Z. Zhang, Z.H. Cheng, Q. Huan, X.B. He, X. Lin, L. Gao, Z.T. Deng, **N. Jiang**, Q. Liu, S.X. Du, H.M. Guo, H.-J. Gao, "Site- and Configuration-Selective Anchoring of Iron-Phthalocyanine on the Step Edges of Au(111) Surface", *The Journal of Physical Chemistry C*, 115, 10791-10796, 2011, https://doi.org/10.1021/jp203046b.
58. Z.H. Cheng, S.X. Du, **N. Jiang**, Y.Y. Zhang, W. Guo, W.A. Hofer, H.-J. Gao, "High resolution scanning-tunneling-microscopy imaging of individual molecular orbitals by eliminating the effect of surface charge", *Surface Science*, 605, 415-418, 2011, https://doi.org/10.1016/j.susc.2010.11.010.
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60. Q. Liu, Y.Y. Zhang, **N. Jiang**, H.G. Zhang, L. Gao, S.X. Du, H.-J. Gao, "Identifying Multiple Configurations of Complex Molecules in Dynamical Processes: Time Resolved Tunneling Spectroscopy and Density Functional Theory Calculation", *Physical Review Letters,* 104, 166101 (1-4), 2010, https://doi.org/10.1103/PhysRevLett.104.166101.
61. **N. Jiang**, Y.Y. Zhang, Q. Liu, Z.H. Cheng, Z.T. Deng, S.X. Du, H.-J. Gao, M.J. Beck, S.T. Pantelides, "Diffusivity control in molecule-on-metal systems using electric fields", *Nano Letters*, 10, 1184-1188, 2010, https://doi.org/10.1021/nl903473p.
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of $Bi_2Fe_4O_9$ nanoparticles", *Chemistry Letters*, 33, 502-503, 2004, https://doi.org/10.1246/cl.2004.502.

71. M.Z. Wu, Y. Xiong, **N. Jiang**, M. Ning, Q.W. Chen, "Hydrothermal preparation of alpha-MnSe and $MnSe_2$ nanorods", *Journal of Crystal Growth*, 262, 567-571, 2004, https://doi.org/10.1016/j.jcrysgro.2003.10.065.

INVITED TALKS

upcoming

1. "Localized Surface Plasmon Controlled Chemistry at and beyond the Nanoscale", Department of Chemistry, Northwestern University, IL, January 2026.
2. "Localized Surface Plasmon Controlled Chemistry at and beyond the Nanoscale", Department of Chemistry, Utah State University, UT, January 2026.
3. "Single-molecule spectroscopic probing of N-heterocyclic carbenes on a two-dimensional metal", Pacifichem 2025, Honolulu, HI, December 2025.
4. "Single-molecule spectroscopic probing of N-heterocyclic carbenes on a two-dimensional metal", 13th International Conference on Advanced Vibrational Spectroscopy (ICAVS 13) and the 5th International Conference on Enhanced Spectroscopy (ICES5), Xiamen, **China**, November 2025.
5. "Localized Surface Plasmon Controlled Chemistry at and beyond the Nanoscale", Wilhelm und Else Heraeus Seminar, Physikzentrum Bad Honnef, **Germany**, November 2025.
6. "Probing the Angstrom-Scale Chemistry and Physics of Surfaces via Tip-Enhanced Raman Spectroscopy", University of Münster, Münster, **Germany**, October 2025.
7. "Probing Local Structural and Chemical Properties of Two-Dimensional Materials via Scanning Tunneling Microscopy Combined Tip-Enhanced Raman Spectroscopy", ICASEC – International Center for Advanced Studies of Energy Conversion, **Germany**, October 2025.
8. "Tip-Enhanced Raman Spectroscopy: Chemical Characterization from Nanoscale to Angstrom Scale", ICASEC – International Center for Advanced Studies of Energy Conversion, **Germany**, October 2025.
9. "Probing Chemistry at the Angstrom-Scale via Scanning Tunneling Microscopy Combined Tip-Enhanced Raman Spectroscopy", Department of Chemistry, Tufts University, MA, September 2025.

