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Webpages: <http://pharmacy.wisc.edu/tang-lab>;

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Education and Training

1992-1997, Peking University, B.S., Chemistry

1997-1999, New York University, M.S., Chemistry

1999-2005, Stanford University, Ph.D., Organic Chemistry

2005-2007, Harvard University and Broad Institute of Harvard and MIT, Postdoc, Chemical Biology and Medicinal Chemistry

Professional Experience

2007-2013, Assistant Professor, School of Pharmacy, University of Wisconsin-Madison

2013-2017, Associate Professor, School of Pharmacy and Department of Chemistry, University of Wisconsin-Madison

2015-present, Director of Medicinal Chemistry Center, School of Pharmacy, University of Wisconsin-Madison

2016-present, Faculty leader, UW Carbone Cancer Center Drug Development Core

2017-present, Professor, School of Pharmacy and Department of Chemistry, University of Wisconsin-Madison

2019-present, Janis Apinis Professor

Other appointments at the University of Wisconsin-Madison

2007-present Trainer, Chemistry-Biology Interface (CBI) Training Program

2008-present Faculty mentor, Undergraduate Research Scholars Program (URS)

2015-present Trainer, Pharmacology and Drug Discovery Training Program

2015-present Member, UW Carbone Cancer Center

Awards and Honors

- Boehringer Ingelheim Pharmaceuticals, Inc. Predoctoral Fellowship (2002)
- Amgen Predoctoral Fellowship (2003)
- Howard Hughes Medical Institute Postdoctoral Fellowship (2005-2007)
- Thieme Synlett/Synthesis Journal Award (2010)
- Invited Speaker for NSF Annual Workshop on Organic Synthesis and Natural Product Chemistry
- Invited Speaker for American Chemical Society Young Academic Investigator Symposium in Division of Organic Chemistry (2011)
- Amgen Young Investigator Award (2011)
- Invited Speaker for the 1st US-Japan Organocatalysis Conference (2012)
- Invited Speaker for IUPAC Organometallic Chemistry Directed for Organic Synthesis International Conference. (2013)
- Eli Lilly Outstanding Continuous Contribution to Compound Screening Award (2014)
- UW-Madison Vilas Mid-Career Award (2018)

Professional Society Memberships

American Chemical Society, Division of Organic Chemistry, Division of Medicinal Chemistry, and Division of Carbohydrate Chemistry

Publications

Graduate and postdoctoral work prior to the University of Wisconsin:

1. "N-Alkoxy Analogues of 3,4,5-Trihydroxypiperidine." Sun, L.; Li, P.; Amankulor, N.; Tang, W.; Landry, D. W.; Zhao, K. *J. Org. Chem.* **1998**, *63*, 6472.
2. "Asymmetric Synthesis of Quaternary Centers. Total Synthesis of (-)-Malyngolide." Trost, B. M.; Tang, W.; Schulte, J. L. *Org. Lett.* **2000**, *2*, 4013.
3. "An Enantioselective Strategy to Macrocyclic Bis-Indolylmaleimides. An Efficient Formal Synthesis of LY333531." Trost, B. M.; Tang, W. *Org. Lett.* **2001**, *3*, 3409.
4. "An Efficient Enantioselective Synthesis of (-)-Galanthamine." Trost, B. M.; Tang, W. *Angew. Chem. Int. Ed.* **2002**, *41*, 2795.
5. "Enantioselective Synthesis of (-)-Codeine and (-)-Morphine." Trost, B. M.; Tang, W. *J. Am. Chem. Soc.* **2002**, *124*, 14542.
6. "Migratory Hydroamination: A Facile Enantioselective Synthesis of Benzomorphans." Trost, B. M.; Tang, W. *J. Am. Chem. Soc.* **2003**, *125*, 8744.
7. "Divergent Enantioselective Synthesis of (-)-Galanthamine and (-)-Morphine." Trost, B. M.; Tang, W.; Toste, F. D. *J. Am. Chem. Soc.* **2005**, *127*, 14785.
8. "Fluorous-Based Small-Molecule Microarrays for the Discovery of Histone Deacetylase Inhibitors." Vegas, A. J.; Bradner, J. E.; Tang, W.; McPherson, O. M.; Greenberg, E. F.; Koehler, A. N.; Schreiber, S. L. *Angew. Chem. Int. Ed.* **2007**, *46*, 7960.
9. "Simple Menaquinones Reduce Carbon Tetrachloride and Iron (III)." Fu, Q. S.; Boonchayaanant, B.; Tang, W.; Trost, B. M.; Criddle, C. S. *Biodegradation* **2009**, *20*, 109.
10. "Identification and Characterization of Small Molecule Inhibitors of a Class I Histone Deacetylase from Plasmodium Falciparum." Patel, V.; Mazitschek, R.; Coleman, B.; Nguyen, C.; Urgaonkar, S.; Cortese, J.; Barker, R. H.; Greenberg, E.; Tang, W.; Bradner, J. E.; Schreiber, S. L.; Duraisingham, M. T.; Wirth, D. F.; Clardy, J. *J. Med. Chem.* **2009**, *52*, 2185.
11. "Small Molecules Efficiently Direct Differentiation of Mouse Embryonic Stem Cells into Definitive Endoderm." Borowiak, M.; Maehr, R.; Chen, S.; Chen, A. E.; Tang, W.; Lamenzo, J. O.; Schreiber, S. L.; Melton, D. A. *Cell - Stem Cell*, **2009**, *4*, 348.
12. "Crebinostat: A novel cognitive enhancer that inhibits histone deacetylase activity and modulates chromatin-mediated neuroplasticity." Fass, D. M.; Reis, S. A.; Ghosh, B.; M. Hennig, K. M.; Joseph, N. F.; Zhao, W.-N.; Nieland, T. J. F.; Guan, J.-S.; Kuhnle, C. E. G.; Tang, W.; Barker, D. D.; Mazitschek, R.; Schreiber, S. L.; Tsai, L.-H.; Haggarty, S. J. *Neuropharmacology*, **2013**, *64*, 81-96.

