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EDUCATION

Sun Yat-sen University, Guangzhou, China	B.Sc.	1997	Chemistry
State University College at Buffalo, NY	M.A.	2002	Chemistry
University of Washington, Seattle, WA	Ph.D.	2006	Chemistry & Nanotechnology

TRAINING

2006 – 2008 Research Associate (Stanislaus S. Wong & Iwao Ojima)
Condensed Matter Physics & Materials Science Department
Brookhaven National Laboratory, Upton, NY

2003 – 2006 Research Assistant (Younan Xia)
Department of Chemistry, University of Washington, Seattle
Dissertation: Synthesis and Utilization of Metal Nanostructures

2001 – 2002 Research Assistant (Kimberly A. Bagley)
Department of Chemistry, State University College at Buffalo, NY
Thesis: Infrared Studies of Carbon Monoxide Binding of Fe-only Hydrogenase and
Carbon Monoxide Dehydrogenase/Acetyl CoA Synthase

EMPLOYMENT HISTORY

2016 – present Associate Professor
Department of Chemistry and Biochemistry, University of Arkansas, Fayetteville

2017 – 2018 Visiting Professor (hosted by Dr. Yimei Zhu and Drs. Jia Wang/Radoslav Adzic)
Condensed Matter Physics & Materials Science Department and Chemistry Division,
Brookhaven National Laboratory, Upton, NY

2010 – 2016 Assistant Professor
Department of Chemistry and Biochemistry, University of Arkansas, Fayetteville

2008 – 2010 Research Assistant Professor
Department of Biomedical Engineering, Washington University in St. Louis

HONORS

2019 Materials McElvain Seminar, Department of Chemistry, University of Wisconsin-Madison

2018 Named Arkansas Research Alliance Fellow

2015-18 Named Top 1% Highly Cited Researchers by Thomson Reuters

2017 Fulbright College of Arts and Sciences Master Researcher Award, University of Arkansas

2016 Established Investigator of the Year Runner-Up, Arkansas Bioscience Institute

2014 Women's Giving Circle Award, University of Arkansas

2012 Robert C. and Sandra Connor Endowed Faculty Fellowship, University of Arkansas

2011 Ralph E. Powe Junior Faculty Enhancement Award

2005 Chinese Government Award for Outstanding Self-financed Student Abroad

2005 Best Poster Award at the 2005 MRS Spring Meeting, San Francisco, CA

2004 Nanotechnology Fellowship, University of Washington

2003 Nanotechnology Fellowship, University of Washington

2002 Great Batch Enterprise Graduate Assistant Award, State University College at Buffalo, NY

1997 Outstanding Undergraduate Award, Sun Yat-sen University

PUBLICATIONS

(Note: Students from my group at UA are indicated as ¹undergraduate student; ²graduate student; ³postdoctoral fellow. Corresponding authors are indicated by *. The sum of times cited is 16,915 and the h-index is 56 as of July 2019. ORCID: [0000-0003-0012-9640](https://orcid.org/0000-0003-0012-9640))