2025

10. “Single-molecule spectroscopic probing of N-heterocyclic carbenes on a two-dimensional metal", American Chemical Society Fall 2025 National Meeting, DC, August 2025
11. "Probing Chemistry at the Angstrom-Scale via Scanning Tunneling Microscopy Combined Tip-Enhanced Raman Spectroscopy", Department of Physics, National Central University, **ROC**, July 2025.
12. “Localized Surface Plasmon Controlled Chemistry at and beyond the Nanoscale”, Center for Condensed Matter Sciences, National Taiwan University, **ROC**, July 2025.
13. “Localized Surface Plasmon Controlled Chemistry at and beyond the Nanoscale”, Research Center for Applied Sciences, Academia Sinica, **ROC**, July 2025.
14. "Probing Chemistry at the Angstrom-Scale via Scanning Tunneling Microscopy Combined Tip-Enhanced Raman Spectroscopy", Department of Chemistry, National Tsing Hua University, **ROC**, July 2025.
15. "Probing Chemistry at the Angstrom-Scale via Scanning Tunneling Microscopy Combined Tip-Enhanced Raman Spectroscopy", Department of Chemistry, National Cheng Kung University, **ROC**, July 2025.
16. “Localized Surface Plasmon Controlled Chemistry at and beyond the Nanoscale”, The 23rd

Workshop on First-Principles Computational Materials Physics, Kaohsiung, **ROC**, July 2025.

17. "Probing Chemistry at the Angstrom-Scale via Scanning Tunneling Microscopy Combined Tip-Enhanced Raman Spectroscopy", National Synchrotron Radiation Research Center, **ROC**, July 2025.
18. "Probing Chemistry at the Angstrom-Scale via Scanning Tunneling Microscopy Combined Tip-Enhanced Raman Spectroscopy", Department of Chemistry, National Taiwan University, **ROC**, June 2025.
19. "Probing Chemistry at the Angstrom-Scale via Scanning Tunneling Microscopy Combined Tip-Enhanced Raman Spectroscopy", Department of Chemistry and Biochemistry, University of South Carolina, SC, April 2025.
20. "Single-molecule spectroscopic probing of N-heterocyclic carbenes on a two-dimensional metal", Pittcon Conference & Expo, Boston, MA, March 2025.
21. "Probing Chemistry at the Angstrom-Scale via Tip-Enhanced Raman Spectroscopy", Department of Chemistry, University of Chicago, IL, January 2025. [Closs Lecture]

2024

22. "Angstrom-scale Characterization of Atomically Thin Two-Dimensional Materials via Tip-Enhanced Raman Spectroscopy", 15th International Symposium on Atomic Level Characterizations for New Materials and Devices ALC '24, Matsue, **Japan**, November 2024.
23. "Atomic-scale insights into the interlayer characteristics and oxygen reactivity of 2D materials", Federation of Analytical Chemistry and Spectroscopy Societies SciX Conference, Raleigh, NC, October 2024.
24. "Probing Chemistry at the Angstrom-Scale via Scanning Tunneling Microscopy Combined Tip-Enhanced Raman Spectroscopy", Department of Chemistry and Biochemistry, The Ohio State University, OH, October 2024.
25. "Probing the Angstrom-Scale Chemistry and Physics of Surfaces via Tip-Enhanced Raman Spectroscopy", Max Planck Institute for Multidisciplinary Sciences, Göttingen, **Germany**, September 2024.
26. "Angstrom-Scale Spectroscopic Visualization of Interfacial Interactions in an Organic/Two-Dimensional Materials Vertical Heterostructure ", International Conference on Internal Interfaces, ICII-2024, Marburg, **Germany**, September 2024.
27. "Probing the Angstrom-Scale Chemistry and Physics of Surfaces via Tip-Enhanced Raman Spectroscopy", Max Planck Institute for Solid State Research, Stuttgart, **Germany**, August 2024.
28. "Probing Chemistry at the Angstrom -Scale via Tip-Enhanced Raman Spectroscopy", The 28th International Conference on Raman Spectroscopy (ICORS), Rome, **Italy**, August 2024. [keynote]
29. "Probing the Angstrom-Scale Chemistry and Physics of Surfaces via Tip-Enhanced Raman Spectroscopy", Institute of Physics, Zagreb, **Croatia**, July 2024.
30. "Probing the Angstrom-Scale Chemistry and Physics of Surfaces via Tip-Enhanced Raman Spectroscopy", Department of Applied Physics, University of Campinas, Campinas, **Brazil**, May 2024.
31. "Probing the Angstrom-Scale Chemistry and Physics of Surfaces via Tip-Enhanced Raman Spectroscopy", Brazilian Physical Society Autumn Meeting 2024, Florianopolis, **Brazil**, May 2024.
32. "Probing the Angstrom-Scale Chemistry and Physics of Surfaces via Tip-Enhanced Raman Spectroscopy", Department of Physics, University of Nevada, Reno, NV, May 2024.
33. "Probing Chemistry at the Angstrom-Scale via Scanning Tunneling Microscopy Combined Tip-Enhanced Raman Spectroscopy", Institute of Applied Physics, TU Wien, Vienna, **Austria**, March 2024.
34. "Probing Physical and Chemical Properties at the Angstrom-Scale via Scanning Tunneling