Independent work at the University of Wisconsin – Madison since 2007 (* Corresponding author):

13. "Base-Catalyzed Intramolecular Hydroamination of Conjugated Enynes." Zhang, W.; Werness, J. B.; Tang, W.* *Org. Lett.* **2008**, *10*, 2023-2026.

14. "Synthesis of Cyclobutenes by Highly Selective Transition-Metal-Catalyzed Ring Expansion of Cyclopropanes."
Xu, H.-D.; Zhang, W.; Shu, D.; Werness, J. B.; Tang, W.* *Angew. Chem. Int. Ed.* **2008**, *47*, 8933-8936. (**Highlighted in Synfacts**)
15. "N,N'-(11S,12S)-(9,10-dihydro-9,10-ethanoanthracene-11,12-diyl)-bis-[2-(diphenylphosphino)-Benzamide."
Tang, W.* in *The Encyclopedia of Reagents for Organic Synthesis* [EROS], Fuchs, P. L., Ed. John Wiley and Sons, **2008**.
16. "Intramolecular Hydroamination of Conjugated Enynes."
Zhang, W.; Werness, J. B.; Tang, W.* *Tetrahedron*, **2009**, *65*, 3090-3095. (*Invited contribution for Justin Du Bois's Tetrahedron Young Investigator Award.*)
17. "DABCO-Catalyzed 1,4-Bromolactonization of Conjugated Enynes: Highly Stereoselective Formation of a Stereogenic Center and an Axially Chiral Allene."
Zhang, W.; Xu, H.-D.; Xu, H.; Tang, W.* *J. Am. Chem. Soc.* **2009**, *131*, 3832-3833. (**Highlighted in Synfacts**)
18. "Thermodynamic Control of the Electrocyclic Ring Opening of Cyclobutenes: C=X Substituents at C-3 Mask the Kinetic Torquoselectivity."
Um, J. M.; Xu, H.-D.; Houk, K. N.*; Tang, W.* *J. Am. Chem. Soc.* **2009**, *131*, 6664-6665.
19. "Enantioselective Bromolactonization of Conjugated (Z)-Enynes."
Zhang, W.; Zheng, S.; Liu, N.; Werness, J. B.; Guzei, I. A.; Tang, W.* *J. Am. Chem. Soc.* **2010**, *132*, 3664-3665. (**Highlighted in Angew. Chem. Int. Ed.** **2010**, *49*, 8306-8309.)
20. "Synthesis of Bromoallenyl Pyrrolidines via 1,4-Addition to 1,3-Enynes."
Werness, J. B.; Tang, W.* *Sci. China Chem.* **2011**, *54*, 56-60. (*Invited contribution for the 6th Sino-US Chemistry Professor Conference at Hangzhou, China.*)
21. "Synthesis of Highly Functionalized Cyclohexenone Rings: Rhodium-Catalyzed 1,3-Acyloxy Migration and Subsequent [5+1] Cycloaddition."
Shu, D.; Li, X.; Zhang, M.; Robichaux, P. J.; Tang, W.* *Angew. Chem. Int. Ed.* **2011**, *50*, 1346-1349.
22. "Intramolecular 1,4-Addition of Nitrogen Nucleophiles and Halogen Electrophiles to Conjugated Enynes."
Liu, N.; Werness, J. B.; Guzei, I. A.; Tang, W.* *Tetrahedron* **2011**, *67*, 4385-4390. (*Invited contribution for F. Dean Toste's Tetrahedron Young Investigator Award.*)
23. "Interception of a Rautenstrauch Intermediate by Alkynes for [5+2] Cycloaddition: Rhodium-Catalyzed Cycloisomerization of 3-Acyloxy-4-ene-1,9-dynes to Bicyclo[5.3.0]decatrienes."
Shu, X.-Z.; Huang, S.; Shu, D.; Guzei, I. A.; Tang, W.* *Angew. Chem. Int. Ed.* **2011**, *50*, 8153-8156. (**Selected as "hot paper" by the Editor**)
24. "Stereoselective Total Synthesis of (-)-Kumausallene."
Werness, J. B.; Tang, W.* *Org. Lett.* **2011**, *13*, 3664-3666. (**Highlighted in Synfacts**)
25. "Rhodium-catalyzed Ring Expansion of Cyclopropanes to Seven-membered Rings by 1,5 C-C Bond Migration."
Li, X.; Zhang, M.; Shu, D.; Robichaux, P. J.; Huang, S.; Tang, W.* *Angew. Chem. Int. Ed.* **2011**, *50*, 10421-10424.
26. "Effect of Halogenation Reagents on Halocyclization and Overman Rearrangement of Allylic Trichloroacetimidates."
Liu, N.; Schienebeck, C. M.; Collier, M. D.; Tang, W.* *Tetrahedron Lett.* **2011**, *52*, 6217-6219.
27. "Discovery of histone deacetylase 8 selective inhibitors"
Tang, W.*; Luo, T.; Greenberg, E. F.; Bradner, J. E.; Schreiber, S. L.* *Bioorg. Med. Chem. Lett.* **2011**, *21*, 2601-2605.

