Li-Chiang Lin, Ph.D.
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The Umit S. Ozkan Professorship
William G. Lowrie Dept. of Chemical and Biomolecular Engineering
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EDUCATION

2010 Sep.-2014 May **Ph.D.**, **Chemical and Biomolecular Engineering, University of California-Berkeley, USA**
Thesis: "Computational Study of Porous Materials for Gas Separations"

2006 Feb.-2007 Oct. **M.S.**, **Chemical Engineering, National Taiwan University, Taiwan**
Thesis: "Effects of Relative Volatility Ranking to the Design of Reactive Distillation: Excess-reactant Design"

2002 Sep.-2006 Jan. **B.S.**, **Chemical Engineering, National Taiwan University, Taiwan**

ACADEMIC APPOINTMENTS

2016 Sep.-	Assistant Professor, Dept. Chemical and Biomolecular Engineering, The Ohio State University
2016 Jul. - Aug.	Visiting Assistant Professor, Dept. of Chemical and Biomolecular Engineering, The Ohio State University
2016 Jan.- Jun.	Research Scientist, Dept. of Materials Science and Engineering, MIT (Prof. Jeffrey C. Grossman's group)
2015 Jan.- Nov.	Assistant Professor, Dept. of Process and Energy, Delft University of Technology, the Netherlands
2015	Visiting Scientist, Dept. of Materials Science and Engineering, MIT (Prof. Jeffrey C. Grossman's group)
2014-2015	Postdoctoral Researcher, Dept. of Materials Science and Engineering, MIT (Prof. Jeffrey C. Grossman's group)
2014	Junior Specialist, Dept. of Chemical and Biomolecular Engineering, UC-Berkeley (Prof. Berend Smit's group)
2011-2014	Graduate Student Researcher, UC-Berkeley and Lawrence Berkeley National Lab
2009-2010	Teaching Assistant, Dept. of Chemical Engineering, National Taiwan University, Taiwan

NON-ACADEMIC APPOINTMENTS

2008-2009	Integrating Process Engineer, Taiwan Semiconductor Manufacturing Corporation (TSMC)
2007-2008	Corporal, Army, Taiwan (Mandatory military service)

SELECTED HONORS

2020	Charles E. MacQuigg Award for Outstanding Teaching, College of Engineering, The Ohio State University, USA
2020	Lumley Research Award, College of Engineering, The Ohio State University, USA
2019	Excellence in Publications Award, International Adsorption Society (IAS)

2013	DOW Excellence in Teaching Award, University of California – Berkeley, USA
2012-2013	Chevron Fellowship, USA
2012	Graduate Student Research Award, AICHE Separation Division, USA
2012-2014	Government Fellowship for Study Abroad, Ministry of Education, Taiwan
2010	Power Top-Off Award, University of California – Berkeley, USA
2005	Memorial Scholarship for Mr. Lin, Hsiung-Chen, Taiwan
2003-2005	Presidential Award, Top 5% students - (**Six times**), National Taiwan University, Taiwan
2003-2005	First Bank Scholarship for Outstanding College Students - (**Three times**), Taiwan
2004	AZ Electronic Materials Scholarship, Taiwan
2003	TASCO Chemical Corporation Scholarship, Taiwan

PUBLICATIONS (67 published articles; h-index 29 and total citations ~3400)

Google Scholar profile (https://scholar.google.com/citations?user=9yluyaQAAAAJ&hl=en)

Following Appointment at The Ohio State University in Fall 2016

67. Zou, C.; Penley, D. R.; Cho, E. H.; Lin, L.-C.* Efficient and Accurate Charge Assignments via Multi-Layer Connectivity-based Atom Contribution (m-CBAC) Approach, *J. Phys. Chem. C*, just accepted, **2020**.

66. Risplendi, F.; Raffone, F.; Lin, L.-C.; Grossman, J.C.; Cicero, G. Fundamental Insights on Hydration Environment of Boric Acid and Its Role in Separation from Saline Water, *J. Phys. Chem. C*, 124, 1438-1445, **2020**.