AT THE UNIVERSITY OF ARKANSAS**2019**

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- 100) Alqahtany, M.;[†] Khadka, P.;[†] Niyonshuti, I.;^{2,†} Krishnamurthi, V.R.; Sadoon, A.A.; Challapalli, S.D.; **Chen, J.**;* Wang, Y.* Nanoscale Reorganizations of Histone-like Nucleoid Structuring Protein in *Escherichia coli* are caused by silver nanoparticles. *Nanotechnology* **2019**, *30*, 385101. (†co-first authors)
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- 98) Song, J.; Lin, L.; Yang, Z.; Zhu, R.; Zhou, Z.;* Li, Z.-W.;* Wang, F.; **Chen, J.**; Yang, H.;* Chen, X.* Self-Assembled Responsive Bilayered Vesicles with Adjustable Oxidative Stress for Enhanced Cancer Imaging and Therapy, *J. Am. Chem. Soc.* **2019**, *141*, *20*, 8158-8170.
- 97) Mano, R.H.;² Acharya, P.; Deng, S.; Crane, C.C.;² Reinhart, B.; Lee, S.; Tong, X.; Nykypanchuk, D.; Zhu, J.; Zhu, Y.; Greenlee, L.F.;* **Chen, J.*** Controlling the 3-D Morphology of Ni-Fe-Based Nanocatalysts for the Oxygen Evolution Reaction, *Nanoscale* **2019**, *11*, 8170-8184.
- 96) Jenkins, S.V.;* Nedosekin, D.A.; Shaulis, B.J.; Wang, T.J.;³ Jamsshidi-Parsian, A.; Pollock, E.D.; **Chen, J.**; Dings, R.P.M.; Griffin, R.J. Enhanced Photothermal Treatment Efficacy and Normal Tissue Protection via Vascular Targeted Gold Nanocages, *Nanotheranostics* **2019**, *3*, 145-155.
- 95) Chen, S.;³ Wu, H.;² Tao, J.; Xin, H.; Zhu, Y.; **Chen, J.*** Pt-Ni Seed-Core-Frame Hierarchical Nanostructures and Their Conversion to Nanoframes for Enhanced Methanol Electro-Oxidation, *Catalysts* **2019**, *9*, 39; DOI: 10.3390/catal9010039 (invited paper).

2018

- 94) Song, L.; Liang, Z.; Ma, Z.; Zhang, Y.; **Chen, J.**; Adzic, R.R.; Wang, J.X.* Temperature-Dependent Kinetics and Reaction Mechanism of Ammonia Oxidation on Pt, Ir, and PtIr Alloy catalysts, *J. Electrochem. Soc.* **2018**, *165*, J3095-J3100.
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- 89) Meeker D.G.;[†] Wang, T.;^{3,†} Harrington, W.N.; Zharov, V.P.; Johnson, S.A.; Jenkins, S.V.; Oyibo, S.E.;¹ Walker, C.M.; Mills, W.B.; Shirtliff, M.E.; Beenken, K.E.; **Chen, J.**;* Smeltzer, M.S.*

Versatility of Targeted Antibiotic-loaded Gold Nanoconstructs for the Treatment of Biofilm-associated Bacterial Infections, *Int. J. Hyperthermia* **2018**, *34*, 209-219. (†Equal contribution)

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- 87) Mathurin, L.E.;² Tao, J.; Xin, H.; Li, J.; Zhu, Y.; **Chen, J.*** Dendritic Core-Frame and Frame Multimetallic Rhombic Dodecahedra: A Comparison Study of Composition and Structure Effects on Electrocatalysis of Methanol Oxidation, *ChemNanoMat* **2018**, *4*, 76-87.

2017

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- 7) **Chen, J.**; Herricks, T.; Xia, Y. * Polyol Synthesis of Platinum Nanostructures: Control of Morphology through Manipulation of Reduction Kinetics, *Angew. Chem. Int. Ed.* **2005**, *44*, 2589-2592.
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- 4) Herricks, T.; Chen, J.; Xia, Y.* Polyol Synthesis of Platinum Nanoparticles: Control of Morphology with Sodium Nitrate, *Nano Lett.* **2004**, *4*, 2367-2371.
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- 2) Geissler, M.; **Chen, J.**; Xia, Y.* Comparative Study of Monolayers Self-assembled from Alkylisocyanides and Alkanethiols on Polycrystalline Pt Substrates, *Langmuir* **2004**, *20*, 6993-6997.

AT THE BUFFALO STATE COLLEGE

- 1) **Chen, J.**; Huang, S.; Seravalli, J.; Gutzman, H., Jr.; S., Derrick J.; Ragsdale, S.W.; Bagley, K.A.* Infrared Studies of Carbon Monoxide Binding to Carbon Monoxide Dehydrogenase/Acetyl-CoA Synthase from *Moorella thermoacetica*, *Biochemistry* 2003, *42*, 14822-14830.

NON-REFEREED PUBLICATIONS

- 1) Skrabalak, S.E.; **Chen, J.**; Neretina, S.; Qin, D. Beyond the Gold Standard: Bimetallic Nanomaterials Bring New Properties and Functions, *Part. Part. Syst. Charact.* **2018**, *35*, 1800111-3 (Editorial of the Special Issue).
- 2) Meeker, D.G.; **Chen, J.**.* Smeltzer, M.S.* Could Targeted, Antibiotic-loaded Gold Nanoconstructs be a New Magic Bullet to Fight Infection? *Nanomedicine*, **2016**, *18*, 2379-2382 (Invited Editorial Article).