28. "Rhodium-catalyzed 1,3-Acyloxy Migration and Subsequent Intramolecular [4+2] Cycloaddition of Vinylallene and Unactivated Alkyne." Huang, S.; Li, X.; Lin, C. L.; Guzei, I. A.; Tang, W.* *Chem. Commun.* **2012**, *48*, 2204-2206.
29. "Rhodium-Catalyzed Carbonylation of 3-Acyloxy-1,4-enynes for the Synthesis of Cyclopentenones." Li, X.; Huang, S.; Schienebeck, C. M.; Shu, D.; Tang, W.* *Org. Lett.* **2012**, *14*, 1584–1587.
30. "Rhodium-catalyzed Intra- and Intermolecular [5+2] Cycloaddition of 3-Acyloxy-1,4-enyne and Alkyne with Concomitant 1,2-Acyloxy Migration." Shu, X.-Z; Li, X.; Shu, D.; Huang, S.; Schienebeck, C. M.; Zhou, X.; Robichaux, P. J.; Tang, W.* *J. Am. Chem. Soc.* **2012**, *134*, 5211–5221.
31. "Catalytic Enantioselective Halolactonization of Enynes and Alkenes." Zhang, W.; Liu, N.; Schienebeck, C. M.; Decloux, K.; Zheng, S. Werness, J. B.; Tang, W.* *Chem. Eur. J.* **2012**, *18*, 7296-7305. (**Highlighted in Synfacts**)
32. "Stereoselective Preparation of Cyclobutanes with Four Different Substituents: Total Synthesis and Structural Revision of Pipercyclobutanamide A and Piperchabamide G." Liu, R.; Zhang, M.; Wyche, T. P.; Winston-McPherson, G. N.; Bugni, T. S.; Tang, W.* *Angew. Chem. Ed. Int.* **2012**, *51*, 7503-7506. (**Highlighted in Nat. Chem. Biol.** **2012**, *8*, 678.)
33. "Synthesis of Functionalized Cyclohexenone Core of Welwitindolinones via Rhodium-Catalyzed [5+1] Cycloaddition." Zhang, M.; Tang, W.* *Org. Lett.* **2012**, *14*, 3756-3759.
34. "Rhodium-Catalyzed Carbonylation of Cyclopropyl Substituted Propargyl Esters: A Tandem 1,3-Acyloxy Migration [5+1] Cycloaddition." Shu, D.; Li, X.; Zhang, M.; Robichaux, P. J.; Guzei, I. A.; Tang, W.* *J. Org. Chem.* **2012**, *77*, 6463-6472.
35. "Rhodium-Catalyzed Acyloxy Migration of Propargylic Esters in Cycloadditions, Inspiration from Recent "Gold Rush"." Shu, X.-Z.; Shu, D.; Schienebeck, C. M.; Tang, W.* *Chem. Soc. Rev.* **2012**, *41*, 7698-7711.
36. "Rhodium-Catalyzed Chemo- and Regioselective Cross-Dimerization of Two Terminal Alkynes." Xu, H.-D.*; Zhang, R.-W.; Li, X., Huang, S., Tang, W.; Hu, W.-H. *Org. Lett.* **2013**, *14*, 840-843.
37. "Rhodium- and Platinum-catalyzed [4+3] Cycloaddition with Concomitant Indole Annulation: Synthesis of Cyclohepta[*b*]indoles." Shu, D.; Song, W.; Li, X.; Tang, W.* *Angew. Chem. Int. Ed.* **2013**, *52*, 3237-3240.
38. "Effect of Ester on Rhodium-Catalyzed Intermolecular [5 + 2] Cycloaddition of 3-Acyloxy-1,4-enynes and Alkynes." Schienebeck, C. M.; Robichaux, P. J.; Li, X.; Chen, L.*; Tang, W.* *Chem. Commun.* **2013**, *49*, 2616-2618.
39. "Ring Expansion of Alkynyl Cyclopropanes to Highly Substituted Cyclobutenes via a *N*-Sulfonyl-1,2,3-Triazole Intermediate." Liu, R.; Zhang, M.; Winston-McPherson, G. N.; Tang, W.* *Chem. Commun.* **2013**, *49*, 4376-4378. (*Invited contribution for ChemComm "Emerging Investigators 2013" themed issue.*)
40. "Enantioselective Intermolecular Bromoesterification of Allylic Sulfonamides." Zhang, W.; Liu, N.; Schienebeck, C. M.; Zhou, X.; Izhar, I. I.; Guzei, I. A.; Tang, W.* *Chem. Sci.* **2013**, *4*, 2652-2656.
41. "Stereoselective Addition of Halogen to Conjugated Enynes and Its Application in the Total Synthesis of (-)-Kumausallene."

