Fengwang Li, Ph.D.

School of Chemical and Biomolecular Engineering

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Research Interest

The Li group aims for a "greener", carbon-neutral future. We strive to develop new electroactive materials, principles, and systems that enable efficient production of sustainable fuels and value-added chemicals from clean, abundant resources (e.g., water, carbon dioxide, nitrogen, biomass) – powered by renewable electricity.

Professional Experience

Lecturer	University of Sydney	2020 –
Postdoctoral Fellow Advisor: Prof. Edward H. Sargent Research focus: Catalysts and systems for CO_2 conversion	University of Toronto	2018 – 2020
Visiting Scholar Supervisor: Prof. Patrick R. Unwin Research focus: Scanning electrochemical cell microscopy	University of Warwick	2016

Education

Ph.D. in Chemistry Thesis: Two-dimensional catalysts for CO_2 reduction Advisor: A/Prof. Jie Zhang, Prof. Douglas R. MacFarlane	Monash University	2014 – 2017
M.Eng. in Applied Chemistry Thesis: Unconventional nanofabrication methods Advisor: Prof. Meining Zhang, Prof. Tingbing Cao	Renmin University of China	2011 – 2013
B.S. in Chemistry	Renmin University of China	2006 – 2010

Honours & Awards

ARC Discovery Early Career Researcher Award (DECRA)	2019
Mollie Holman Medal ("Best PhD thesis award"), Monash University	2018
Monash Postgraduate Publication Award	2017
Chinese Government Award for Outstanding Self-Financed Students Abroad	2016
Chinese National Scholarship for Graduate Students	2013

Publications (†equal contribution; *corresponding author)

Total citations: 2,511, H-index: 28 (Data source: Google Scholar, October 2020)

Google Scholar: https://scholar.google.com.au/citations?user=JMmITMYAAAAJ&hl=en

Highlights: 1 in *Nature*, 2 in *Science*, 6 in *Nat. Catal.*, 1 in *Nat. Mater.*, 1 in *Nat. Energy*, 3 in *J. Am. Chem. Soc.*, and 3 in *Angew. Chem. Int. Ed.*; 9 *'Highly Cited Paper' (Web of Science).*

1. A. S. Rasouli†, X. Wang†, J. Wicks, G. Lee, T. Peng, **F. Li**, C. McCallum, C.-T. Dinh, A. H. Ip, D. Sinton, E. H. Sargent*, CO_2 electroreduction to methane at production rates exceeding 100 mA/cm^2, **ACS Sustainable Chem. Eng.**, 2020, DOI: 10.1021/acssuschemeng.0c03453.
2. A. Ozden†, **F. Li**†, F. P. G. de Arquer, A. Rosas-Hernández, A. Thevenon, Y. Wang, S.-F. Hung, X. Wang, B. Chen, J. Li, J. Wicks, M. Luo, Z. Wang, T. Agapie*, J. C. Peters*, E. H. Sargent*, D. Sinton*,

High-rate and efficient ethylene electrosynthesis using a catalyst/promoter/transport layer, **ACS Energy Lett.**, 2020, 5, 2811-2818.

3. J. Li[†], A. Xu[†], **F. Li**, Z. Wang, C. Zou, C. M. Gabardo, Y. Wang, A. Ozden, Y. Xu, D. -H. Nam, Y. Lum, J. Wicks, B. Chen, Z. Wang, J. Chen, Y. Wen, T. Zhuang, M. Luo, X. Du, T. -K. Sham, B. Zhang, E. H. Sargent*, D. Sinton*, Enhanced multi-carbon alcohol electroproduction from CO via modulated hydrogen adsorption, **Nat. Commun.**, 2020, 11, 3685.