65. Su, C.-Y.; Lyu, Q.; Kang, D.-Y.*; Yang, Z.-H.; Lam, C. H.; Chen, Y.-H.; Lo, S.-C.; Hua, C.-C.* & **Lin, L.-C.*** Hexagonal superalignment of nano-objects with tunable separation in a dilute and spacer-free solution, *Phys. Rev. Lett.*, 123, 238002, **2019**.

64. Cho, E. H. & **Lin, L.-C.*** Electrostatic Potential Optimized Molecular Models for Molecular Simulations: CO, CO_2, COS, H_2S, N_2, N_2O, and SO_2, *J. Chem. Theory Comput.*, 15 (11), 6323-6332, **2019**.

63. Kan, M.-Y.; Shin, J. H.; Yang, C.-T.; Chang, C.-K.; Lee, L.-W.; Chen, B.-H.; Lu, K.-L.; Lee, J. S.*; **Lin, L.-C.*** & Kang, D.-Y.* Activation-Controlled Structure Deformation of Pillared-Bilayer Metal-Organic Framework Membranes for Gas Separations, *Chem. Mater.*, 31 (18), 7666-7677, **2019**.

62. Sinha, P.; Datar, A.; Jeong, C.; Deng, X.; Chung, Y. G. & **Lin, L.-C.*** Surface Area Determination of Porous Materials Using the Brunauer-Emmett-Teller (BET) Method: Limitations and Improvements, *J. Phys. Chem. C*, 123, 20195-20209, **2019**.

61. Lyu, Q.; Deng, X.; Hu, S.; **Lin, L.-C.*** & Ho, W.S.H. Exploring the Potential of Defective UiO-66 as Reverse Osmosis Membranes for Desalination, *J. Phys. Chem. C.*, 123, 16118-16126, **2019**.

60. Yu, Y.; Chien, S.-C.; Sun, J.; Hettiaratchy, E.C.; Myers, R.C.; **Lin, L.-C.*** & Wu, Y.* Excimer Formation and Long-Lived Charge Separation in Self-Assembled Dyes on Metal Oxides, *J. Am. Chem. Soc.*, 141, 8727-8731, **2019**.

59. Cho, E.H.; Lyu, Q. & **Lin, L.-C.*** Computational Discovery of Nanoporous Materials for Energy- and Environment-related applications, *Mol. Sim.*, in press, **2019**.

58. Yu, Y.; Click, K. A.; Chien, S.-C.; Sun, J.; Curtze, A.; **Lin, L.-C.*** & Wu, Y.* Decoupling pH-Dependence of Flat-Band Potential in Aqueous Dye-Sensitized Electrodes, *J. Phys. Chem. C*, 123, 8681-8687, **2019**.

57. Mohona, T. M.; Gupta, A.; Masud, A.; Chien, S.-C.; **Lin, L.-C.**; Nalam, P. C. & Aich, N. Aggregation Behavior of Inorganic 2D Nanomaterials Beyond Graphene: Insights from Molecular Modeling and Modified DLVO Theory, *Environ. Sci. Technol.*, 53, 4161-4172, **2019**.

56. Deshpande, N.; Cho, E.H.; Spanos, A.P.; **Lin, L.-C.** & Brunelli, N.A. Tuning Molecular Structure of Tertiary Amine Catalysts for Glucose Isomerization, *J. Catal.* 372, 119-127, **2019**.

55. Janda, A.; **Lin, L.-C.**; Vlaisavljevich, B.; Van der Mynsbrugge, J.; Bell, A. T., RE: "Impact of Zeolite Structure on Entropic-Enthalpic Contributions to Alkane Monomolecular Cracking: An IR Operando Study" by S. A. Kadam, H. Li, R. F. Wormsbacher, A. Travert, *Chem. Eur. J.*, 25, 7225-7226, **2019**.

