

Conferencia: Regio- & Enantioselective C–C Bond Activation of Benzocyclobutenones

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14/02/18

Aula de
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12:15 h

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XUNTA DE GALICIA
CONSELLERÍA DE CULTURA, EDUCACIÓN
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Tao XU
Abridged CV

1. Personal information

Surname: XU Given name: Tao
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2. Academic training

2006-11 Ph.D. (Organic Chemistry)
Chemistry Dept., Peking University, China (Advisor: Prof. Zhen Yang)
2011-15 Postdoctoral fellow, Department of Chemistry and Biochemistry,
University of Texas at Austin, TX, USA (Advisor: Prof. Guangbin Dong)

3. Employment/Appointments

2016–Now Professor, School of Medicine and Pharmacy, Ocean University of China

4. Research interest

My research focuses on developing new methodologies employing transition metal catalysis in generating versatile molecular skeletons, which could be ultimately applied in complex bioactive natural product and/or pharmaceutically active intermediate synthesis.

5. Awards/recognition (most significant)

2016	Recipient of the Taishan Youth Scholar Award, Shandong Government, China
2016	Recipient of the Innovation Pioneer Award, Qingdao Government, China
2015	Recipient of the Outstanding Young Scholar Award of “Aoshan Scholar”, Qingdao National Laboratory for Marine Science and Technology
2015	Recipient of Young “1000 Plan” Award, Chinese Government

6. Publications (last 5 years only)

- [1] “Rh^I-Catalyzed Carboacylation/Aromatization Cascade Initiated by Regioselective C–C Activation of Benzocyclobutenones” Sun T.; Zhang, Y.; Qiu, B.; Wang, Y.; Qin, Y.; Dong, G.*; **Xu, T.*** *Angew. Chem. Int. Ed.* **2018**, *Early view*.
- [10] “Isolation, Synthesis, and Radical-Scavenging Activity of Rhodomelin A, a Ureidobromophenol from the Marine Red Alga *Rhodomela confervoides*” Li, K.; Wang, Y.-F.; Li, X.-M.; Wang, W.-J.; Ai, X.-Z.; Li, X.; Yang, S.-Q.; Gloer, J.; Wang, B.-G.*; **Xu, T.*** *Org. Lett.* **2018**, *20*, 417.
- [9] “Enantioselective Rh-catalyzed Carboacylation of C=N Bonds via C–C Activation of Benzocyclobutenones” Deng, L.; **Xu, T.***; Li, H.; Dong, G.* *J. Am. Chem. Soc.* **2016**, *138*, 369.
- [8] “Computational Study of Rh-Catalyzed Carboacylation of Olefins: Ligand-Promoted Rhodacycle Isomerization Enables Regioselective C-C Bond Functionalization of Benzocyclobutenones” Lu, G.; Fang, C.; **Xu, T.**; Dong, G.; Liu, P. *J. Am. Chem. Soc.* **2015**, *137*, 8274.
- [7] “Coupling Sterically Hindered Trisubstituted Olefin and Benzocyclobutenones via C-C Activation: Total Synthesis and Structural Revision of Cycloinustakiol” **Xu, T.**; Dong, G. *Angew. Chem. Int. Ed.* **2014**, *53*, 10733.
- [6] “Transition-Metal-Catalyzed C-C Bond Activation of Four-membered cyclic ketones” **Xu, T.**; Dermenci, A.; Dong, G. *Top. Curr. Chem.* **2014**, *346*, 233-257.
- [5] “Rh^I-Catalyzed Decarbonylative Coupling of Olefins and Benzocyclobutenones via C-C Activation: An Efficient Approach To Access Functionalized Spirocycles” **Xu, T.**; Savage, N. A.; Dong, G. *Angew. Chem. Int. Ed.* **2014**, *53*, 1891.
- [4] “Divergent Synthesis of Fused -Naphthol & Indene Rings via Rh-Catalyzed Alkyne insertion into Benzocyclobutenones” Chen, P.; **Xu, T.**; Dong, G. *Angew. Chem. Int. Ed.* **2014**, *53*, 1674.
- [3] “Highly Enantioselective Rh-Catalyzed Carboacylation of Olefins: Efficient Synthesis of Chiral Poly-Fused Rings” **Xu, T.**; Ko, H. M.; Savage, N. A.; Dong, G. *J. Am. Chem. Soc.* **2012**, *134*, 20005.
- [2] “Rh-Catalyzed Regioselective Carboacylation of Olefins: A C-C Activation Approach to Access Fused-Ring Systems.” **Xu, T.**; Dong, G. *Angew. Chem. Int. Ed.* **2012**, *51*, 7567.
- [1] “A Concise Approach to the Total Synthesis of Pseudolaric acid A” **Xu, T.**; Li, C.-C.; Yang, Z. *Org. Lett.* **2011**, *13*, 2630.