BOOK CHAPTERS

(Note: Students from my group at UA are indicated as ¹undergraduate student; ²graduate student; ³postdoctoral fellow. Corresponding authors are indicated by *.)

1. **Chen, J.**.* Wang, T.;³ Meeker, D.; Smeltzer, M. Polymer Coated Gold Nanostructures for Controlled Release Drug Delivery. In *Nanoscale Soft Materials in Nano/Bio Medicine*, World Scientific, 2018; in press.
2. **Chen, J.*** Noble Metal Nanoparticle Platform. In *Cancer Theranostics*, Chen, X.; Wong S., Eds. Academic Press, 2014; pp327-346.
3. Jenkins, S.V.;² Muldoon, T.J.; **Chen, J.*** Plasmonic Nanostructures for Biomedical and Sensing Applications. In *Metallic Nanostructures: From Controlled Synthesis to Applications*, Xiong, X.; Lu, X., Eds. Springer, 2014; pp133-175.
4. Au, L.; **Chen, J.**; Wang, L. V.; Xia, Y.* Gold Nanocages for Cancer Imaging and Therapy. In *Methods in molecular biology (Clifton, N.J.)* 2010, *624*, pp83-99.

PATENTS

(Note: Students from my group at UA are indicated as ¹undergraduate student; ²graduate student; ³postdoctoral fellow. Corresponding authors are indicated by *.)

1. **Chen, J.**; Wang, J.; Liang, Z.; Song, L. Catalytic Compositions and Methods for Ethanol Oxidation, filed on 06/03/2019, U.S. Provisional Application.
2. **Chen, J.**; Greenlee, L.; Manso, R.;² Acharya, P.; Crane, C. Metal Oxide Core-Shell Nanoparticles and Applications Thereof, filed on 03/11/2019, U.S. Provisional Application.
3. **Chen, J.**; Wang, T.;³ Niyonshuti, I.I.;² Thallapuranam, S.K.; Gundampati, R.K.; Agrawal, S.; Quinn,

- K.; Jones, J. Biocompatible and Biodegradable Anionic Hydrogel System, filed on 05/11/2018, U.S. Provisional Application No. 62/670578.
4. **Chen, J.**; Crane, C.C.;² Wang, F. Copper-silica Core-shell Nanoparticles and Methods, filed on 2/14/2018, US CIP Application Serial No. 15/896,595.
 5. Smeltzer, M.; **Chen, J.**; Meeker, D.; Beenken, K. In vivo Photoacoustic and Photothermal Nanotheranostics of Biofilms, filed on 06/02/2015, US CIP Application Serial No. 14/728,849.
 6. Wong, S. S.; Ojima, I.; **Chen, J.** Carbon Nanotube-based Drug Delivery Systems and Methods of Making Same, US20100021471.
 7. Xia, Y.; **Chen, J.**; Herricks, T.E. Synthesis of Platinum Nanostructures, US20070289409.

PRESENTATIONS

(Note: Students from my group at UA are indicated as ¹undergraduate student; ²graduate student; ³postdoctoral fellow.)