- Werness, J. B.; Zhang, W.; Tang, W.* In *Strategies and Tactics in Organic Synthesis*, Harmata, M., Ed. Elsevier Science, Pergamon Press: Oxford, UK, **2013**, Vol. 9. Chapter 10, 275-291.
42. "Generation of Rhodium(I) Carbenes from Ynamides and Their Reactions with Alkynes and Alkenes." Liu, R.; Winston-McPherson, G. N.; Yang, Z.-Y.; Zhou, X.; Song, W.; Guzei, I. A.; Xu, X.;* Tang, W.* *J. Am. Chem. Soc.* **2013**, *135*, 8201-8204.
43. "Rh-Catalyzed (5+2) Cycloadditions of 3-Acyloxy-1,4-enynes and Alkynes: Computational Study of Mechanism, Reactivity, and Regioselectivity." Xu, X.*; Liu, P.; Shu, X.-Z.; Tang, W.*; Houk, K. N.* *J. Am. Chem. Soc.* **2013**, *135*, 9271-9274.
44. "Platinum-Catalyzed Tandem Indole Annulation/Arylation for the Synthesis of Diindolylmethanes and Indolo[3,2-*b*]carbazoles" Shu, D.; Winston-McPherson, G. N.; Song, W.; Tang, W.* *Org. Lett.* **2013**, *15*, 4162-4165.
45. "Stereoselective Total Synthesis of Hainanolidol and Harringtonolide via Oxidopyrylium-Based [5+2] Cycloaddition." Zhang, M.; Liu, N.; Tang, W.* *J. Am. Chem. Soc.*, **2013**, *135*, 12434-12438. (**Highlighted in Synfacts**)
46. "Stereoselective Halocyclization of Alkenes with *N*-Acyl Hemiaminal Nucleophiles." Liu, N.; Wang, H.-Y.; Zhang, W.; Jia, Z.-H.; Guzei, I. A.; Xu, H.-D.*; Tang, W.* *Chirality* **2013**, *25*, 805-809. (*Invited contribution*.)
47. "Transfer of Chirality in the Rhodium-Catalyzed Intramolecular [5+2] Cycloaddition of 3-Acyloxy-1,4-Enynes (ACEs) and Alkynes: Synthesis of Enantioenriched Bicyclo[5.3.0]decatrienes" Shu, X.-Z.; Schienebeck, C. M.; Song, W.; Guzei, I. A.; Tang, W.* *Angew. Chem. Int. Ed.* **2013**, *52*, 13601-13605. (**Highlighted in Synfacts**)
48. "Rhodium-Catalyzed Tandem Annulation and (5+1) Cycloaddition: 3-Hydroxy-1,4-Enyne as the 5-Carbon Component" Li, X.; Song, W.; Tang, W.* *J. Am. Chem. Soc.* **2013**, *135*, 16797-16800.
49. "Tethered Spectroscopic Probes Estimate Dynamic Distances with Subnanometer Resolution in Voltage-Dependent Potassium Channels" Jarecki, B. W.; Zheng, S.; Zhang, L.; Li, X.; Zhou, X.; Cui, Q.; Tang, W.; Chanda, B.* *Biophysical J.* **2013**, *105*, 2724-2732. (**Highlighted in Nat. Chem. Biol.** **2014**, *10*, 169.)
50. "Design, Synthesis and Preliminary Bioactivity Studies of 1,2-Dihydrobenzo[*d*]isothiazol-3-one-1,1-dioxide Hydroxamic Acid Derivatives as Novel Histone Deacetylase Inhibitors" Han, L.; Wang, L.; Hou, X.; Fu, H.; Song, W.; Tang, W.; Fang, H.* *Bioorg. Med. Chem.* **2014**, *22*, 1529-2538.
51. "3-Acyloxy-1,4-ene: a New Five-Carbon Synthon for Rhodium-Catalyzed [5 + 2] Cycloadditions" Schienebeck, C. M.; Li, X.; Shu, X.-Z.; Tang, W.* *Pure Appl. Chem.* **2014**, *86*, 409-417. (*Invited review*)
52. "Intermolecular bromoesterification of conjugated enynes: an efficient synthesis of bromoallenes." Wang, H.-Y.; Zhang, W.; Schienebeck, C. M.; Bennett, S. R.; Tang, W.* *Org. Chem. Front.* **2014**, *1*, 386-390. (*Invited contribution*)
53. "Cinchona Alkaloids as Organocatalysts in Enantioselective Halofunctionalization of Alkenes and Alkynes." Zheng, S.; Schienebeck, C. M.; Zhang, W.; Wang, H.-Y.; Tang, W.* *Asian J. Org. Chem.* **2014**, *3*, 366-376. (*Invited review*)