54. Cho, E.H. & **Lin, L.-C.***, Systematic Molecular Model Development with Reliable Charge Distributions for Gaseous Adsorption in Nanoporous Materials, *J. Mater. Chem. A* 6, 16029-16042, **2018**.

53. Lim, J.R.; Yang, C.-T.; Kim, J. & **Lin, L.-C.***, Transferability of CO_2 Force Fields for the Prediction of Adsorption Properties in All-Silica Zeolites, *J. Phys. Chem. C* 122, 10892-10903, **2018**.

52. Becker, T.; Luna-Triguero, A.; Vicent-Luna, J.M.; **Lin, L.-C.**; Dubbeldam, D.; Calero, S. & Vlugt, T. Potential of Polarizable Force Fields for Predicting the Separation Performance of Small Hydrocarbons in M-MOF-74, *Phys. Chem. Chem. Phys*. 20, 28848-28859, **2018**.

51. Becker, T.; **Lin, L.-C.**; Dubbeldam, D. & Vlugt, T. Polarizable Force Field for CO_2 in M-MOF-74 Derived from Quantum Mechanics, *J. Phys. Chem. C* 122, 24488-24498, **2018**.

50. Bien, C.E; Chen, K.K.; Chien, S.-C.; Reiner, B.R.; **Lin, L.-C.**; Wade, C.R.* & Ho, W.S.W. A Bioinspired Metal-Organic Framework for Trace CO_2 Capture, *J. Am. Chem. Soc.* 140, 12662-12666, **2018**.

49. Zou, C. & **Lin, L.-C.*** Exploring the Potential and Design of Zeolite Nanosheets as Pervaporation Membranes for Ethanol Extraction, *Chem. Commun.* 54, 13200-13203, **2018**. *** Featured as the inside front cover of the issue

48. Yang, C.-T.; Kshiragar, A.R; Charaf Eddin, A.; **Lin, L.-C.*** & Poloni, R.*, Tuning Gas Adsorption by Metal Node-Blocking in Photoresponsive Metal-Organic Frameworks, *Chem. Eur. J.* 24, 15167-15172, **2018**. *** Featured as the frontispiece of the issue

47. Lyu, Q.; Sun, S.; Li, C.; Hu, S. & **Lin, L.-C.***, Rational Design of Two-dimensional Hydrocarbon Polymer as Ultrathin-film Nanoporous Membranes for Water Desalination, *ACS Appl. Mater. Interface*s 10, 18778-18786, **2018**.

46. Chen, Y.-R.; Liou, K.-H.; Kang, D.-Y.; Chen, J.-J. & **Lin, L.-C.***, Investigation of the Water Adsorption Properties and Structural Stability of MIL-100(Fe) with Different Anions, *Langmuir* 34, 4180-4187, **2018**.

45. Yang, C.-T.; Janda, A.; Bell, A.T.* & **Lin, L.-C.***, Atomistic Investigations of the Effects of Si/Al Ratio and Al Distribution on the Adsorption Selectivity of n-Alkanes in Brønsted-Acid Zeolites, *J. Phys. Chem. C* 122, 9397-9410, **2018**. *** Featured as the cover of the issue

44. Cho, J.W.; **Lin, L.-C.***, & Grossman, J.C.*, The Role of Structural Defects in the Water Adsorption Properties of MOF-801, *J. Phys. Chem. C* 122, 5545-5552, **2018**.

43. Van der Mynsbrugge, J.; Janda, A.; **Lin, L.-C.**; Van Speybroeck, V.; Head-Gordon, M. & Bell, A.T., Understanding Brønsted-Acid Catalyzed Monomolecular Reactions of Alkanes in Zeolite Pores by Combining Insights from Experiment and Theory, *ChemPhysChem* 19, 341-358, **2018**. *** Featured as the cover of the issue and highlighted in the cover profile.

42. Jamali, S.H.; Vlugt, T.J.H & **Lin, L.-C.***, Atomistic Understanding of Zeolite Nanosheets for Water Desalination, *J. Phys. Chem. C* 121, 11273-11280, **2017**. *** Selected as the ACS Editors' Choice and featured as the cover of the issue

41. **Lin, L.-C.**; Paik, D. & Kim, J., Understanding Gas Adsorption in MOF-5/Graphene Oxide Composite Material, *Phys. Chem. Chem. Phys.* 19, 11639-11644, **2017**.