CONFERENCE PRESENTATIONS

1. **Chen, J.**; Manso, R.;² Acharya, R.; Greenlee, L. Ni-Fe-based Nanostructures for Oxygen Evolution Reaction in Alkaline Media, 235th ECS meeting, Dallas, TX; oral (May 26-30, 2019)
2. Manso, R.;² Acharya, P.; Greenlee, L.; **Chen, J.** Surface Ligand Effects on Ni-Fe-based Nanocatalysts for Oxygen Evolution Reaction, 235th ECS meeting, Dallas, TX; poster (May 26-30, 2019)
3. Liang, Z.; Song, L.; Deng, S.; Zhu, Y.; Stavitski, E.; Adzic, R. R.; **Chen, J.**; Wang, J. X. 235th ECS meeting, Dallas, TX; oral (May 26-30, 2019)
4. Niyonshuti, I. I.;² Alqahtany, M.; Wang, Y.; **Chen, J.** Investigation of the Effects on Stability of Silver Nanoparticles, 2019 ACS Spring meeting, Orlando, FL; poster (March 31 – April 4, 2019)
5. **Chen, J.** Engineering Polydopamine-coated Gold Nanocages for Biomedical Applications, SWRM ACS meeting 2018, Little Rock, AR (November 7-10, 2018; invited talk)
6. **Chen, J.** Nanoparticle-mediated Photothermal Approach to Treatment of Biofilm Infections, SciX 2018, Atlanta, GA (October 21-26; invited talk)
7. **Chen, J.** Cu-Based Hybrid Nanostructures: From Syntheses to Applications, Noble Metal Nanoparticles Gordon Research Conference (June 17-22, 2018; invited talk)
8. Manso, R.H.;² Song, L.; Liang, Z.; Wang, J.X.; **Chen, J.** CuPt and CuPtRu Nanostructures for Ammonia Oxidation Reaction, 233rd ECS Meeting, Seattle, WA (May 13-17, 2018; oral)
9. **Chen, J.** Synthesis of Copper-Silica Core-Shell Nanostructures with Sharp and Stable Localized Surface Plasmon Resonance, FACSS Presents SciX 2017, Reno, Nevada (October 8-13, 2017; invited talk)
10. **Chen, J.** Synthesis of Electrocatalytically Active Copper-containing Multimetallic Nanostructures, 67th Annual Meeting of the International Society of Electrochemistry, Providence, RI (August 27-September 1, 2017; invited talk)
11. **Chen, J.** Seeded Growth of Copper-Platinum-Ruthenium Multi-metal Nanostructures as Active Electrocatalysts, 2017 ACS Fall Meeting, Washington DC (August 20-24, 2017; invited talk)
12. **Chen, J.**; Crane, C.C.;² Zong, G.; Shi, W. Catalytically-Active Plasmonic Copper Nanostructures, 2017 MRS Spring Meeting, Phoenix, AZ; poster (April 17-21, 2017)
13. Cameron, C.C.;² Wang, F.; **Chen, J.** Enhancing the Stability and Localized Plasmon Resonance of Cu Nanostructures with Thin Silica Shells, 2017 MRS Spring Meeting, Phoenix, AZ; oral (April 17-21, 2017)
14. **Chen, J.**; Jenkins, S.V.;² Meeker, D.; Smeltzer, M.S. Engineering Gold Nanoconstructs for Photoactivatable Controlled Release of Antibiotics, 2017 MRS Spring Meeting, Phoenix, AZ; poster (April 17-21, 2017)
15. **Chen, J.** Introduction of galvanic replacement reactions at the nanoscale to undergraduate students: Synthesis of hollow metal nanostructures, 2017 ACS Spring Meeting, San Francisco, CA (April 2-6, 2017; invited talk)