Microscopy and Tip-Enhanced Raman Spectroscopy", Leibniz-Institut für Analytische Wissenschaften – ISAS, Berlin, **Germany**, March 2024.

35. "Probing Chemistry at the Angstrom-Scale via Scanning Tunneling Microscopy Combined Tip-Enhanced Raman Spectroscopy", Department of Chemistry, Emory University, GA, March 2024.
36. "Probing the Angstrom-Scale Chemistry and Physics of Surfaces via Tip-Enhanced Raman Spectroscopy", Argonne National Laboratory, IL, February 2024.
37. "Atomic-Scale Insights into the Interlayer Characteristics and Oxygen Reactivity of Borophene", Pittcon Conference & Expo, San Diego, CA, February 2024.
38. "Probing Angstrom-Scale Chemistry via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry, Brown University, RI, February 2024.

2023

39. "Probing Angstrom-Scale Chemistry via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry, University of Houston, TX, November 2023.
40. "Probing Chemistry at Angstrom Scale via Localized Surface Plasmons", 69th American Vacuum Society International Symposium and Exhibition, Portland, OR, November 2023.
41. "Probing Physical and Chemical Properties at the Ångström-Scale via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Swiss Federal Laboratories for Materials Science and Technology, Dübendorf, **Switzerland**, October 2023.
42. "Probing Angstrom-Scale Chemistry via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry and Applied Biosciences, ETH Zurich, Zurich**, Switzerland**, October 2023.
43. "Probing Angstrom-Scale Chemistry via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", 40 Years of Surface Science and Nanotechnology (40nano), Ascona, **Switzerland**, October 2023.
44. "Probing Angstrom-Scale Chemistry via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", University of Chinese Academy of Sciences, Beijing, **China**, September 2023.
45. "Probing Angstrom-Scale Chemistry via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", 20th International Microscopy Congress (IMC), Busan, **Korea**, September 2023.
46. "Probing Physical and Chemical Properties at the Ångström-Scale via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Physics, University of Notre Dame, IN, September 2023.
47. "Probing Local Structural and Chemical Properties of Atomically Thin Two-Dimensional Materials via Tip-Enhanced Raman Spectroscopy", 83th Physical Electronics Conference (PEC), La Crosse, WI, August 2023. [keynote]
48. "Probing Chemistry at the Angstrom-Scale via Tip-Enhanced Raman Spectroscopy", Dynamics at Surfaces - Gordon Research Conferences, Newport, RI, July 2023.
49. "Tip-Enhanced Raman Spectroscopy: Chemical Analysis from Nanoscale to Angstrom Scale", Department of Chemistry, Université Paris Cité, Paris, **France**, June 2023.
50. "Probing Single-Bond Chemistry via Nano-Confined Localized Surface Plasmon", Department of Chemistry, University of Oxford, Oxford, **United Kingdom**, June 2023.
51. "Probing Single-Bond Chemistry via Nano-Confined Localized Surface Plasmon", Department of Materials Science and Metallurgy, University of Cambridge, Cambridge, **United Kingdom**, June 2023. [Goldsmiths' Seminar]
52. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", 2023 Canadian Chemistry Conference and Exhibition, Vancouver, **Canada**, June 2023.