4. W. R. Leow[†], Y. Lum[†], A. Ozden, Y. Wang, D. -H. Nam, B. Chen, J. Wicks, T. Zhuang, **F. Li**, D. Sinton, E. H. Sargent*, Chloride-mediated selective electrosynthesis of ethylene and propylene oxides at high current density, **Science**, 2020, 368, 1228-1233.
   ***Perspective at **Science**: "Electrification of the chemical industry".*
   ***Highlighted at C&EN News.*

5. X. Wang[†], Z. Wang[†], F. P. G. Arquer, C. -T. Dinh, A. Ozden, Y. C. Li, D. -H. Nam, J. Li, Y. -S. Liu, J. Wicks, Z. Chen, M. Chi, B. Chen, Y. Wang, J. Tam, J. Howe, A. Proppe, P. Todorovic, **F. Li**, T. Zhuang, C. M. Gabardo, A. Krimani, C. McCallum, Y. Lum, M. Luo, Y. Min, A. Xu, C. O'Brien, B. Stephen, B. Sun, A. H. Ip, L. Richter, S. Kelley, D. Sinton, E. H. Sargent*, Efficient electrically-powered CO_2-to-ethanol via suppression of deoxygenation, **Nat. Energy**, 2020, 5, 478-486.
   ***Highlighted at Canadian Light Source News, UofT Engineering News, TechXplore, Interesting Engineering.*

6. Y. Wang[†], A. Xu[†], Z. Wang[†], L. Huang, J. Li, **F. Li**, J. Wicks, M. Luo, D. -H. Nam, C. -S. Tan, Y. Ding, J. Wu, Y. Lum, C. -T. Dinh, D. Sinton, G. Zheng, E. H. Sargent*, Enhanced nitrate-to-ammonia activity on copper-nickel alloys via tuning of intermediate adsorption, **J. Am. Chem. Soc.**, 2020, 142, 5702-5708.

7. D. -H. Nam[†], P. D. Luna[†], A. Rosas-Hernández, A. Thevenon, **F. Li**, T. Agapie, J. C. Peters, O. Shekhah, M. Eddaoudi, E. H. Sargent*, Molecular enhancement of heterogeneous CO_2 reduction, **Nat. Mater.**, 2020, 19, 266-276.

8. **F. Li**[†], Y. C. Li[†], Z. Wang[†], J. Li, D-H Nam, Y. Lum, M. Luo, X. Wang, A. Ozden, S.-F. Hung, B. Chen, Y. Wang, J. Wicks, Y. Xu, Y. Li, C. M. Gabardo, C.-T. Dinh, Y. Wang, T.-T. Zhuang, D. Sinton, E. H. Sargent*, Cooperative CO_2-to-ethanol conversion via enriched intermediates at molecule–metal catalyst interfaces, **Nat. Catal.**, 2020, 3, 75-82.
   ***'Highly Cited Paper' (Web of Science)*

9. X. Wang, A. Xu, **F. Li**, S.-F. Hung, D.-H. Nam, C. M. Gabardo, Z. Wang, Y. Xu, A. Ozden, A. S. Rasouli, A. H. Ip, D. Sinton, E. H. Sargent*, Efficient methane electrosynthesis enabled by tuning local CO_2 availability, **J. Am. Chem. Soc.**, 2020, 142, 3525-3531.

10. Y. Wang[†], Z. Wang[†], C. -T. Dinh[†], J. Li[†], A. Ozden, M. G. Kibria, A. Seifitokaldani, C. -S. Tan, C. M. Gabardo, M. Luo, H. Zhou, **F. Li**, Y. Lum, C. McCallum, Y. Xu, M. Liu, A. Proppe, A. Johnston, P. Todorovic, T. -T. Zhuang, D. Sinton, S. O. Kelley, E. H. Sargent*, Catalyst synthesis under CO_2 electroreduction favors faceting and promotes renewable fuels electrosynthesis, **Nat. Catal.**, 2020, 3, 98-106.
    ***'Highly Cited Paper' (Web of Science)*

11. **F. Li**[†], A. Thevenon[†], A. Rosas-Hernández[†], Z. Wang[†], Y. Li[†], C. M. Gabardo, A. Ozden, C. -T. Dinh, J. Li, Y. Wang, J. P. Edwards, Y. Xu, C. McCallum, L. Tao, Z. -Q. Liang, M. Luo, X. Wang, H. Li, C. P. O'Brien, C. -S. Tan, D. -H. Nam, R. Quintero-Bermudez, T. -T. Zhuang, Y. C. Li, Z. Han, R. D. Britt, D. Sinton, J. C. Peters*, T. Agapie*, E. H. Sargent*, Molecular tuning of CO_2-to-ethylene conversion, **Nature**, 2020, 577, 509-513.
    ***Highlighted at UofT News, Caltech News, Canadian Light Source News, Phys.org, ACS C&EN, AAAS EurekAlert!, ScienceDaily, Inverse, Long Room, CTV "Your Morning", Naked Scientists, etc.*
    ***Preview article at Joule: C. Hahn & T. F. Jaramillo, Using Microenvironments to Control Reactivity in CO_2 Electrocatalysis, Joule, 2020, 4, 292-294.*