16. **Chen, J.** Seeded growth of catalytically active copper-based nanostructures, 2017 ACS Spring Meeting, San Francisco, CA (April 2-6, invited talk)
17. Mathurin, L.E.;² **Chen, J.** Electrochemical Study of Trimetallic Nanostructures for Methanol Oxidation, 229th ECS Meeting, San Diego, CA; Poster (May 29-June 2, 2016). *Mathurin won the 2nd place of poster award.*
18. **Chen, J.**; Miller, E.K.;¹ Jenkins, S.V.;² Meeker, D.G.; Smeltzer, M.S. Polymer-Coated Gold Nanocages for Photothermally-Controlled Release of Therapeutic Agents. International Congress of Hyperthermic Oncology, 2016, New Orleans, LA; Oral (April 11-15, 2016)
19. Miller, E.K.;¹ Jenkins, S.V.;² Meeker, D.G.; Smeltzer, M.S.; **Chen, J.** Engineering Gold Nanostructures for Targeted Delivery and Controlled Release of Antibiotics. NanoEngineering for Medicine and Biology (ASME NEMB), Houston, TX; Poster (February 21-24, 2016). *Miller received "Honorable Mention" in the poster competition.*
20. **Chen, J.**; Plasmonic-Magnetic Nanorods for Imaging and Therapeutics. Pacificchem 2015 meeting, Honolulu, Hawaii; Oral (December 15–20, 2015, invited talk)
21. **Chen, J.**; Understanding the Interactions of Theranostic Gold-based Nanostructures with Complex Biological Environment. 2015 Joint Southeastern/Southwest Regional Meeting, Memphis, TN; Oral (November 4–7, 2015, invited talk)
22. **Chen, J.**; Chen, S.;³ Jenkins, S.V.;² Crane, C.C.² Tailoring Gold-copper Anisotropic Nanostructures for Plasmonic Enhanced Catalysis. 2015 MRS Spring Meeting, San Francisco, CA; Oral (April 6–10, 2015)
23. **Chen, J.**; Jenkins, S.V.;² Meeker, D.G.; Beenken, K.; Smeltzer, M. Targeted Delivery of Antibiotics Using Gold-based Nanoparticle Platform for Antimicrobial Treatments. 2015 MRS Spring Meeting, San Francisco, CA; Oral (April 6–10, 2015)
24. **Chen, J.**; Crane, C.C.² Large-scale Synthesis of Segmented Heteronanostructures Using Mask-assisted Seeded Growth. 2015 MRS Spring Meeting, San Francisco, CA; Oral (April 6–10, 2015)
25. Jenkins, S.V.;² Meeker, D.G.; Smeltzer, M.S.; **Chen, J.** Fabrication of a Nanoconjugate for Synergistic Antibiotic and Photothermal Treatment of Resistant Bacteria, 2015 ACS Spring Meeting, Denver, CO; Poster (March 22–26, 2015)
26. Mathurin, L.E.;² Tao, J.; Chen, S.;³ **Chen, J.** Ruthenium Incorporated Platinum Copper Nanotubes for Electro-oxidation of Methanol, 2015 ACS Spring Meeting, Denver, CO; Poster (March 22–26, 2015)
27. Crane, C.C.;² **Chen, J.** Synthesis of Pt-Au and Pd-Au Bimetallic Heterostructures using Mask-assisted Seeded Growth, 2015 ACS Spring Meeting, Denver, CO; Poster (March 22–26, 2015)
28. **Chen, J.**; Chen, S.;³ Crane, C.;² Mathurin, L.² Jenkins, S.;² Site-selective Seeded Growth of Bimetallic Nanostructures and Their Catalytic Applications, Noble Metal Nanoparticles, GRC at Mt. Holyoke College, South Hadley, MA; Poster (June 15–20, 2014)
29. Mathurin, L.;² Chen, S.;³ **Chen, J.** Tailoring Surface Composition and Morphology of Platinum-copper Nanotubes through in situ Galvanic Replacement Reaction, 2014 ACS Spring Meeting, Dallas, TX; Poster (March 16–20, 2014)
30. Crane, C.;² **Chen, J.** Synthesis of Metallic Janus Nanoparticles using Silica as a Protecting Group, 2014 ACS Spring Meeting, Dallas, TX; Poster (March 16–20, 2014)
31. Jenkins, S.V.;² **Chen, J.**; Zhang, Y. Detection of Nanoparticle Aggregation in Complex, Biological Environment, 2014 ACS Spring Meeting, Dallas, TX; Poster (March 16–20, 2014)
32. **Chen, J.**; Jenkins, S.V.;² Srivatsan, A.; Reynolds, K.;¹ Pandey, R. Controlled Release of Hydrophobic Drugs from Poly(ethylene glycol) Covered Gold Nanocages, 2014 ACS Spring Meeting, Dallas, TX; Poster (March 16–20, 2014)
33. **Chen, J.**; Chen, S.;³ Jenkins, S.V.;² Miller, E.¹ Seeded Co-reduction of Cu-containing Bimetallic Nanostructures and Their Catalytic Activity, 2014 ACS Spring Meeting, Dallas, TX; Poster (March 16–20, 2014)
34. **Chen, J.**; Gold Nanocages-photosensitizer Conjugates for Dual-modal Image-guided Enhanced Photodynamic Therapy, 2013 ACS Midwest Meeting, Springfield, MO (October 16–20, 2013, invited