40. Deshpande, N.; Pattanaik, L.; Whitaker, M.W.; Yang, C.-T.; **Lin, L.-C.** & Brunelli, N.A., Selectively Converting Glucose to Fructose Using Immobilized Tertiary Amines, *J. of Catalysis* 353, 205-210, **2017**.

39. Van der Mynsbrugge, J.; Janda, A.; Mallikarjun Sharada, S.; **Lin, L.-C.**; Van Speybroeck, V.; Head-Gordon, M. & Bell, A., Theoretical Analysis of the Influence of Pore Geometry on Monomolecular Cracking and Dehydrogenation of n-Butane in Brønsted-Acid Zeolites, *ACS Catalysis* 7, 2685-2697, **2017**.

38. Liou, K.-H.; Kang, D.-Y. & **Lin, L.-C.***, Investigating the Potential of Single-walled Aluminosilicate Nanotubes in Water Desalination, *ChemPhysChem* 18, 179-183, **2017**. ***Featured as the back cover of the issue

37. Becker, T.; Heinen, J.; Dubbeldam, D.; **Lin, L.-C.** & Vlugt, T., Polarizable Force Fields for CO_2 and CH_4 Adsorption in M-MOF-74, *J. Phys. Chem. C* 121, 4659-4673, **2017**.

36. Janda, A.; Vlaisavljevich, B.; Smit, B.; **Lin, L.-C.*** & Bell, A.T.*, Effects of Zeolite Pore and Cage Topology on Thermodynamics of n-Alkane Adsorption at Brønsted Protons in Zeolites at High Temperature, *J. Phys. Chem. C* 121, 1618-1638, **2017**.

35. De Lange, M.F.; **Lin, L.-C.**; Gascon, J.; Vlugt, T.J.H. & Kapteijn, F., Assessing the surface area of porous solids – limitations, probe molecules and methods, *Langmuir* 32, 12664-12675, **2016**.

Prior to Appointment at The Ohio State University

34. (¶Contributed equally) ¶Cohen-Tanugi, D.; ¶**Lin, L.-C.** & Grossman, J.C., Multilayer Nanoporous Graphene Membranes for Water Desalination, *Nano Lett*. 16, 1027-1033, **2016**.

33. Fan, Z.; **Lin, L.-C.**; Buijs, W.; Vlugt, T.J.H. & van Huis, M.A., Atomistic understanding of cation exchange in PbS nanocrystals using simulations with pseudoligands, *Nature Communications* 7, 11503, **2016**.

32. Braun, E.; Zurhelle, A.F.; Thijssen, W.; Kchnell, S.K.; **Lin, L.-C.**; Kim, J.; Thompson, J.A. & Smit, B., High-Throughput Computational Screening of Nanoporous Adsorbents for CO_2 Capture from Natural Gas, *Molecular Systems Design & Engineering* 1, 175-188 **2016**. ***Featured as the cover of the issue

31. Mercado, R.; Vlaisavljevich, B; **Lin, L.-C.**; Lee, K.; Lee, Y.; Mason, J.A.; Xiao, D.J.; Gonzalez, M.I.; Kapelewski, M.T.; Neaton, J.B. & Smit, B., Force Field Development from Periodic Density Functional Theory Calculations for Gas Separation Applications Using Metal-Organic Frameworks, *J. Phys. Chem. C* 120, 12590-12604, **2016**.

30. Janda, A.L.; Vlaisavljevich, B.; **Lin, L.-C.**; Smit, B. & Bell, A.T., Effects of zeolite structural confinement on adsorption thermodynamics and reaction kinetics for monomolecular cracking and dehydrogenation of n-butane, *J. Am. Chem. Soc.* 138, 4739-4756, **2016**.

