CHAO LIU

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CURRENT POSITION

Postdoctoral Fellow, Northwestern University, Evanston, IL — Oct. 2015 - present

EDUCATION

Ph.D. Physical Chemistry, University of New Hampshire (UNH), Durham, NH — 2015
B.S. Applied Chemistry, Guangxi University, Nanning, China — 2008

PUBLICATIONS

1. Park, J., Jin, T., Liu, C., Li, G. & Yan, M. "A three-dimensional graphene-TiO_2 nanocomposite photocatalyst synthesized by covalent attachment," *ACS Omega* **2016**, 1, 351-356.
2. Liu, C., Iyemperumal, S. K., Deskins, N. A. & Li, G. "Photocatalytic CO_2 reduction by highly dispersed Cu sites on TiO_2," *J. Photon. Energy* **2016**, 7, 012004.
3. Liu, C., Jin, T., Louis, M. E., Pantovich, S. A., Skraba-Joiner, S. L., Rajh, T. & Li, G. "Molecular deposition of a macrocyclic cobalt catalyst on TiO_2 nanoparticles," *J. Mol. Catal. A* **2016**, 423, 293-299.
4. Jin, T., Liu, C. & Li, G. "Heterogenization of a molecular cobalt catalyst for photochemical CO_2 reduction," *J. Coord. Chem.* **2016**, 69, 1748-1758.
5. He, H., Liu, C., Louis, M. E. & Li, G. "Infrared studies of a hybrid CO_2-reduction photocatalyst consisting of a molecular Re(I) complex grafted on Kaolin," *J. Mol. Catal. A* **2014**, 395, 145-150.
6. Jin, T., Liu, C. & Li, G. "Photocatalytic CO_2 reduction using a molecular cobalt complex deposited on TiO_2 nanoparticles," *Chem. Commun.* **2014**, 50, 6221-6224.
7. Dubois, K. D., Liu, C. & Li, G. "Involvement of surface-adsorbed water in photochromism of spiropyran molecules deposited on NaY zeolite," *Chem. Phys. Lett.* **2014**, 598, 53-57.
8. Liu, C., Dubois, K. D., Louis, M. E., Vorushilov, A. S. & Li, G. "Photocatalytic CO_2 reduction and surface immobilization of a tricarbonyl Re(I) complex modified with amide groups," *ACS Catal*. **2013**, 3, 655-662.
9. Goldfarb, J. L. & Liu, C. "Impact of blend ratio on the co-firing of torrefied wood and coal via analysis of oxidation kinetics," *Bioresour. Technol*. **2013**, 149, 208-215.
10. Dubois, K. D., He, H., Liu, C., Vorushilov, A. S. & Li, G. "Covalent attachment of a molecular CO_2-reduction photocatalyst to mesoporous silica," *J. Mol. Catal.* A **2012**, 363-364, 208-213.
11. He, H., Liu, C., Dubois, K. D., Jin, T., Louis, M. E. & Li, G. "Enhanced charge separation in nanostructured TiO_2 materials for photocatalytic and photovoltaic applications," *Ind. Eng. Chem. Res*. **2012**, 51, 11841-11849.

CONFERENCE PRESENTATIONS

1. Liu, C., Jin, T., Louis, M. E. & Li, G. "CO_2 reduction photocatalysts using earth abundant metals.," *UNH Graduate Research Conference*, Durham, NH, April 2014.
2. Liu, C., Jin, T., Louis, M. E. & Li, G. "Innovative hybrid photocatalysts for solar CO_2 reduction," *The 2013 Fall Meeting of the New England Catalysis Society*, Worcester, MA, November 2013.
3. Liu, C., He, H., Dubois, K. D., Vorushilov, A. S. & Li, G. "Solar CO_2 reduction using surface-immobilized molecular photocatalysts," *ACS Summer School on Green Chemistry and Sustainable Energy*, Golden, CO, July 2013.
4. Liu, C. & Li, G. "CO_2 reduction photocatalysts using earth abundant metals," *UNH Graduate Research Conference*, Durham, NH, April 2013.
5. Liu, C., He, H., Dubois, K. D., Vorushilov, A. S. & Li, G. "Solar CO_2 reduction using surface-immobilized molecular photocatalysts," *Gordon Research Seminar/Conference on Photosynthesis*, Davison, NC, July 2012.

6. Dubois, K. D., Liu, C. & Li, G. "Photochemical reduction of CO_2 using organometallic complexes immobilized in mesoporous materials," *Gordon Research Conference on Nanoporous Materials & Their Applications*, Holderness, NH, August 2011.

AWARDS

Dissertation Year Fellowship Award, UNH Graduate School	2014
Summer Teaching Assistants Fellowship Award, UNH Graduate School	2013 & 2014
Excellence in Graduate Research Award, UNH Department of Chemistry	2012