- talk)
35. **Chen, J.**; Taylor, E.;² Chen, S.;³ Mathurin, L.² Synthesis of Cu-Pt Bimetallic Nanostructure for Electro-oxidation of Alcohol, Cluser, Nanocrystals & Nanostructures, GRC at Mt. Holyoke College, South Hadley, MA; Poster (August 4–9, 2013)
 36. Jenkins, S.;² Srivastan, A.; Pandey, R.; **Chen, J.** Manipulating Drug Unloading from Gold Nanocages. Cancer Nanotechnology, Cancer Nanotechnology, GRC at Mount Snow Resort, West Dover, VT; Poster (July 14–19, 2013)
 37. Mathurin, L.;² **Chen, J.** Synthesis of Au/Ag-CdS Hybrid Nanostructures as Efficient Photocatalysts, 2013 ACS Spring Meeting, New Orleans, LA; Poster (April 7–11, 2013)
 38. **Chen, J.** Synthesis and Catalytic Performance of Pd-Fe₃O₄ Nanoparticles with Controllable Interfaces, 2012 ACS Fall Meeting, Philadelphia, PA (August 19–23, 2012, invited talk)
 39. **Chen, J.** The Use of Gold Nanoparticles in Photoacoustic Imaging, SNM Continuing Education, 2012 Annual Meeting, Miami Beach, FL (June 9–13, 2012, invited talk)
 40. Samir, J.V.;² Reynolds, K.;¹ **Chen, J.** Monitoring and Manipulating the Release of a Hydrophobic Photosensitizer from PEGylated Gold Nanocages. 4th Nanotechnology and Health Care Conference, Rockefeller Institute, University of Arkansas System; Poster (April 26–29, 2012)
 41. **Chen, J.**; Chen, S.;³ Si, R.; Taylor, E.;² Janzen, J.;¹ Seed-mediated Growth of Palladium-magnetite Nanoparticles. Clusters, Nanocrystals, and Nanostructures, GRC at Mt. Holyoke College, South Hadley, MA; Poster (July 24–29, 2011)
 42. **Chen, J.**; Shrestha, S.;¹ Jenkins, S.V.;² Stenken, J.A. Tailoring Polymer-covered Gold Nanocages for Chemical Sampling in a Microdialysis Device. Cancer Nanotechnology GRC at Colby College, Waterville, ME; Poster (July 17–22, 2011)
 43. **Chen, J.** Polymer-Covered Nanocages for Drug Delivery, The 3rd Nanotechnology and Health Care Conference, Rockefeller Institute, University of Arkansas System (April 6–9, 2011, invited talk)
 44. **Chen, J.** Gold Nanocages: Synthesis, Properties, and Biomedical Applications. The 1st Symposium on Nanotechnology for Public Health, Environment, and Energy at Washington University in St. Louis (September 24–25, 2009, invited talk)
 45. **Chen, J.**; Claus, C.; Laforest, R.; Zhang, Q.; Yang, M.; Gidding, M.; Welch, M.J.; Xia, Y. Biodistribution and Tumor Targeting of Gold Nanocages in a Mouse Tumor Model. 2009 ACS Fall Meeting, Washington D. C.; Oral (August 16–20, 2009)
 46. **Chen, J.** Gold Nanocages: Synthesis, Properties, and Biomedical Applications. The 4th Sino-US Nano Meeting, USTC, Hefei, China (July 2–3, 2009, invited talk)
 47. **Chen, J.**; Chen, S.; Zhao, X.; Kuznetsova, L. V.; Wong, S.S.; Ojima, I. Synthesis and Evaluation of Functionalized SWNT as Transporter for Tumor-targeting Drug Delivery. 2007 MRS Fall Meeting, Boston, MA; Poster (November 25–30, 2007)
 48. **Chen, J.**; Wang, D.; Xi, J.; Siekkinen, A.; Au, L.; Warsen, A.; Li, Z.-Y.; Zhang, H.; Xia, Y.; Li, X. Gold Nanocages for Photothermal Therapy. 2007 SPIE Photonics West, San Jose, CA: Oral (January 20–25, 2007)
 49. **Chen, J.**; Li, X.; Xia, Y. Engineering the Structure for Biomedical Applications. 2006 MRS Spring Meeting, San Francisco, CA; Oral (April 17–21, 2006)
 50. **Chen, J.**; Herricks, T.; Xia, Y. Morphology-controlled Synthesis of Platinum Nanostructures. Presented at 2005 MRS Spring Meeting, San Francisco, CA; Poster (March 28–April 1, 2005; awarded the Best Poster)

