

## List of publication of Dr. Djamaladdin (Jamal) G. Musaev

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### 2018

1. Brandon E. Haines, Jin-Quan Yu, Djamaladdin G. Musaev, "The Mechanism of Directed Ni(II)-Catalyzed C-H Iodination with Molecular Iodine", *Chem. Sci.*, **2018**, DOI: 10.1039/C7SC04604A.
2. Adrián Varela-Álvarez, Brandon E. Haines and Djamaladdin G. Musaev, „Key Mechanistic Insights into the Intramolecular C-H Bond Amination and Double Bond Aziridination in Sulfamate Esters Catalyzed by Dirhodium Tetracarboxylate Complexes”, *J. of Organometallic Chem.*, **2018**, DOI: 10.1016/j.jorgchem.2017.12.013
3. Kuangbiao Liao, Wenbin Liu, Zachary L. Niemeyer, Zhi Ren, John Bacsa, Djamaladdin G. Musaev, Mathew S. Sigman, Huw M. L. Davies, “Site-Selective Carbene-Induced C–H Functionalization Catalyzed by Dirhodium Tetrakis(triaryl(cyclopropanecarboxylate) Complexes”, *ACS Catalysis*, **2018**, *in press*.
4. Alexey L. Kaledin, Darren M. Driscoll, Diego Troya, Daniel Collins-Wildman, Craig L. Hill, John R. Morris, Djamaladdin G. Musaev, “Impact of Ambient Gases on the Mechanism of the [Cs<sub>8</sub>Nb<sub>6</sub>O<sub>19</sub>]-Catalyzed Nerve-Agent Decomposition”, **2017**, *submitted*
5. Kenji Usui, Brandon E. Haines, Djamaladdin G. Musaev, Richmond Sarpong, „ Understanding C–H functionalization site-selectivity in a directed alkynylation“, **2017**, *submitted*

### 2017

6. Kuangbiao Liao, Tom Pickle, Vyacheslav Boyarskikh, John Bacsa, Djamaladdin G. Musaev, Huw M. L. Davies, „Site-selective and stereoselective functionalization of non-activated tertiary C–H bonds“, *NATURE*, **2017**, DOI: 10.1038/nature24641
7. Joaquín Soriano-López, Djamaladdin G. Musaev, Craig Hill, José Ramón Galán-Mascarós, Jorge J. Carbó, Josep M. Poblet, „TetraCobalt-Polyoxometalate Catalysts for Water Oxidation: Key Mechanistic Details.“, *J. of Catalysis*, **2017**, 350, 56-63.
8. Brandon E. Haines, Takahiro Kawakami, Kei Murakami, Kenichiro Itami, Djamaladdin G. Musaev, “Key Mechanistic Details and predictive Models for Cu-catalyzed Aromatic C–H Imidation with *N*-Fluorobenzenesulfonimide.” *Chem. Sci.*, **2017**, 8 (2), 988-1001
9. Marika Wieliczko, Yurii V. Geletii, John Bacsa, Djamaladdin G. Musaev, Craig L. Hill, „Effects of Competitive Active-Site Ligand Binding on Proton- and Electron-Transfer Properties of the [Co<sub>4</sub>(H<sub>2</sub>O)<sub>2</sub>(PW<sub>9</sub>O<sub>34</sub>)<sub>2</sub>]<sup>10-</sup> Polyoxometalate Water Oxidation Catalyst“, *J. Cluster Sci.*, **2017**, 28 (2), 839-852