***'Highly Cited Paper' (Web of Science)*

12. Y. Lum[†], J. E. Huang[†], Z. Wang, M. Luo, D. -H. Nam, W. R. Leow, B. Chen, J. Wicks, Y. C. Li, Y. Wang, C. -T. Dinh, J. Li, T. Zhuang, **F. Li**, T. -K. Sham, D. Sinton, E. H. Sargent*, Tuning hydroxyl binding energy enables selective electrochemical oxidation of ethylene to ethylene glycol, **Nat. Catal.**, 2020, 3, 14-22.
***Highlighted at Nature Catalysis News & Views: Towards the sustainable synthesis of ethylene glycol.*

13. Y. Zhang[†], L. Li[†], S. -X. Guo, X. Zhang, **F. Li**, A. Bond, J. Zhang*, Two-dimensional electrocatalysts for efficient reduction of carbon dioxide, **ChemSusChem**, 2020, 13, 59-77.
***Among top 10% most downloaded papers in the 12 months following online publication in ChemSusChem.*

14. F. P. G. Arquer[†], C. -T. Dinh[†], A. Ozden[†], J. Wicks[†], C. McCallum, A. R. Kirmani, D. -H. Nam, C. M. Gabardo, A. Seifitokaldani, X. Wang, Y. C. Li, **F. Li**, J. Edwards, L. J. Richter, S. J. Thorpe, D. Sinton*, E. H. Sargent*, CO_2 electrolysis to multicarbon products at activities greater than 1 A cm^{-2}, **Science**, 2020, 367, 661-666.
***Highlighted at UofT News, Chemistry World, Phys.org, AAAS EurekAlert!, LongRoom, Environmental News Network, Nanowerk, 7thSpace, etc.*
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15. M. Luo[†], Y. C. Li[†], Z. Wang[†], J. Li, **F. Li**, Y. Lum, D. -H. Nam, B. Chen, J. Wicks, A. Xu, T. Zhuang, W. R. Leow, X. Wang, C. -T. Dinh, Y. Wang, Y. Wang, D. Sinton, E. H. Sargent*, Hydroxide promotes carbon dioxide electroreduction to ethanol on copper via tuning of adsorbed hydrogen, **Nat. Commun.**, 2019, 10, 5814.
***"Top 50 Chemistry and Materials Sciences Articles" in 2019.*

16. X. Wang[†], Z. Wang[†], T. -T. Zhuang, C. -T. Dinh, J. Li, D. -H. Nam, **F. Li**, C. -W. Huang, C. -S. Tan, Z. Chen, M. Chi, C. M. Gabardo, A. Seifitokaldani, P. Todorović, A. Proppe, Y. Pang, A. R. Kirmani, Y. Wang, A. H. Ip, L. J. Richter, B. Scheffel, A. Xu, S. -C. Lo, S. Kelley, D. Sinton, E. H. Sargent*, Efficient upgrading of CO to C_3 fuel using asymmetric C-C coupling active sites, **Nat. Commun.**, 2019, 10, 5186.
***"Top 50 Chemistry and Materials Sciences Articles" in 2019.*

17. J. Li[†], Z. Wang[†], C. McCallum[†], Y. Xu, **F. Li**, Y. Wang, C. Gabardo, C. -T. Dinh, T. -T. Zhuang, L. Wang, J. Y. Howe, Y. Ren, E. H. Sargent*, D. Sinton*, Constraining CO coverage on copper promotes high-efficiency ethylene electroproduction, **Nat. Catal.**, 2019, 2, 1124-1131.