54. "Synthesis and Biological Evaluation of 2,3'-Diindolylmethanes as Agonists of Aryl Hydrocarbon Receptor." Winston-McPherson, G. N.; Shu, D.; Tang, W.* *Bioorg. Med. Chem. Lett.* **2014**, 24, 4023-4025.
55. "Synthesis of naturally occurring tropones and tropolones." Liu, N.; Song, W.; Schienebeck, C. M.; Zhang, M.*; Tang, W.* *Tetrahedron*. **2014**, 70, 9281-9305. (*Invited review*)
56. "Copper-catalyzed tandem annulation/arylation for the synthesis of diindolylmethanes from propargylic alcohols." Li, H.; Li, X.; Wang, H.-Y.; Winston-McPherson, G. N.; Geng, H.-M. J.; Guzei, I. A.; Tang, W.* *Chem. Commun.* **2014**, 50, 12293-12296.
57. "Improved antiproliferative activity of 1,3,4-thiadiazole-containing histone deacetylase (HDAC) inhibitors by introduction of the heteroaromatic surface recognition motif." Guan, P.; Wang, L.; Hou, X.; Wan, Y.; Xu, W.; Tang, W.; Fang, H.* *Bioorg. Med. Chem.* **2014**, 22, 5766-5775.
58. "Design, synthesis, and preliminary bioactivity studies of substituted purine hydroxamic acid derivatives as novel histone deacetylase (HDAC) inhibitors." Wang, J.; Sun, F.; Han, L.; Hou, X.; Pan, X.; Liu, R.; Tang, W.; Fang, H.* *MedChemComm.* **2014**, 5, 1887-1891.
59. "Gold versus Rhodium: Divergent Reactivity Enabled by the Catalyst." Winston-McPherson, G. N.; Tang, W.* *ChemCatChem* **2015**, 7, 574-576.
60. "Tumor Suppressor Role of Notch3 in Medullary Thyroid Carcinoma Revealed by Genetic and Pharmacological Induction." Jaskula-Sztul, R.; Eide, J.; Tesfazghi, S.; Dammalapati, A.; Harrison, A. D.; Yu, X.-M.; Schienebeck, C.; Winston-McPherson, G.; Kupcho, K. R.; Robers, M. B.; Hundal, A. K.; Tang, W.*; Chen, H.* *Mol. Cancer Therap.* **2015**, 14, 499-512.
61. "Rhodium-Catalyzed Intermolecular [5+1] and [5+2] Cycloadditions Using 1,4-Enynes with an Electron-Donating Ester on the 3-Position." Schienebeck, C. M.; Song, W.; Smits, A. M.; Tang, W.* *Synthesis* **2015**, 47, 1076-1084. (*invited feature article*).
62. "Synthesis of Substituted Tropones by Sequential Rh-Catalyzed [5+2] Cycloaddition and Elimination." Song, W.; Xi, B.-m.; Yang, K.; Tang, W.* *Tetrahedron* **2015**, 71, 5979-5984. (*Invited contribution for Prof. Bary Trost's Tetrahedron Award.*)
63. "Novel Analogs Targeting Histone Deacetylase Suppress Aggressive Thyroid Cancer Cell Growth and Induce Re-differentiation." Jang, S.; Yu, X. M.; Odorico, S.; Clark, M.; Jaskula-Sztul, R.; Schienebeck, C. M.; Kupcho, K. R.; Harrison, A. D.; Winston-McPherson, G. N.; Tang, W.; Chen, H.* *Cancer Gene Therap.* **2015**, 22, 410-416.
64. "Iridium-Catalysed Dynamic Kinetic Isomerization: Expedient Synthesis of Carbohydrates from Achmatowicz Rearrangement Products." Wang, H.-y.; Yang, K.; Bennett, S. R.; Guo, S.-r.*; Tang, W.* *Angew. Chem. Int. Ed.* **2015**, 54, 8756-8759.
65. "Design, synthesis and preliminary bioactivity evaluations of substituted quinoline hydroxamic acid derivatives as novel histone deacetylase (HDAC) inhibitors." Wang, L.; Hou, X.; Fu, H.; Pan, X.; Xu, W.; Tang, W.; Fang, H.* *Bioorg. Med. Chem.* **2015**, 23, 4364-4374.
66. "Divergent Reactivity of Rhodium(I) Carbenes Derived from Indole Annulations." Li, X.; Li, H.; Song, W.; Tseng, P.-S.; Liu, L.-Y.*; Guzei, I. A.; Tang, W.* *Angew. Chem. Int. Ed.* **2015**, 54, 12905-12908.

