

## Journal Publications

"Synthesis and Characterization of Bimetallic Single-Source Precursors ( $\text{Ph}_3\text{P}(\mu\text{-SEt})_2\text{E}(\text{SEt})_2$  for MES<sub>2</sub> Chalcopyrite Materials (M = Cu, Ag and E = In, Ga, Al)" Kelsey R. Margulieux, Chivin Sun, Matthew T. Kihara, Adam C. Colson,<sup>[1]</sup> Lev N. Zakharov, Kenton H. Whitmire, Andrew W. Holland, and Joshua J. Pak, European Journal of Inorganic Chemistry, 2017, 2068–2077, DOI: 10.1002/ejic.201700115.

"A Multicomponent Metal-Organic Framework with a High Tolerance for Vacancy Defects" Lee, Seok; Doussot, Celine; Baux, Anthony; Liu, Lujia; Jameson, Geoffrey; Richardson, Christopher; Pak, Joshua J.; Trousselet, Fabien; Coudert, François-Xavier; Telfer, Shane, Chem. Mater. 2016, 28(1), 368–375, DOI: 10.1021/acs.chemmater.5b04306.

"Fabrication and Characterization of Thin Film Solar Cell Made From  $\text{CuIn}_{0.75}\text{Ga}_{0.25}\text{S}_2$  Wurtzite Nanoparticles" Fengyan Zhang, Chivin Sun, Cyril Bajracharya, René G. Rodriguez, Joshua J. Pak, Journal of Nanomaterials, 2013, Article ID 320375, 5 pages, 2013. doi:10.1155/2013/320375.

"A Large-Scale Synthesis and Characterization of Quaternary  $\text{CuIn}_x\text{Ga}_{1-x}\text{S}_2$  Chalcopyrite Nanoparticles via Microwave Batch Reactions" Chivin Sun, Richard D. Westover, Gary Long, Cyril Bajracharya, Jerry Harris, Alex Punnoose, René G. Rodriguez, and Joshua J. Pak\*, Int. J. Chem. Eng. 2011, Article ID 545234.

"Divergent Syntheses of Cu-In Bimetallic Single Source Precursors via Thiolate Ligand Exchange" Chivin Sun, Richard D. Westover, Kelsey R. Margulieux, Lev N. Zakharov, Andrew W. Holland\*, Joshua J. Pak\*, Inorganic Chemistry, 2010, 4756–4758.

"Controlled Stoichiometry for Quaternary  $\text{CuIn}_x\text{G}_1-\text{xS}_2$  Chalopyrite Nanoparticles from Single Source Precursors via Microwave Irradiation" Chivin Sun, Joseph S. Gardner, Gary Long, Cyril Bajracharya, Aaron Thurber, Alex Punnoose, Rene G. Rodriguez\*, and Joshua J. Pak\*, Chem. Mat. 2010, 26992701.

"Step-Wise Introduction of Thiolates in Copper Indium Binuclear Complexes" Kelsey R. Margulieux, Chivin Sun, Lev N. Zakharov, Andrew W. Holland\*, Joshua J. Pak\*, Inorganic Chemistry, 2010, 49(9), 3959-3961.

"A high yield synthesis of chalcopyrite  $\text{CuInS}_2$  nanoparticles with exceptional size control" Chivin Sun, Joseph S. Gardner, Endrit Shurdha, Kelsey R. Margulieux, Richard D. Westover, Lisa Lau, Gary Long, Cyril Bajracharya, Chongmin Wang, Aaron Thurber, Alex Punnoose, Rene G. Rodriguez\*, and Joshua J. Pak\*, J. Nanomat. 2009, 748567.

"Extraction of Technetium as  $[\text{Tc}(\text{II})(\text{NO})(\text{AHA})_2\text{H}_2\text{O}]^+$  Species in the UREX Process" Patricia Paviet-Hartmann\*, Ana Nunez Gomez-Aleixandre, Joshua Pak, Amparo Glez Espartero, Frederic Poineau, Amber Wright, Edward Mausolf, and Kenneth R. Czerwinski, Proceedings of the 17th International Conference on Nuclear Engineering, 2009, ICONE 17- 75509.

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"Pulsed-Spray Radiofrequency PECVD of CuInS<sub>2</sub> Thin Films," R.G. Rodriguez, D.J.V. Pulsipher, L.D. Lau, E. Shurdha, J.J. Pak, M.H. Jin, K.K. Banger, A.F. Hepp, Plasma Chemistry and Plasma Processing 26(2), 137-148, 2006.

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"Synthesis and crystallographic characterization of a 'palladadehydrobenzo[19]annulene'," J.J. Pak, O.S. Darwish, T.J.R. Weakley, M.M. Haley, J. Organomet. Chem., 683 (2), 430-434, 2003.

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" $\alpha,\beta$ -Unsaturated Nitriles: An Effective Conjugate Addition with Potassium Phenyl Selenolate and Potassium Phenyl Sulfenylate," F.F. Fleming, J.J. Pak, J. Org. Chem., 60, 4299-4301, 1995.