18. T. Zhuang[†], D. -H. Nam[†], Z. Wang[†], H. -H. Li, C. Gabardo, Y. Li, Z. -Q. Liang, J. Li, X. -J. Liu, B. Chen, W. R. Leow, R. Wu, X. Wang, **F. Li**, Y. Lum, J. Wicks, C. O'Brien, T. Peng, A. Ip, T. -K. Sham, S. -H. Yu, D. Sinton, E. H. Sargent*, Dopant-tuned stabilization of intermediates promotes electrosynthesis of valuable C3 products, **Nat. Commun.**, 2019, 10, 4807.

19. J. Li[†], S. Guo[†], F. Li, **F. Li**, X. Zhang, J. Ma*, D. R. Macfarlane, A. M. Bond, J. Zhang*, Electrohydrogenation of carbon dioxide using a ternary Pd/Cu_2O–Cu catalyst, **ChemSusChem**, 2019, 12, 4471-4479.

20. X. Zhang, Y. Zhang, **F. Li**, C. D. Easton, A. M. Bond, J. Zhang*, Oxomolybdate anchored on copper for electrocatalytic hydrogen production over the entire pH range, **Appl. Catal. B Environ.**, 2019, 249, 227-234.

21. Y. C. Li[†], Z. Wang[†], T. Yuan, D. -H. Nam, M. Luo, J. Wicks, B. Chen, J. Li, **F. Li**, F. P. G. Arquer, Y. Wang, C. -T. Dinh, O. Voznyy, D. Sinton, E. H. Sargent*, Binding site diversity promotes CO_2 electroreduction to ethanol, **J. Am. Chem. Soc.**, 2019, 141, 8584-8591.
***'Highly Cited Paper' (Web of Science)*

22. Y. Pang[†], J. Li[†], C. -S. Tan, P. -L. Hsieh, T. -T. Zhuang, Z. Liang, C. Zou, X. Wang, P. D. Luna, J. P. Edwards, Y. Xu, **F. Li**, C. -T. Dinh, M. Zhong, L. -J. Chen, E. H. Sargent*, D. Sinton*, Efficient electrocatalytic conversion of carbon monoxide to propanol using fragmented copper, **Nat. Catal.**, 2019, 2, 251-258.
***'Highly Cited Paper' (Web of Science)*

23. T. -T Zhuang[†], Y. Pang[†], Z. -Q. Liang, Y. Li, C. -S. Tan, H. Yuan, J. Li, C. -T. Dinh, P. D. Luna, P. -L. Hsieh, T. Burdyny, H. -H. Li, M. Liu, Y. Wang, **F. Li**, A. Proppe, A. Johnston, Z. -Y. Wu, Y. -R. Zheng, E. Bladt, A. Ip, H. Tan, L. -J. Chen, S. Bals, J. Hofkens, S. -H. Yu, S. O. Kelley, D. Sinton*, E. H. Sargent*, Copper nanocavities confine intermediates for efficient electrosynthesis of C3 alcohol fuels from carbon monoxide, **Nat. Catal.**, 2018, 1, 946-951.
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24. J. Li[†], F. Che[†], Y. Pang[†], C. Zou[†], J. Howe, T. Burdyny, J. P. Edwards, Y. Wang, **F. Li**, P. D. Luna, C. -T Dinh, T. Zhuang, M. I. Saidaminov, S. Cheng, T. Wu, Z. Finfrock, L. Ma, Z. Xie, Y. Liu, G. Botton, X. Du, J. Guo, T. -K. Sham, E. H. Sargent*, D. Sinton*, Copper adparticle enabled selective electrosynthesis of n-propanol, **Nat. Commun.**, 2018, 9, 4614.

25. Z. -Q. Liang[†], T. -T. Zhuang[†], A. Seifitokaldani[†], J. Li, C. -W. Huang, C. -S. Tan, Y. Li, P. D. Luna, C. T. Dinh, Y. Hu, Q. Xiao, P. -L. Hsieh, Y. Wang, **F. Li**, R. Quintero-Bermudez, Y. Zhou, P. Chen, Y. Pang, S. -C. Lo, L. -J. Chen, H. Tan, Z. Xu, S. Zhao, D. Sinton, E. H. Sargent*, Copper-on-nitride enhances the stable electrosynthesis of multi-carbon products from CO_2, **Nat. Commun.**, 2018, 9, 3828.