53. "Probing Chemistry at the Angstrom Scale via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry, University of Washington, WA, May 2023.
54. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry, Northern Illinois University, IL, February 2023.
55. "Probing Chemistry at the Angstrom-Scale via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry, University of Kansas, KS, February 2023.
56. "Probing Single-Bond Chemistry via Nano-Confined Localized Surface Plasmon", Department of Chemistry and Biochemistry, University of California San Diego, CA, January 2023.

2022

57. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry, Sorbonne University, Paris, **France**, November 2022.
58. "Atomic-Scale Probing of Chemically Modified Borophene via Tip-Enhanced Raman Spectroscopy", TERS-8 Conference, Pairs, **France**, November 2022. [keynote]
59. "Controlling Localized Plasmons via an Atomistic Approach", Federation of Analytical Chemistry and Spectroscopy Societies SciX Conference, Greater Cincinnati, KY, October 2022.
60. "Chemically identifying single adatoms with single-bond sensitivity during oxidation reactions of a polymorphic atomic monolayer", Federation of Analytical Chemistry and Spectroscopy Societies SciX Conference, Greater Cincinnati, KY, October 2022.
61. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry, Illinois Institute of Technology, IL, September 2022.
62. “Probing Angstrom-Scale Chemistry via Tip-Enhanced Raman Spectroscopy”, American Chemical Society Fall 2022 National Meeting, Chicago, IL, August 2022.
63. "Probing angstrom-scale chemistry via optical scanning tunneling microscopy", 2022 International Workshop on Low Dimensional Materials and Devices, Dalian, **China,** August 2022. (Virtual)
64. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry, University of Michigan, MI, April 2022.
65. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry, University of Texas at Austin, TX, April 2022.
66. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy ", Department of Chemistry, Lehigh University, PA, February 2022.

2021

67. "Direct Observation of the Geometric Isomer Selectivity via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Pacifichem, December 2021. (Virtual)
68. "Probing Molecule-Substrate Interactions at Angstrom Scale by Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", Pacifichem, December 2021. (Virtual)
69. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry, University of Nebraska-Lincoln, NE, December 2021.
70. "Tip-Enhanced Raman Spectroscopy: Chemical Analysis from Nanoscale to Angstrom Scale", the Center for Emergent Molecular Optoelectronics, Mississippi State University, MS, November 2021. (Virtual)
71. "Probing Molecule-Substrate Interactions at Angstrom Scale by Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", 67th American Vacuum Society Virtual Symposium, October 2021. (Virtual)
72. "Probing angstrom-scale interfacial characteristics in organic/2D heterostructures via tip-enhanced Raman spectroscopy", Federation of Analytical Chemistry and Spectroscopy Societies SciX Conference, Providence, RI, September 2021.
73. "Probing chemistry of surface-supported nanostructure at the angstrom-scale", Federation of

Analytical Chemistry and Spectroscopy Societies SciX Conference, Providence, RI, September 2021.

74. "Tip-Enhanced Raman Spectroscopy: Chemical Analysis from Nanoscale to Angstrom Scale", American Physical Society March Meeting 2021, March 2021. (Virtual)

2020

75. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", American Vacuum Society Prairie Chapter Symposium, September 2020. (Virtual)
76. "Defining Multiple Orientations of Single Molecules with Angstrom Scale Spatial Resolution via Tip-Enhanced Raman Spectroscopy", American Chemical Society Fall 2020 National Meeting, August 2020. (Virtual)
77. "Direct Observation of the Geometric Isomer Selectivity via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", American Chemical Society Fall 2020 National Meeting, August 2020. (Virtual)
78. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry, University of Chicago, IL, April 2020. (Virtual)
79. "Probing Chemistry of Surface-Supported Nanostructures at the Angstrom-Scale via Tip-Enhanced Raman Spectroscopy", Department of Chemistry, University of Iowa, IA, February 2020.
80. "Probing Chemistry of Surface-Supported Nanostructures at the Angstrom-Scale via Tip-Enhanced Raman Spectroscopy", Department of Chemistry, University of Connecticut, CT, February 2020.
81. "Probing Intermolecular and Molecule-Substrate Interactions at Angstrom Scale via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", National Institute of Standards and Technology, MD, January 2020.