29. Becker, T.; Dubbeldam, D.; **Lin, L.-C.** & Vlugt, T., Investigating polarization effects of CO_2 adsorption in MgMOF-74, *J. Comput. Sci*. 15, 86-94, **2016**.

28. **Lin, L.-C.** & Grossman, J.C., Atomistic Understandings of Reduced Graphene Oxide as an Ultrathin-Film Nanoporous Membrane for Separations, *Nature Communications* 6, 8335, **2015**.

27. **Lin, L.-C.**; Choi, J. & Grossman, J.C., Two-dimensional Covalent Triazine Framework as an Ultrathin-Film Nanoporous Membrane for Desalination, *Chem. Commun.* 51, 14921-14924, **2015**.

26. (¶Contributed equally) ¶Lee, K.; ¶Howe, J.; ¶**Lin, L.-C.**; Smit, B. & Neaton, J.B., Small Molecule Adsorption in Open-Site Metal-Organic Frameworks: a Systematic Density Functional Theory Study for Rational Design. *Chem. Mater.* 27, 668-678, **2015**.

25. (¶Contributed equally) ¶Peng, X.; ¶**Lin, L.-C.**; Sun, W. & Smit, B., Water Adsorption in Metal-Organic

Frameworks with Open-Metal Sites. *AICHE J.* 61, 677-687, **2015**.