67. "Rhodium-Catalyzed Stereoselective Intramolecular [5 + 2] Cycloaddition of 3-Acyloxy 1,4-Enyne and Alkene."
Shu, X.-Z.; Schienebeck, C. M.; Li, X.; Zhou, X.; Song, W.; Chen, L.; Guzei, I. A.; Tang, W.* *Org. Lett.* **2015**, *17*, 5128-5131.
68. "Divergent De Novo Synthesis of All Eight Stereoisomers of 2,3,6-Trideoxyhexopyranosides and Their Oligomers."
Song, W.; Zhao, Y.;* Lynch, J. C.; Kim, H.; Tang, W.* *Chem Commun.* **2015**, *51*, 17475-17478.
69. "Chiral Catalyst-Directed Dynamic Kinetic Diastereoselective Acylation of Lactols for De Novo Synthesis of Carbohydrate."
Wang, H.-Y.; Yang, K.; Yin, D.; Liu, C.; Glazier, D. A.; Tang, W.* *Org. Lett.* **2015**, *17*, 5272-5275.
70. "Mechanism and reactivity of rhodium-catalyzed intermolecular [5+1] cycloaddition of 3-acyloxy-1,4-enyne (ACE) and CO: A computational study."
Ke, X.-N.; Schienebeck, C. M.; Zhou, C.-C.; Xu, X.-F.;* Tang, W.* *Chin. Chem. Lett.* **2015**, *26*, 730-734.
71. "Synthesis of Carbazoles and Carbazole-Containing Heterocycles via Rhodium-Catalyzed Tandem Carbonylative Benzannulations."
Song, W.; Li, X.; Yang, K.; Zhao, X.-l.; Glazier, D. A.; Xi, B.-m.;* Tang, W.* *J. Org. Chem.* **2016**, *81*, 2930-2942.
72. "Design and Synthesis of a New Generation of Substituted Purine Hydroxamate Analogs as Histone Deacetylase Inhibitors."
Liu, R.; Wang, J.; Tang, W.; Fang, H.* *Bioorg. Med. Chem.* **2016**, *24*, 1446-1454.
73. "Rhodium-Catalyzed [5+2] Cycloaddition of Inverted 3-Acyloxy-1,4-enyne and Alkyne: Experimental and Theoretical Studies."
Li, X.; Song, W.; Zhao, X.-l.; Ke, X.; Xu, X.;* Liu, P.; Houk, K. N.; Tang, W.* *Chem. Eur. J.* **2016**, *22*, 7079-7083.
74. "Rhodium-catalyzed [5+2] Cycloaddition of 3-Acyloxy-1,4-enyne and Alkene or Allene."
Song, W.; Lynch, J. C.; Shu, X.-z.; Tang, W.* *Adv. Syn. Catal.* **2016**, *358*, 2007-2011.
75. "Rhodium(I)-Catalyzed Benzannulation of Heteroaryl Propargylic Esters: Synthesis of Indoles and Related Heterocycles."
Li, X.; Xie, H.; Fu, X.; Liu, J.-t.; Wang, H.-y.; Bao-Min Xi,* Liu, P.;* Xu, X.;* Tang, W.* *Chem. Eur. J.* **2016**, *22*, 10410-10414.
76. "Total Synthesis of Diptoindonesin G and Its Analogues as Selective Modulators of Estrogen Receptors"
Liu, J.-t.; Do, T. J.; Simmons, C. J.; Lynch, J. C.; Gu, W.; Ma, Z.-X.; Xu, W.; and Tang, W.* *Org. Biomol. Chem.* **2016**, *14*, 8927-8930.
77. "Author Profile for the publication of the 10th paper in *Angewandte Chemie International Edition* during the last 10 ten years."
Tang, W. *Angew. Chem. Int. Ed.* **2016**, *55*, 12412.
78. "Discovery of selective small-molecule HDAC6 inhibitor for overcoming proteasome inhibitor resistance in multiple myeloma."
Hidemitsu, T.; Qi, J.; Paranal, R. M.; Tang, W.; Greenberg, E.; West, N.; Colling, M. E.; Estiu, G.; Mazitschek, R.; Perry, J. A.; Ohguchi, H.; Cottini, F.; Mimura, N.; Görgün, G.; Tai, Y.-T.; Richardson, P. G.; Carrasco, R. D.; Wiest, O.; Schreiber, S. L.; Anderson, K. C.;* Bradner, J. E.* *Proc. Natl. Acad. Sci. U.S.A.* **2016**, *113*, 13162-13167.
79. "Synthesis of Highly Substituted Benzofuran-containing Natural Products via Rh-catalyzed Carbonylative Benzannulation"
Liu, J.-t.; Simmons, C. J.; Xie, H.; Yang, F.; Zhao, X.-l.;* Tang, Y.;* and Tang, W.* *Adv. Syn. Catal.* **2017**, *359*, 693-697. (**Highlighted in Synfacts**)