10. Brandon E. Haines, Jin-Quan Yu, Djameladdin G. Musaev, „ An enantioselectivity model for Pd-catalyzed C-H Functionalization Mediated by the Mono-N-Protected Amino Acid (MPAA) Family of Ligands“, *ACS Catalysis*, **2017**, 7 (7), 4344-4354
11. Joseph J. Gair, Brandon E. Haines, Alexander S. Filatov, Djameladdin G. Musaev, Jared C. Lewis, „ Remarkable dimeric structural motif of Palladium (II) mono-N-protected amino acid complexes and its importance in C-H Functionalization“, *Chem. Sci.*, **2017**, 8 (8), 5746-5756.
12. R. Erik Plata, David E. Hill, Brandon E. Haines, Djameladdin G. Musaev, Ling Chu, David P. Hickey, Matthew S. Sigman, Jin-Quan Yu, Donna G. Blackmond “A Role for Pd(IV) in Catalytic Enantioselective C-H Functionalization With Monoprotected Amino Acid Ligands Under Mild Conditions” , *J. Am. Chem. Soc.* **2017**, 139 (27), 9238-9245
13. Brett D. McLarney, Marchello A. Cavitt, Theodore M. Donnell, Djameladdin G. Musaev, Stefan France, “Rh(II)-Catalyzed  $\beta$ -C(sp<sup>2</sup>)-H Alkylation of Enol Ethers, Enamides and Enecarbamates with  $\alpha$ -Diazo Dicarbonyl Compounds”, *Chemistry-A European Journal*, **2017**, 23 (5), 1129-1135

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15. Adrián Varela-Álvarez, Tzuhsitung Yang, Heather Jennings, Katherine P. Kornecki, Samantha N. MacMillan, Kyle M. Lancaster, James Booker Christianson Mack, Justin Du Bois, John F. Berry, Djameladdin G. Musaev, “Rh<sub>2</sub>(II,III) Catalysts with Chelating Carboxylate and Carboxamidate Supports: Electronic Structure and Nitrene Transfer Reactivity.” *J. Am. Chem. Soc.* **2016**, 138 (7), 2327-2341.
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19. Elliot N. Glass, John Fielden, Zhuangqun Huang, Xu Xiang, Djameladdin G. Musaev, Tianquan Lian, Craig L. Hill, “ Transition Metal Substitution Effects on Metal-to-Polyoxometalate Charge Transfer.” *Inorg. Chem.* **2016**, 55(9), pp. 4308-4319.

20. Robert C. Chapleski Jr., Djamaladdin G. Musaev, Craig L. Hill, and Diego Troya, "Reaction Mechanism of Nerve-Agent Hydrolysis with the  $\text{Cs}_8\text{Nb}_6\text{O}_{19}$  Lindqvist Hexaniobate Catalyst." *J. Phys. Chem. C*, **2016**, *120* (30), pp. 16822-16830
21. Brandon E. Haines, Yutaro Saito, Yasutomo Segawa, Kenichiro Itami, Djamaladdin G. Musaev, "Flexible Reaction Pocket on Bulky Diphosphine-Ir Complex Controls Regioselectivity in *para*-selective C-H Borylation of Arenes." *ACS Catalysis*, **2016**, *6* (11), 7536-7546
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23. Hongjin Lv, Yuanzhe Gao, Weiwei Guo, Sarah M Lauinger, Yingnan Chi, John Bacsa, Kevin P. Sullivan, Marika Wieliczko, Djamaladdin G. Musaev, Craig L. Hill, „Cu-based Polyoxometalate catalyst for efficient Catalytic Hydrogen Evalution“, *Inorg. Chem.* **2016**, *55*, pp. 6750-6758.

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27. Alexey L. Kaledin, Tianquan Lian, Craig L. Hill, Djamaladdin G. Musaev, „A Hybrid Quantum Mechanical Approach: Intimate Details of Electron Transfer Between Type I CdSe/ZnS Quantum Dots and an Anthraquinone Molecule“, *J. Phys. Chem. B*, **2015**, *119*, 7651-7658.
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32. Adrián Varela-Álvarez, Djamaladdin G. Musaev, “Fundamental Aspects of the Metal-Catalyzed C–H Bond Functionalization by Diazocarbenes: Guiding Principles for Design of Catalyst with Non-redox-Active Metal (Such as Ca) and Non-Innocent Ligand.” In “*Understanding Organometallic Reaction Mechanisms and Catalysis. Experimental and Computational Tools*”, Ed. Ananikov, V.; Wiley-VCH Verlag GmbH & Co. KGaA, **2014**, pp 17-40, Weinheim, Germany
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