26. Y. Zhang, X. Zhang, Y. Ling, **F. Li**, A. Bond, J. Zhang*, Controllable synthesis of few-layer bismuth subcarbonate by electrochemical exfoliation for enhanced CO_2 reduction performance, **Angew. Chem. Int. Ed.**, 2018, 57, 13283-13287.

27. F. Li, J. Li, **F. Li**, L. Gao, X. Long, Y. Hu, C. Wang, S. Wei, J. Jin, J. Ma*, Facile regrowth of Mg-Fe_2O_3/P-Fe_2O_3 homojunction photoelectrode for efficient solar water oxidation, **J. Mater. Chem. A**, 2018, 6, 13412-13418.

28. **F. Li**, D. R. MacFarlane*, J. Zhang*, Recent advances in nanoengineering of electrocatalysts for CO_2 reduction, **Nanoscale**, 2018,10, 6235-6260.
***'Highly Cited Paper' (Web of Science)*
***Featured in the themed collection "Nanoscale Most Popular Articles, 2018"*

29. X. Zhang, **F. Li**, Y. Zhang, A. M. Bond, J. Zhang*, Stannate derived bimetallic nanoparticles for electrocatalytic CO_2 reduction, **J. Mater. Chem. A**, 2018, 6, 7851-7858.

30. Y. Zhang, **F. Li**, X. Zhang, T. Williams, C. Easton, A. M. Bond, J. Zhang*, Electrochemical reduction of CO_2 on defect-rich Bi derived from Bi_2S_3 with enhanced formate selectivity, **J. Mater. Chem. A**, 2018, 6, 4714-4720.

31. S. Guo, **F. Li**, D. R. MacFarlane, J. Zhang*, Polyoxometalate promoted electrocatalytic CO_2 reduction at nanostructured silver in dimethylformamide, **ACS Appl. Mater. Interfaces**, 2018, 10, 12690-12697.

32. C. Sun, **F. Li**, H. An, Z. Li, A. Bond, J. Zhang*, Facile electrochemical co-deposition of metal (Cu, Pd, Pt, Rh) nanoparticles on reduced graphene oxide for electrocatalytic reduction of nitrate/nitrite. **Electrochim. Acta**, 2018, 269, 733-741.

33. **F. Li**, M. Xue, X. Zhang, L. Chen, G. P. Knowles, D. R. MacFarlane*, J. Zhang*, Advanced composite two-dimensional energy materials by simultaneous anodic and cathodic exfoliation, **Adv. Energy Mater.**, 2018, 8, 1702794.

34. X. Zhang, Y. Zhang, **F. Li**, C. D. Easton, A. M. Bond, J. Zhang*, Ultra-small Cu nanoparticles embedded in N-doped carbon arrays for electrocatalytic CO_2 reduction reaction in dimethylformamide, **Nano Res.**, 2018, 11, 3678-3690.

35. **F. Li**, M. Xue, J. Li, X. Ma, L. Chen, X, Zhang, D. R. MacFarlane*, J. Zhang*, Unlocking the electrocatalytic activity of antimony for CO_2 reduction by two-dimensional engineering of the bulk material, **Angew. Chem. Int. Ed.**, 2017, 56, 14718-14722.
***Highlighted at Chemistry in Australia, X-Mol.com*

36. Y. Zhang, L. Chen, **F. Li**, C. Easton, J. Li, A. Bond*, J. Zhang*, Direct detection of electron transfer reactions underpinning the tin catalyzed electrochemical reduction of CO_2 using Fourier transformed ac voltammetry, **ACS Catal.**, 2017, 7, 4846-4853.

37. L. Chen, **F. Li**, C. L. Bentley, M. Horne, A. M. Bond, J. Zhang*, Electrocatalytic reduction of CO_2 with an oxide derived lead nano-coralline electrode in a distillable ionic liquid, **ChemElectroChem**, 2017, 4, 1402-1410.

38. **F. Li**, M. Xue, G. P. Knowles, L. Chen, D. R. MacFarlane*, J. Zhang*, Nitrogen doped carbon derived from biomass for electrocatalytic reduction of CO_2 to CO, **Electrochim. Acta**, 2017, 245, 561-568.