2019

82. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Max Planck Institute for Solid State Research, Stuttgart, **Germany**, December 2019.
83. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy", Wilhelm und Else Heraeus Seminar, Physikzentrum Bad Honnef, **Germany**, December 2019.
84. "Angstrom Scale Chemical Analysis of Metal-supported Regioisomeric Assemblies by Ultrahigh Vacuum, Tip-enhanced Raman Spectroscopy", Federation of Analytical Chemistry and Spectroscopy Societies SciX Conference, Rising Stars in Plasmonics Session, Palm Spring, CA, October 2019.
85. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Physics and Astronomy, University of Wyoming, Laramine, WY, October 2019.
86. "Probing Intermolecular and Molecule-Substrate Interactions at Angstrom Scale by Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", American Chemical Society Fall 2019 National Meeting, San Diego, CA, August 2019.
87. "Probing Intermolecular and Molecule-Substrate Interactions at Angstrom Scale by Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", 8th ChinaNano Conference 2019, Beijing, ***China***, August 2019. [keynote]
88. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Center for Nanoscale Materials, Argonne National Laboratory, IL, July 2019.
89. "Angstrom Scale Chemical Analysis of Metal-supported Regioisomeric Assemblies by Ultrahigh Vacuum, TERS: Conformation and Interaction", 4th International Conference on Enhanced Spectroscopies 2019, London, Ontario, ***Canada***, June 2019.
90. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman

Spectroscopy", Department of Physics, University of Illinois Chicago, IL, April 2019.

91. "Intermolecular and Molecule-Substrate Interactions in Self-Assembled Monolayers Characterized by Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", American Chemical Society Spring 2019 National Meeting, Orlando, FL, April 2019.
92. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Physics and Astronomy, California State University, Northridge, CA, February 2019.
93. "Angstrom Scale Chemical Analysis via Scanning Tunneling Microscopy and Tip-Enhanced Raman Spectroscopy", Department of Chemistry & Biochemistry, Loyola University Chicago, IL, January 2019.

2018

94. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", School of Chemistry and Chemical Engineering, Lanzhou University, Lanzhou, **China**, November 2018.
95. "Intermolecular Interactions in Self-Assembled Nanostructures Characterized by Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", Federation of Analytical Chemistry and Spectroscopy Societies SciX Conference, Atlanta, GA, October 2018.
96. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", Department of Mechanical Engineering, The University of Hong Kong, **Hong Kong**, September 2018.
97. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", Center For Quantum Nanoscience, Ewha Womans University, Seoul, **Korea**, September 2018.
98. "Intermolecular Interactions in Self-Assembled Nanostructures Characterized by Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", The 26th International Conference on Raman Spectroscopy, Jeju, **Korea**, August 2018.
99. "Probing intermolecular interaction in self assembled monolayers on surfaces with ultrahigh vacuum tip-enhanced Raman spectroscopy", SPIE Nanoscience + Engineering, San Diego, CA, August 2018.
100. "Probing Intermolecular Interactions via Nanoimaging and Nanospectroscopy", 2018 International Workshop on Low Dimensional Materials and Devices, Yichang, **China**, August 2018.
101. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", Department of Chemistry, Roosevelt University, IL, February 2018.
102. "Recent progress in the study of surface chemistry on various noble metal surfaces by ultrahigh vacuum tip-enhanced Raman spectroscopy", The 48th Winter Colloquium on the Physics of Quantum Electronics, Snowbird, UT, January 2018.
103. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", Department of Physics, University of Utah, UT, January 2018.
104. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", School of Physical Science and Technology, Shanghai Tech University, Shanghai, **China**, January 2018.

2017

105. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", College of Chemistry and Molecular Engineering, Peking University, Beijing, **China**, December 2017.
106. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", Department of Physics, Beijing Institute of Technology, Beijing, **China**,

December 2017.

107. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", Department of Physics, Wuhan University, Wuhan, **China**, December 2017.
108. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", School of Materials Science and Engineering, Southeast University, Nanjing, ***China***, December 2017.
109. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", RIKEN, Wako, ***Japan***, November 2017.
110. "Recent progress in the study of surface chemistry on various noble metal surfaces by ultrahigh vacuum tip-enhanced Raman spectroscopy", SPIE Nanoscience + Engineering, San Diego, CA, August 2017.
111. "An Insight into Single-Molecule Processes via Nanoimaging and Nanospectroscopy", National Center for Nanoscience and Technology, Beijing, **China**, July 2017.
112. "An Insight into Single-Molecule Processes via Nanoimaging and Nanospectroscopy", 2017 International Workshop on Nanomaterials &Nanodevices, Beijing, **China**, July 2017.
113. "Nanoscale Chemical Imaging via Scanning Tunneling Microscopy and Advanced Raman Spectroscopy Techniques", School of Energy Science and Engineering, Nanjing Tech University, Nanjing, **China**, June 2017.

2016

114. "An Insight into Single-Molecule Processes via Nanoimaging and Nanospectroscopy", Department of Physics, Drexel University, PA, November 2016.

2015

115. "New Directions in Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy with Molecular-Resolution Scanning Tunneling Microscopy", EMN Fall Meeting, Las Vegas, NV, November 2015.
116. "New Directions in Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy", Pittcon Conference & Expo, New Orleans, LA, March 2015.
117. "New Directions in Ultrahigh Vacuum Tip-Enhanced Raman Spectroscopy with Molecular-Resolution Scanning Tunneling Microscopy", Department of Physics, McGill University, Montreal, **Canada**, March 2015.

SERVICES

1. Program Chair / Chair-Elect, American Vacuum Society Surface Science Division, 2023-2027
2. Vice-chair / Chair-Elect, American Vacuum Society Prairie Chapter, 2024-2027
3. Executive member, American Vacuum Society Prairie Chapter, 2016-2020, 2022-present
4. American Vacuum Society Prairie Chapter Awards Committee Chair, 2022-present
5. Committee member, Physical Electronic Conference, 2022-present
6. Guest Associate Editor for *The Journal of Physical Chemistry C, Optics Communications,* and *Applied Spectroscopy*
7. Reviewer for academic journals including *Science*, *Nature Chemistry, Nature Materials, Nature Reviews Physics, Nature Communications, Science Advances, Angewandte Chemie International Edition, Journal of the American Chemical Society, Journal of the American Chemical Society Au, Nano Letters, ACS Nano, Chemical Reviews, Advanced Materials, Advanced Science, National Science Review, Science Bulletin, Carbon, Light: Science & Application, Light: Advanced Manufacturing, ACS Photonics, ACS Applied Materials & Interfaces, ACS Applied Optical Materials, Accounts of Chemical Research, Nanoscale, Fundamental Research, The Journal of Physical Chemistry Letter, The Journal of Physical*

Chemistry, The Journal of Chemical Physics, Langmuir, Carbon, Analytical Chemistry, Physical Chemistry Chemical Physics, Surface Science, Optics Commnunications, Journal of Raman Spectroscopy, Advanced Optical Material, Journal of Physics: Condensed Matter, Applied Physics Letters, Applied Physics A, Journal of Physics D, ChemCatChem, ChemPhysChem, Nanotechnology, CrystEngComm, ECS Journal of Solid State Science and Technology, Journal of Vacuum Science & Technology, Talanta, Analytical Methods, Biosensors, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, ChemistrySelect

8. Grant reviewer for National Science Foundation, Department of Energy, American Chemical Society
9. Grant reviewer for the French National Research Agency
10. Grant reviewer for the Swiss National Science Foundation (SNSF)
11. Conference organizer: 82nd Physical Electronics Conference, 2022
12. Conference symposium organizer: Pacifichem 2025, Fall 2025 American Chemical Society National Meeting, 2023 American Vacuum Society National Meeting, Spring 2022 American Chemical Society National Meeting, Pacifichem 2021, Fall 2020 American Chemical Society National Meeting
13. Tutorial on nanoscale imaging for Department of Energy, 2021
14. Research Mentor, Chicago City College, 2018-present
15. Mentor, Hinsdale CHigh School District 86's Science Inquiry and Research course, 2017-present
16. Organizer, "Standard High & Ultra High Vacuum Seminar", University of Illinois Chicago, 2016