24. Braun, E.; Chen, J.J.; Schnell, S.K.; **Lin, L.-C.**; Reimer, J.A. & Smit, B., Nanoporous Materials can Tune the Critical Point of a Pure Substance, *Angew. Chem. Int. Ed.* 54, 14349-14352, **2015**.
23. De Lange, M.; Van Velzen, B.; Ottevanger, C.; Verouden, K.; **Lin, L.-C.**; Vlugt, T.; Gascon, J. & Kateijn, F., Metal-Organic Frameworks in Adsorption Driven Heat Pumps: The Potential of Alcohols as Working Fluid, *Langmuir* 31, 12783-12796, **2015**.
22. Janda, A.L.; Vlaisavljevich, B.; **Lin, L.-C.**; Sharada, S.M.; Smit, B.; Head-Gordon, M. & Bell, A.T., Adsorption Thermodynamics and Intrinsic Activation Parameters for Monomolecular Cracking of N-alkanes on Brønsted-acid Sites in Zeolites, *J. Phys. Chem. C.* 119, 10427-10438, **2015**.
21. (¶Contributed equally) ¶Liu, H.; ¶Liu, B.; ¶**Lin, L.-C.**; Chen, G.-J.; Wu, Y.-Q.; Wang, J.; Gao, X.-T.; Lv, Y.-L.; Pan, Y.; Zhang; X.-X.; Zhang, X.-R.; Yang, L.-Y.; Sun, C.-Y.; Smit, B. & Wang, W.-C., A Hybrid Absorbent-Adsorbent Method to Efficiently Capture Carbon. *Nature Communications* 5, 5147, **2014**.
20. **Lin, L.-C**.; Lee, K.; Gagliardi, L.; Neaton, J.B. & Smit, B., Force Field Development from Electronic Structure Calculations with Periodic Boundary Conditions: Applications to Gaseous Adsorption and Transport in Metal-Organic Frameworks. *J. Chem. Theory Comput.* 10, 1477-1488, **2014**.
19. (¶Contributed equally) ¶Borycz, J.; ¶**Lin, L.-C.**; Bloch, E.D.; Kim, J.; Dzubak, A.L.; Maurice, R.; Semrouni, D.; Lee, K.; Smit, B. & Gagliardi, L., CO_2 Adsorption in Fe2(dobdc): A Classical Force Field Parameterized from Quantum Mechanical Calculations, *J. Phys. Chem. C* 118, 12230-12240, **2014**.
18. Huck, J.M.; **Lin, L.-C.**; Berger, A.; Shahrak, M.N.; Martin, R.L.; Bhown, A.S.; Haranczyk, M.; Reuter, K. & Smit, B., Evaluating different classes of porous materials for carbon capture, *Energy Environ. Sci.* 7, 4132-4146, **2014**.
17. Sun, W.; **Lin, L.-C.**; Peng, X. & Smit, B., Screening of Porous MOFs and Zeolites for the Removal of SO_2 and NOx in the Flue Gases: a Molecular Simulation Study. *AICHE J.* 60, 2314-2323, **2014**.
16. Simon, C.; Kim, J.; **Lin, L.-C.**; Martin, R.L.; Haranczyk, M. & Smit, B., Optimizing Nanoporous Materials for Gas Storage, *Phys. Chem. Chem. Phys*. 16, 5499-5513, **2014**. ***Featured as the cover of the issue
15. Lee, J.; Isley, W.C.; Dzubak, A.L.; Verma, P.; Stoneburner, S.J.; **Lin, L.-C.**; Howe, H.D.; Bloch, E.D.; Reed, D.A.; Hudson, M.R.; Brown, C.M.; Long, J.R.; Neaton, J.B.; Smit, B.; Cramer, C.H.; Truhlar, D.G. & Gagliardi, L., Design of a Metal-Organic Framework with Enhanced Back Bonding for the Separation of N_2 and CH_4, *J. Am. Chem. Soc.* 136, 698-704, **2014**.
14. Kim, J.; **Lin, L.-C.**; Lee, K.; Neaton, J.B. & Smit, B., Efficient Determination of Accurate Force Fields for Porous Materials Using Ab-initio Total Energy Calculations*, J. Phys. Chem. C* 118, 2693-2701, **2014**.
13. Bloch, E.D.; Hudson, M.R.; Mason, J.A.; Chavan, S.; Crocella, V.; Howe, J.D.; Lee, K.; Dzubak, A.L.; Queen, W.K.; Zadrozny, J.M.; Geier, S.J.; **Lin, L.-C.**; Gagliardi, L.; Smit, B.; Neaton, J.B.; Brodiga, S.; Brown, C.M. & Long, J.R., Reversible CO Binding Enables Tunable CO/H_2 and CO/N_2 Separations in Metal-Organic Frameworks with Exposed Divalent Metal Cations, *J. Am. Chem. Soc.* 136, 10752-10761, **2014**.
12. **Lin, L.-C.**; Kim, J.; Kong, X.; Scott, E.; McDonald, T.M.; Long, J.R.; Reimer, J.A. & Smit, B., Understanding CO_2 Dynamics in Metal-Organic Frameworks with Open Metal Sites, *Angew. Chem. Int. Ed.* 52, 4410-4413, **2013**. ***Featured as the inside cover of the issue
11. Kim, J.; Abouelnasr, M.; **Lin, L.-C.** & Smit, B., Large-scale Screening of Zeolite Structures for CO_2 Membrane Separation, *J. Am. Chem. Soc.* 135, 7545-7552, **2013**.
10. Swisher, J.A.; **Lin, L.-C.**; Kim, J. & Smit, B., Evaluating Mixture Adsorption Models Using Molecular

Simulation, *AICHE J.* 59, 3054-3064, **2013**.