39. X. Ma, **F. Li**, Z. Xie, M. Xue, Z. Zheng, X. Zhang*, Size-tunable, highly sensitive microelectrode arrays enabled by polymer pen lithography, **Soft Matter**, 2017, 13, 3685-3689.

40. **F. Li**, L. Chen, G. P. Knowles, D. R. MacFarlane*, J. Zhang*, Hierarchical mesoporous SnO_2 nanosheets on carbon cloth: a robust and flexible electrocatalyst for CO_2 reduction with high efficiency and selectivity, **Angew. Chem. Int. Ed.**, 2017, 56, 505-509.
***'Highly Cited Paper' (Web of Science); highlighted at Chemistry in Australia.*

41. L. Chen, **F. Li**, Y. Zhang, C. L. Bentley, M. Horne, A. M. Bond, J. Zhang*, Electrochemical reduction of carbon dioxide in a monoethanolamine capture medium, **ChemSumChem**, 2017, 10, 4109-4118.

42. C. Bentley*, M. Kang, F. Maddar, **F. Li**, M. Walker, J. Zhang, P. Unwin*, Electrochemical maps and movies of the hydrogen evolution reaction on natural crystals of molybdenite: basal vs. edge plane activity, **Chem. Sci.**, 2017, 8, 6583-6593.

43. **F. Li**, L. Chen, M. Xue, T. Williams, Y. Zhang, D. R. MacFarlane*, J. Zhang*, Towards a better Sn: efficient electrocatalytic reduction of CO_2 to formate by Sn/SnS_2 derived from SnS_2 nanosheets, **Nano Energy**, 2017, 31, 270-277.

44. D. Cooray, S. Sandanayake, **F. Li**, S. J. Langford, A. M. Bond, J. Zhang*, Efficient enzymatic oxidation of glucose mediated by ferrocene covalently attached to polyethylenimine stabilized gold nanoparticles, **Electroanalysis**, 2016, 28, 2728-2736.

45. **F. Li**, S. Zhao, L. Chen, A. Khan, D. R. MacFarlane*, J. Zhang*, Polyethylenimine promoted electrocatalytic reduction of CO_2 to CO in aqueous medium by graphene-supported amorphous molybdenum sulphide, **Energy Environ. Sci.**, 2016, 9, 216-223.
***Highlighted at Phys.org, Chemistry in Australia, Monash News, etc.*

46. M. Xue*, **F. Li**, D. Chen, Z. Yang, X. Wang, J. Ji, High-oriented polypyrrole nanotubes for next-generation gas sensor, **Adv. Mater.**, 2016, 28, 8265-8270.
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47. L. Chen, S. Guo, **F. Li**, C. Bentley, M. Horne, A. M. Bond, J. Zhang*, Electrochemical reduction of CO_2 at metal electrodes in the distillable ionic liquid dimethylammonium dimethylcarbamate, **ChemSusChem**, 2016, 9, 1271-1278.

48. **F. Li**, J. Chen, X. Wang, M. Xue*, G. F. Chen, Stretchable supercapacitor with adjustable volumetric capacitance based on 3D interdigital electrodes, **Adv. Funct. Mater.**, 2015, 25, 4601-4606.