80. "Chiral Catalyst-Directed Dynamic Kinetic Diastereoselective Acylation of Anomeric Hydroxyl Groups and a Controlled Reduction of the Glycosyl Ester Products." Wang, H.-Y.; Simmons, C. J.; Zhang, Y.; Smits, A. M.; Balzer, P. G.; Wang, S.* and Tang, W.* *Org. Lett.* **2017**, *19*, 508-511.
81. "Neuroendocrine Tumor-Targeted Upconversion Nanoparticle-Based Micelles for Simultaneous NIR-Controlled Combination Chemotherapy and Photodynamic Therapy, and Fluorescence Imaging" Chen, G.; Jaskula-Sztul, R.; Esquibel, C. R.; Lou, I.; Zheng, Q.; Dammalapati, A.; Harrison, A.; Eliceiri, K. W.; Tang, W.; Chen, H.* Gong, S.* *Adv. Funct. Mater.* **2017**, *27*, 1604671.
82. "Catalytic Site-Selective Acylation of Carbohydrates Directed by Cation–n Interaction." Xiao, G.; Cintron-Rosado, G. A.; Glazier, D. A.; Xi, B.-m.; Liu, C.; Liu, P.* and Tang, W.* *J. Am. Chem. Soc.* **2017**, *139*, 4346-4349. (**Highlighted in JACS Spotlights**)
83. "De novo Synthesis of Mono- and Oligosaccharides via Dihydropyran Intermediates." Song, W.; Wang, S.* and Tang, W.* *Chem. Asian J.* **2017**, *12*, 1027-1042.
84. "Iridium-catalyzed highly efficient chemoselective reduction of aldehydes in water using formic acid as the hydrogen source." Yang, Z.; Zhu, Z.; Luo, R.; Qiu, X.; Liu, J.-L.; Yang, J.-K.; and Tang W.* *Green Chem.* **2017**, *19*, 3296-3301.
85. "Transition metal mediated carbonylative benzannulations." Song, W.; Blaszczyk, S. A.; Liu, J.; Wang, S.* and Tang W.* *Org. Biomol. Chem.* **2017**, *15*, 7490-7504.
86. "Harnessing the Reactivity of Iridium Hydrides by Air: Iridium-Catalyzed Oxidation of Aldehydes to Acids in Water." Yang, Z.; Luo, R.; Zhu, Z.; Yang, X.; and Tang W.* *Organometallics.* **2017**, *36*, 4095–4098.
87. "Isoquinoline-1-carboxylate as a Traceless Leaving Group for Chelation-Assisted Glycosylation under Mild Neutral Conditions." Wang, H.-Y.; Simmons, C. J.; Blaszczyk, S. A.; Balzer, P. G.; Luo, R. and Tang W.* *Angew. Chem. Int. Ed.* **2017**, *56*, 15698–15702.
88. "Addressing the Challenge of Carbohydrate Site Selectivity by Synergistic Catalysis." Blaszczyk, S. A. and Tang W.* *Chem* **2017**, *3*, 722-723.
89. "AB₃-loaded and tumor-targeted unimolecular micelles for medullary thyroid cancer treatment" Jaskula-Sztul, R.; Chen, G.; Dammalapati, A.; Harrison, A.; Tang, W.; Gong, S.* and Chen, H.* *J. Mater. Chem.* **2017**, *5*, 151-159.
90. "Chiral Reagents in Glycosylation and Modification of Carbohydrates." Wang, H.-Y.; Blaszczyk, S. A.; Xiao, G.; and Tang W.* *Chem. Soc. Rev.* **2018**, *47*, 681-701.
91. "Iridium-Catalyzed Dynamic Kinetic Allylic Etherification of Achmatowicz Rearrangement Products." Zhu, Z.; Wang, H.-Y.; Simmons, C. J.; Tseng, P.-S.; Qiu, X.; Zhang, Y.; Duan, X.; Yang, J.-K.; and Tang W.* *Adv. Syn. Cat.* **2018**, *360*, 595-599.
92. "Trace derivatives of kynurenone potently activate the aryl hydrocarbon receptor (AHR)" Seok, S.-H.; Ma, Z.-X.; Feltenberger, J. B.; Chen, H.; Chen, H.; Scarlett, C.; Lin, Z.; Satyshur, K. A.; Cortopassi, M.; Jefcoate, C. R.; Ge, Y.; Tang, W.; Bradfield, C. A.; and Xing, Y.* *J. Biol. Chem.* **2018**, *293*, 1994-2005.
93. "Iridium-catalyzed efficient reduction of ketones in water with formic acid as hydride donor at low catalyst loading" Liu, J.; Yang, S.; Tang, W.; Yang, Z.* and Xu, J.* *Green Chem.* **2018**, *20*, 2118-2124.
94. "Catalytic Asymmetric Synthesis of All Possible Stereoisomers of 2,3,4,6-Tetradeoxy-4-Aminohexopyranosides"