9. Haranczyk, M.; **Lin, L.-C.**; Lee, K.; Neaton, H.B. & Smit, B., Methane Storage Capabilities of Diamond Analogues, *Phys. Chem. Chem. Phys.* 15, 20937-20942, **2013**.
8. Martin, R.L.; **Lin, L.-C.**; Jariwala, K.; Smit, B. & Haranczyk, M., Mail-Order Oganic Frameworks (MOFs): Designing Isoreticular MOF-5 Analogues Comprising Commercially Available Organic Molecules, *J. Phys. Chem. C* 117, 12159-12167, **2013**. ***Featured as the cover of the issue
7. Planas, N.; Dzubak, A.L.; Poloni, R.; **Lin, L.-C.**; McManus, A.; McDonald, T.M.; Neaton, J.B.; Long, J.R.; Smit, B. & Gagliardi, L., The Mechanism of Carbon Dioxide Adsorption in an Alkylamine-Functionalized Metal-Organic Framework, *J. Am. Chem. Soc.* 135, 7402-7405, **2013**.
6. Kim, J.; Maiti, A.; **Lin, L.-C.**; Stolaroff, J.K.; Smit, B. & Aines, R.D., New Materials for Methane Capture from Dilute and Medium-concentration Sources," *Nature Communications* 4, 1694, **2013**.
5. (¶Contributed equally) ¶Kim, J.; ¶**Lin, L.-C.**; Swisher, J.A.; Haranczyk, M. & Smit, B. Prediction Large CO_2 Adsorption in Aluminosilicate Zeolites for Postcombustion Carbon Dioxide Capture, *J. Am. Chem. Soc.* 134, 18940-18943, **2012**.
4. **Lin, L.-C.**; Berger, A.H.; Martin, R.L.; Kim, J.; Swisher, J.A.; Jariwala, K.; Rycroft, C.H.; Bhown, A.S.; Deem, M.W.; Haranczyk, M. & Smit, B., In Silico Screening of Carbon-Capture Materials, *Nature Materials* 11, 633-641, **2012**.
3. (¶Contributed equally) ¶Kim, J.; ¶**Lin, L.-C.**; Martin, R.L.; Swisher, J.A.; Haranczyk, M. & Smit, B., Large-scale Computational Screening of Zeolites for Ethane/Ethene Separation, *Langmuir* 28, 11914-11919, **2012**.
2. (¶Contributed equally) ¶Dzubak, A.L.; ¶**Lin, L.C.**; Kim, J.; Swisher, J.A.; Poloni, R.; Maximoff, S.N.; Smit, B. & Gagliardi, L., Ab Initio Carbon Capture in Open-site Metal-Organic Frameworks, *Nature Chemistry* 4, 810-816, **2012**.
1. Martin R.L.; Willems, T.F.; **Lin, L.-C.**; Kim, J.; Swisher, J.A.; Smit, B. & Haranczyk, M., Similarity-driven Discovery of Porous Materials for Adsorption-based Separations, *ChemPhysChem* 13, 3595-3597, **2012**. ***Featured as the cover of the issue

PRESENTATIONS

26. **Lin, L.-C.**, Computational Discovery of Nanoporous Materials for Energy-related Applications, 13th International Conference on Fundamentals of Adsorption, Cairns, Australia, **2019**. ***Invited presentation for receiving the "Triennial Award for Excellence in Publications by a Young Scientist Below 35 of the International Adsorption Society (IAS)"
25. **Lin, L.-C.**, Computational Discovery of Nanoporous Materials for Energy-related Applications, the Kang Research Group, Department of Chemical Engineering, National Taiwan University, Taiwan, **2019**.
24. **Lin, L.-C.**, Computational Discovery of Nanoporous Materials for Energy-related Applications, the Chiang Research Group, Department of Chemical Engineering, National Taiwan University of Science and Technology, Taiwan, **2019**.
23. **Lin, L.-C.**, Computational Discovery of Nanoporous Materials for Energy-related Applications, Department of Chemistry, University of South Dakota, South Dakota, USA, **2018**.
22. **Lin, L.-C.**, Computational Discovery of Nanoporous Materials for Energy-related Applications, Department of Physics, University of Maryland – Baltimore County, Maryland, USA, **2018**.

