**Selected Recent Publications (2015-2018)**

J.H. Lee, S. Kattel, Z. Xie, B.M. Tackett, J. Wang, C.-J. Liu, and J.G. Chen\*, “Understanding the Role of Functional Groups in Polymeric Binder for Electrochemical Carbon Dioxide Reduction on Gold Nanoparticles”, *Advanced Functional Materials*, (2018) accepted.

B. Yan, S. Yao, S. Kattel, Q. Wu, Z. Xie, E. Gomez, P. Liu, D. Su and J.G. Chen\*, “Active sites for tandem reactions of CO2 reduction and ethane dehydrogenation”, *Proceedings of the National Academy of Sciences of United States*, 115 (2018) 8278-8283.

J.G. Chen\*, R.M. Crooks\*, L.C. Seefeldt\*, K.L. Bren, R.M. Bullock, M.Y. Darensbourg, P.L. Holland, B. Hoffman, M.J. Janik, A.K. Jones, M.G. Kanatzidis, P. King, K.M. Lancaster, S.V. Lymar, P. Pfromm, W.F. Schneider, R.R. Schrock, “Beyond Fossil-Fuel-Driven Nitrogen Transformations”, *Science*, 360 (2018) 873.

E. Gomez, S. Kattel, B. Yan, S. Yao, P. Liu and J.G. Chen\*, “Combining CO2 Reduction with Propane Oxidative Dehydrogenation over Bimetallic Catalysts”, *Nature Communications*, 9 (2018) 1398.

Z. Lin, R. Chen, Z. Qu\* and J.G. Chen\*, “Hydrodeoxygenation of biomass-derived oxygenates over metal carbides: From model surfaces to powder catalysts”, (*Critical Review*), *Green Chemistry*, 20 (2018) 2679-2696.

S. Kattel\*, P. Liu\* and J.G. Chen\*, “Tuning Selectivity of CO2 Hydrogenation Reactions at the Metal/Oxide Interface”, *Journal of the American Chemical Society*, 139 (2017) 9739-9754.

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J.C. Matsubu, S. Zhang, L. DeRita, N.S. Marinkovic, J.G. Chen, G.W. Graham, X. Pan and P. Christopher, “Adsorbate-Mediated Strong Metal-Support Interactions in Oxide-Supported Rh Catalysts”, *Nature Chemistry*, 9 (2017) 120-127.

W. Wan, B.M. Tackett and J.G. Chen\*, “Reactions of water and C1 molecules on carbide and metal-modified carbide surfaces”, *Chemical Society Reviews*, 46 (2017) 1807-1823

S. Kattel, W. Yu, X. Yang, B. Yan, Y. Huang, W. Wan, P. Liu\* and J.G. Chen\*, “CO2 Hydrogenation on Oxide-supported PtCo Catalysts: Fine-tuning Selectivity using Oxide Supports”, *Angewandte Chemie International Edition*, 55 (2016) 7968-7973.

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