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49. X. Ma, M. Xue*, **F. Li**, J. Chen, D. Chen, X. Wang, F. Pan, G. F. Chen, Gradual-order enhanced stability: a frozen section of electrospun nanofibers for energy storage, **Nanoscale**, 2015, 7, 8715-8719.
50. H. Lei[†], A. Han[†], **F. Li**, M. Zhang, Y. Han, P. Du*, W. Lai*, R. Cao*, Electrochemical, spectroscopic and theoretical studies of a simple bifunctional cobalt corrole catalyst for oxygen evolution and hydrogen production, **Phys. Chem. Chem. Phys.**, 2014, 16, 1883-1893.
51. J. He, X. Ma, Y. Zhu, **F. Li**, X. Tang, X. Zhang*, M. Zhang*, Facile fabrication of regular Au microband electrode arrays for voltammetric detection down to submicromolar level by hydrogel etching, **Electrochem. Commun.**, 2013, 30, 67-70.
52. X. Tang, D. Zhao, J. He, **F. Li**, J. Peng, M. Zhang*, Quenching of the electrochemiluminescence of tris (2,2'-bipyridine) ruthenium(II)-Tri-n-propylamine by pristine carbon nanotube and its application to quantitative detection of DNA, **Anal. Chem.**, 2013, 85, 1711-1718.
53. M. Xue*, **F. Li**, Y. Wang, X. Cai, F. Pan, J. Chen*, Ultralow-limit gas detection in nano-dumbbell polymer sensor via electrospinning, **Nanoscale**, 2013, 5, 1803-1805.
54. M. Xue, T. Cao*, D. Wang, Y. Wu, H. Yang, X. Dong, J. He, **F. Li**, G. F. Chen*, Superconductivity above 30 K in alkali-metal-doped hydrocarbon, **Sci. Rep.**, 2012, 2, 389-392.
55. M. Xue, **F. Li**, J. Zhu, H. Song, M. Zhang, T. Cao*, Structure-based enhanced capacitance: in situ growth of highly ordered polyaniline nanorods on reduced graphene oxide patterns, **Adv. Funct. Mater.**, 2012, 22, 1284-1290.
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56. M. Xue[†], **F. Li**[†], T. Cao*, Fabrication of ultra-fine nanostructures using edge transfer printing, **Nanoscale**, 2012, 4, 1939-1947.
57. **F. Li**, M. Xue, X. Ma, T. Cao*, M. Zhang*, Facile patterning of reduced graphene oxide film into microelectrode array for highly sensitive sensing, **Anal. Chem.**, 2011, 83, 6426-6430.

- ***Book chapters***

58. **F. Li**, J. Zhang*, Electrocatalytic Reduction of CO_2 in Ionic Liquid-based Electrolytes in *Encyclopedia of Ionic Liquids*, Springer, Singapore, 2019.
59. **F. Li**, M. Xue*, Two-Dimensional Transition Metal Dichalcogenides for Electrocatalytic Energy Conversion Applications in *Two-dimensional Materials – Synthesis, Characterization and Potential Applications*, IntechOpen, London, 2016.

Conferences & Invited Talks

1. Invited talk "Molecular tuning of electrochemical CO_2 reduction", UNSW, Sydney, Australia, February 2020.
2. Invited talk "Molecular tuning of electrochemical CO_2 reduction", University of Sydney, Sydney, Australia, February 2020.
3. Invited talk "Molecular tuning of electrochemical CO_2 reduction", École polytechnique fédérale de Lausanne (EPFL), Lausanne, Switzerland, January 2020.
4. Invited talk "Molecular tuning of electrochemical CO_2 reduction", Renmin University of China, Huazhong University of Science and Technology, Shaanxi Normal University, China, December 2019.
5. Invited talk "Electrocatalytic CO_2 reduction – catalyst, mechanism and system", University of Science and Technology of China, Hefei, China, April 2019.

6. Invited talk “2D materials for electrocatalytic CO_2 reduction”, Renmin University of China, Beijing, China, September 2016.
7. Invited talk “2D metal sulphide materials for electrocatalytic reduction of CO_2 in aqueous medium”, Leiden University, Leiden, the Netherlands, August 2016.
8. Royal Australian Chemical Institute Centenary Congress, “Two-dimensional electrocatalysts for CO_2 reduction”, Melbourne, Australia, July 2017.
9. ARC Centre of Excellence for Electromaterials Science Full Centre Meeting, “Artificial photosynthesis – with and without wires”, Canberra, Australia, September 2016.
10. 67th Annual Meeting of the International Society of Electrochemistry, “Graphene supported 2D metal sulphide materials for electrocatalytic reduction of CO_2”, The Hague, the Netherlands, August 2016.
11. 11th Annual International Electromaterials Science Symposium, “Polyethylenimine promoted electrocatalytic reduction of CO_2 to CO in aqueous media by graphene-supported molybdenum sulphide”, Melbourne, Australia, February 2016.
12. 11th Annual International Electromaterials Science Symposium, “Graphene Supported Materials for Electrocatalytic CO_2 Reduction”, Melbourne, Australia, February 2016.