Zhu Z.; Glazier, D. A.; Yang D.; Tang, W.* *Adv. Syn. Cat.* **2018**, *in press*.
DOI:10.1002/adsc.201800029

95. "Development of the first small molecule histone deacetylase 6 (HDAC6) degraders."
Yang, K.; Song, Y.; Xie, H.; Wu, H.; Wu, Y.-T.; Leistena, E. D.; Tang W.* *Bioorg. Med. Chem. Lett.* **2018**, 28, 2493-2497.
96. "Iridium-Catalyzed Highly Efficient and Site-Selective Deoxygenation of Alcohols"
Yang, S.; Tang, W.; Yang, Z.;* and Xu, J.* *ACS Cat.* **2018**, 8, 9320-9326.
97. "Organocatalyst-Mediated Dynamic Kinetic Enantioselective Acylation of 2-Chromanols"
Glazier, D. A.; Schroeder, J. M.; Liu, J.; Tang, W.* *Adv. Syn. Cat.* **2018**, 360, 4646-4649.
98. "Recent advances in site-selective functionalization of carbohydrates mediated by organocatalysts"
Blaszczyk, S. A.; Homan, T.; Tang, W.* *Carbohydrate. Res.* **2018**, 471, 64-77.
99. "Intermolecular Regio- and Stereoselective Hetero-[5+2] Cycloaddition of Oxidopyrylium Ylides and Cyclic Imines"
Zhao, C.; Glazier, D. A.; Yang, D.; Yin, D.; Guzei, I. A.; Aristov, M. M.; Liu, P.* and Tang, W.* *Angew. Chem. Eng. Ed.* **2019**, 58, 887-891.
100. "Iridium-catalysed highly selective reduction-elimination of steroidal 4-en-3-ones to 3,5-dienes in water"
Li, J.; Tang, W.; Ren, D.; Xu, J.*; Yang, Y.* *Green Chem.* **2019**, *in press*.
101. "Identification of a novel class of RIP1/RIP3 dual inhibitors that impede cell death and inflammation in mouse abdominal aortic aneurysm models"
Zhou, T.; Wang, Q.; Phan, N.; Ren, J.; Yang, H.; Feldman, C. C.; Feltenberger, J. B.; Ye, Z.; Wildman, S. A.; Tang, W.; Liu, B.* *Cell Death & Disease* **2019**, *in press*.
102. "Finding the Sweet Spot in SAX-ERLIC Mobile Phase for Simultaneous Enrichment of N-glyco and Phospho-peptides"
Cui, Y.; Yang, K.; Tabang D. N.; Huang, J.; Tang, W.; Li, L.* *J. Am. Soc. Mass Spectrom.* **2019**, *accepted*.
103. "S-Adamantyl Group Directed Site-Selective Acylation and Its Applications in the Streamlined Assembly of Oligosaccharides"
Blaszczyk, S. A.;[#] Xiao, G.;[#] Wen, P.;[#] Hao, H.; Wu, J.; Wang, B.; Carattino, F.; Li, Z.; Glazier, D. A.; McCarty, B. J.; Liu, P.* and Tang, W.* *Angew. Chem. Eng. Ed.* **2019**, *in press*.
104. "Development of selective small molecule MDM2 degraders based on nutlin"
Wang, B.;[#] Wu, S.;[#] Liu, J.; Yang, K.; Xie, H.; and Tang, W.* *Eur. J. Med. Chem.* **2019**, *in press*.