DEPARTMENTAL SEMINARS

1. **Materials McElvain Seminar** at Department of Chemistry, **University of Wisconsin-Madison** on April 18, 2019, titled “Nonprecious Metal Nanostructures: Syntheses, Properties, and Applications”.
2. Department of Chemistry, State University College at Buffalo, March 21, 2019.
3. Department of Chemistry, Wesleyan University, November 3, 2017
4. Department of Physics and Energy Science, University of Colorado at Colorado Springs, October 13, 2017

5. School of Materials Science and Engineering, Xi'an Jiaotong University, June 19, 2017
6. Department of Chemistry, Sun Yat-sen University, Guangzhou, China, December 26, 2016
7. Department of Chemistry, University of Science and Technology of China, December 20, 2016
8. Institute of Nanoscience and Nanotechnology, University of Arkansas, November 30, 2016
9. Department of Chemical Engineering, University of Arkansas, April 28, 2016
10. Department of Chemistry, University of Texas Rio Grande Valley, March 29, 2016.
11. Department of Chemistry, University of Notre Dame, IN, April 30, 2015.
12. Department of Chemistry, Purdue University, West Lafayette, IN, April 29, 2015.
13. Department of Chemistry and Biochemistry, University of California at Santa Cruz, April 10, 2015.
14. Department of Chemistry, University of Oklahoma, Norman, OK, March 6, 2015.
15. Department of Chemistry, Brown University, Providence, RI, February 5, 2015.
16. Department of Chemistry, Missouri State University, Springfield, MO, January 28, 2015.
17. Department of Chemistry, University of Miami, Miami, FL, November 14, 2014.
18. Center for Functional Nanomaterials, Brookhaven National Laboratory, Upton, NY, August 1, 2014.
19. Binghamton University, Binghamton, NY, March 28, 2014.
20. Department of Chemistry, Hendrix College, Conway, AR, November 5, 2012.
21. National Center for Toxicological Research, Jefferson, AR, April 20, 2011.
22. Condensed Matter Physics & Materials Science Department, Brookhaven National Laboratory, Upton, NY, July 21, 2006

TEACHING

Spring	2019	Physical Chemistry Laboratory (CHEM 3512L)
Fall	2018	Element of Physical Chemistry Laboratory (CHEM 3451L) Nanotechnology Laboratory: Module 2 (CHEM 4153L)
Fall	2017	Nanotechnology Laboratory: Module 2 (CHEM 4153L)
Spring	2017	Physical Chemistry of Materials (CHEM 649V-001)
Fall	2016	Element of Physical Chemistry Laboratory (CHEM 3451L) Nanotechnology Laboratory: Module 2 (CHEM 4153L)
Spring	2016	Chemistry for Majors II (CHEM 1223)
Fall	2015	Element of Physical Chemistry (CHEM 3453) Nanotechnology Laboratory: Module 2 (CHEM 4153L)
Spring	2015	Physical Chemistry Laboratory (CHEM 3512L)
Fall	2014	Element of Physical Chemistry Laboratory (CHEM 3451L) Nanotechnology Laboratory: Module 2 (CHEM 4153L)
Spring	2014	Materials for Theranostics (CHEM 649V-002)
Fall	2013	Chemistry for Majors I (CHEM 1213) Nanotechnology Laboratory: Module 2 (CHEM 4153L)
Spring	2013	Chemistry for Majors II (CHEM 1223)
Fall	2012	Elements of Physical Chemistry (CHEM 3453)
Spring	2012	Physical Chemistry II (CHEM 3514)
Fall	2011	Elements of Physical Chemistry (CHEM 3453)
Fall	2010	Elements of Physical Chemistry (CHEM3453)