Gang Li, Ph.D.

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Research Area

Inorganic Chemistry, Organometallics, Homogenous Catalysis, Chemical Kinetics and Mechanistic Studies

Professional Appointments

2019-present	Assistant Professor	Utah State University
2015-2019	Postdoctoral Research Associate (with Prof. John T. Groves)	Princeton University
2010-2015	Research and Teaching Assistant (with Prof. Jack R. Norton)	Columbia University
2007-2010	Undergraduate Research Assistant (with Prof. Aiwen Lei)	Wuhan University

Education

2015	Ph.D.	Columbia University
2014	M.Phil.	Columbia University
2012	M.A.	Columbia University
2010	B.S.	Wuhan University

Awards and Honors

2015-2019	Bristol-Myers Squibb Postdoctoral Fellowship, Bristol-Myers Squibb.
2015	Reaxys PhD Prize Finalist, Elsevier Inc.
2015	Pegram Award in Meritorious Graduate Research, Columbia University, New York, New York.
2012	Jack Miller Award in Excellent Teaching, Columbia University, New York, New York.
2010-2015	Faculty Fellowship, Columbia University, New York, New York
2010	Graduate with honor, Wuhan University, Wuhan, Hubei Province, P. R. China.
2010	Outstanding Undergraduate Thesis Award, Hubei Province, P. R. China.

Publications

Independent Work

1. Wang, Y.; Zhu, L.; Shao, Z.; Li, G.; Lan, Y.; Liu, Q., "Unmasking the Ligand Effect in Manganese-Catalyzed Hydrogenations: Mechanistic Insight and Catalytic Application", *J. Am. Chem. Soc.* **2019**, *141*, 17337.

Postdoctoral, Graduate and Undergraduate Work

2. Li, G.; Kates, P. A.; Dilger, A. K.; Cheng, P. T.; Ewing, W. R.; Groves, J. T, "Manganese Catalyzed Desaturation of N-Acyl Amines and Ethers", *ACS Catal.* **2019**, *9*, 9513.
3. Li, G.; Dilger, A. K.; Cheng, P. T.; Ewing, W. R.; Groves, J. T, "Selective C-H Halogenations with a Highly Fluorinated Manganese Porphyrin", *Angew. Chem. Int. Ed.* **2018**, *57*, 1251.
4. Li, G.; Kuo, J. L.; Han, A.; Abuyuan, J. M.; Young, L. C.; Norton, J. R.; Palmer, J. H, "Radical Isomerization and Cycloisomerization Initiated by H• Transfer", *J. Am. Chem. Soc.* **2016**, *138*, 7698.
5. Li, G.; Estes, D. P.; Norton, J. R.; Satler, W.; Ruccolo, S., "Dihydrogen Activation by Cobaloximes with Various Axial Ligands", *Inorg. Chem.* **2014**, *53*, 10743.
6. Norton, J. R.; Spataru, T.; Camaioni, D. M.; Lee, S. –J.; Li, G.; Choi, J.; Franz. J. A., "Kinetics and Mechanism of the Hydrogenation of the $CpCr(CO)_3$•/$[CpCr(CO)_3]_2$ Equilibrium to $CpCr(CO)_3H$", *Organometallics* **2014**, *33*, 2496.
7. Han, A.; Spataru. T.; Hartung, J.; Li, G.; Norton, J. R., "Effect of Double-Bond Substituents on the Rate of Cyclization of α-Carbomethoxyhex-5-enyl Radicals", *J. Org. Chem.* **2014**, *79*, 1938.
8. Li, G.; Han, A.; Pulling, M. E.; Estes, D. P.; Norton, J. R., "Evidence for Formation of a Co-H Bond from $(H_2O)_2Co(dmgBF_2)_2$ under H_2: Application to Radical Cyclizations", *J. Am. Chem. Soc.* **2012**, *134*, 14662.
9. Liu, Q.; Li, G.; Yi, H.; Wu, P.; Liu, J.; Lei, A., "Pd-Catalyzed Direct and Selective C-H Functionalization: C3-Acetoxylation of Indoles", *Chem. Eur. J.* **2011**, *17*, 2353.
10. Liu, Q.; Li, G.; He, J.; Liu, J.; Li, P.; Lei, A., "Palladium-Catalyzed Aerobic Oxidative Carbonylation of Arylboronate Esters under Mild Conditions", *Angew. Chem. Int. Ed.* **2010**, *49*, 3371.

11. Liu, Q.; Lan, Y.; Liu, J.; Li, G.; Wu, Y.; Lei, A., "Revealing a Second Transmetalation Step in the Negishi Coupling and Its Competition with Reductive Elimination: Improvement in the Interpretation of the Mechanism of Biaryl Syntheses", *J. Am. Chem. Soc.* **2009**, *131*, 10201.
12. Liu, Q.; Duan, H.; Luo, X.; Tang, Y.; Li, G.; Huang, R.; Lei, A., "An Electron-Deficient Diene as Ligand for Palladium-Catalyzed Cross-Coupling Reactions: An Efficient Alkylation of Aryl Iodides by Primary and Secondary Alkylzinc Reagents", *Adv. Synth. Catal.* **2008**, *350*, 1349.

Invited Lectures

2019

11/08: Department of Chemistry, Boise State University, Boise, ID
04/16: Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing, China
04/15: Department of Chemistry, Tsinghua University, Beijing, China
04/12: Department of Chemistry, Xian Jiaotong University, Xian, China

2018

05/04: School of Pharmaceutical Sciences, Chongqing University, Chongqing, China
04/21: Institute for Advanced Study, Wuhan University, Wuhan, China

2015

09/07: Reaxys PhD Prize Symposium, Hong Kong SAR, China
08/13: IUPAC-2015, 45th World Chemistry Congress, Busan, South Korea
08/10: 2nd International Inorganic Chemistry Symposium, Department of Chemistry, KAIST, Daejeon, South Korea

Lecture Courses at Utah State

Fall 2019	Chem 6500: "Reactivity and Mechanisms in Inorganic Chemistry"	Enrollment: 10