21. Zou, C. & **Lin, L.-C.***, Computationally Investigating Zeolite Nanosheets as Pervaporation Membranes for Ethanol Extraction and the Role of Membrane Surfaces, *AIChE 2018 Annual Meeting*, Pittsburgh, USA, **2018**.
20. Yang, C.-T.; Eddin, A.C.; Poloni, R. & **Lin, L.-C.***, Atomistic Understandings of the CO_2 Uptake Difference in Photo Responsive Metal-Organic Frameworks, *AIChE 2017 Annual Meeting*, Minnesota, USA, **2017**.
19. **Lin, L.-C.***; Jamali, S.H. & Vlugt, T.J.H., Molecular Dynamics Simulations of Zeolite Nanosheets for Water Desalination, *AIChE 2017 Annual Meeting*, Minnesota, USA, **2017**.
18. **Lin, L.-C**., Computational Discovery of Nanoporous Materials for Energy Applications, Department of Chemical and Biomedical Engineering, Cleveland State University, Ohio, USA, **2017**.
17. **Lin, L.-C.**, Computational Study of Porous Materials for Energy-Related Applications, Department of Chemical and Biomolecular Engineering, The Ohio State University, Ohio, USA, **2015**.
16. **Lin, L.-C.**, Molecular Simulations to Gas Separation Applications, Chevron Corporation, California, USA, **2014**.
15. **Lin, L.-C.**, Computational Study of Porous Materials for Gas Separations, Department of Chemical and Biomolecular Engineering, UC-Berkeley, California, USA, **2014**.
14. **Lin, L.-C.**, Computational Carbon Capture, *2014 MRS Spring Meeting*, California, USA, **2014**.
13. **Lin, L.-C.**, Molecular Simulations to Gas Separation & Storage Applications, the Grossman Research Group, MIT, Massachusetts, **2014**.
12. **Lin, L.-C.** *et al.*, *Ab Initio* Carbon Capture in Open-Site Metal-Organic Frameworks - Force Field Development and Its Applications, *AICHE 2013 Annual Meeting*, California, USA, **2013**.
11. **Lin, L.-C.** *et al.*, Computational Carbon Capture, *GRC meeting-Nanoporous Materials and its Applications*, New Hampshire, USA, **2013**.
10. **Lin, L.-C.** *et al.*, A New Pathway of Deriving Force Fields from Periodic Density Functional Theory Calculations, *2013 EFRC/NETL/BES/APRA-e All Hand Meeting*, California, USA, **2013**.
9. **Lin, L.-C.** *et al.*, Computational Carbon Capture, *EFRC PI Meeting*, Washington, D.C., USA, **2013**.
8. **Lin, L.-C.** *et al.*, Large-scale Computational Screening of Adsorbent Materials for Carbon Capture, *AICHE 2012 Annual Meeting*, Pittsburgh, USA, **2012**.
7. Dubach, A.; **Lin, L.-C.** *et al.*, *Ab initio* Studies for CO_2 Capture: Non-Empirical Force Field Development for Open-site MOFs and CO_2 Fixation on Amine-Grafted Mg_2dobpdc, *2012 EFRC/NETL/BES/APRA-e All Hand Meeting*, California, USA, **2012**.
6. **Lin, L.-C.**, Nonempirical Force Field Development for Carbon Capture, Molecular Foundry, Lawrence Berkeley National Laboratory, California, USA, **2012**.
5. Poloni, R.; **Lin, L.-C.** *et al.*, A Computational Approach to Understand Carbon Capture by Metal-Organic Frameworks exhibiting Open-Metal sites, *2011 EFRC/NETL/BES/APRA-e All Hand Meeting*, California, USA, **2011**.
4. **Lin, L.-C.** *et al.*, Computational Screening of Adsorbent Materials for Carbon Dioxide Capture, *2011 EFRC/NETL/BES/APRA-e All Hand Meeting*, California, USA, **2011**.
3. **Lin, L.-C.** & Smit, B., Computational Screening of Adsorbent Materials for Carbon Dioxide Capture, *GRC meeting- Nanoporous Materials and its Applications*, New Hampshire, USA, **2011**.
2. **Lin, L.-C.** & Yu, C.-C., Development of Temperature Predictive Model for Low Pressure Chemical

Vapor Deposition Reactor, *JTK Chemical Engineering Conference*, Kagoshima, Japan, **2006**.

1. Chen, T.-Y.; **Lin, L.-C.** *et al.*, Model-Based Control for Improved Uniformity in Low-Pressure Chemical Vapor Deposition, *AEC/APC Symposium Asia*, Taipei, Taiwan, **2006**.