John K. Gibson – Selected Recent Publications

1) "Activation of water by pentavalent actinide dioxide cations: Characteristic curium revealed by a reactivity turn after americium," T. Jian, P. D. Dau, D. K. Shuh, M. Vasiliu, D. A. Dixon, K. A. Peterson, J. K. Gibson, *Inorg. Chem.* 58 (2019) 14005-14014 (DOI: 10.1021/acs.inorgchem.9b01997)

2) "Destruction of the uranyl moiety in a U(V) 'cation-cation' interaction," S.-X. Hu, J. Jian, J. Li, J. K. Gibson, *Inorg. Chem.* 58 (2019) 10148-10159 (DOI: 10.1021/acs.inorgchem.9b01265)*

3) "Reductive activation of neptunyl and plutonyl oxo species with a hydroxypyridinone chelalating ligand" K. P. Carter, J. Jian, M. M. Pyrch, T. Z. Forbes, T. M. Eaton, R. J. Abergel, W. A. de Jong, J. K. Gibson, *Chem Comm.* 54 (2018) 10698-10701 (DOI: 10.1039/C8CC05626A).

4) "Pentavalent curium, berkelium, and californium in nitrate complexes: Extending actinide chemistry and oxidation states," A. Kovács, P. D. Dau, J. Marçalo, J. K. Gibson, *Inorg. Chem.* 57 (2018) 9453-9467 (DOI: 10.1021/acs.inorgchem.8b01450).

5) "Heptavalent actinide tetroxides NpO_4^- and PuO_4^-: Oxidation of Pu(V) to Pu(VII) by adding an electron to PuO_4," J. K. Gibson, W. A. de Jong, P. D. Dau, Y. Gong, *J. Phys. Chem. A* 47 (2017) 9156-9162 (DOI: 10.1021/acs.jpca.7b09721).

6) "A uranyl peroxide dimer in the gas phase," P. D. Dau, P. V. Dau, L. Rao, A. Kovács, J. K. Gibson, *Inorg. Chem.* 56 (2017) 4186-4196 (10.1021/acs.inorgchem.7b00187).

7) "Heptavalent neptunium in a gas-phase complex: $(Np^{VII}O_3^+)(NO_3^-)_2$," P. D. Dau, R. Maurice, E. Renault, J. K. Gibson, *Inorg. Chem.* 55 (2016) 9830-9837 (DOI: 10.1021/acs.inorgchem.6b01617).

8) "Divalent and trivalent gas-phase coordination complexes of californium: Evaluating the stability of Cf(II)," P. D. Dau, D. K. Shuh, M. Sturzbecher-Hoehne, R. J. Abergel, J. K. Gibson, *Dalton Trans.* 45 (2016) 12338 - 12345 (DOI: 10.1039/C6DT02414A).

9) "Synthesis and hydrolysis of uranyl, neptunyl and plutonyl gas-phase complexes exhibiting discrete actinide-carbon bonds," P. D. Dau, D. Rios, Y. Gong, M. C. Michelini, J. Marçalo, D. K. Shuh, M. Mogannam, M. J. Van Stipdonk, T. A. Corcovilos, J. K. Martens, J. Oomens, G. Berden, B. Redlich, J. K. Gibson, *Organometallics* 25 (2016) 1228-1240 (DOI: 10.1021/acs.organomet.6b00079).

10) "Gas-phase activation of carbon dioxide by a terminal uranium-nitrogen bond: A demonstration of the principle of microscopic reversibility," P. D. Dau, P. B. Armentrout, M. C. Michelini, J. K. Gibson, *Phys. Chem. Chem. Phys.* 18 (2016) 7334-7340 (DOI: 10.1039/c6cp00494f).