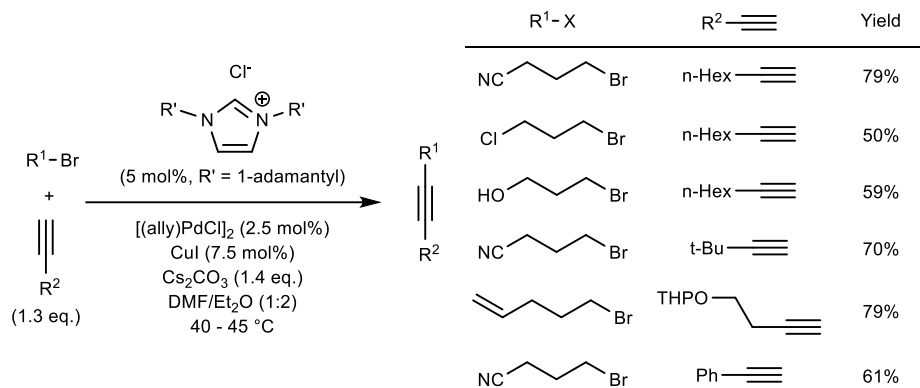
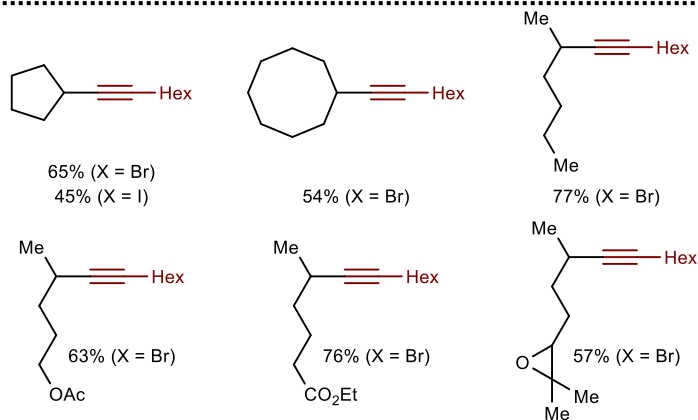
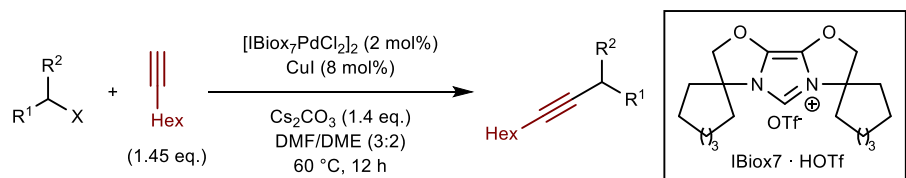


## Fu (2003, Pd/Cu, 1° bromide)



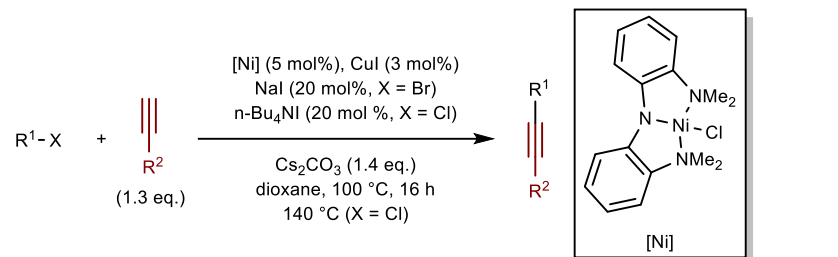
Eckhardt, M.; Fu, G. C. *J. Am. Chem. Soc.* **2003**, *125*, 13642. <https://doi.org/10.1021/ja038177r>

## Glorius (2006, Pd/Cu, 1° and 2° bromide and iodide)

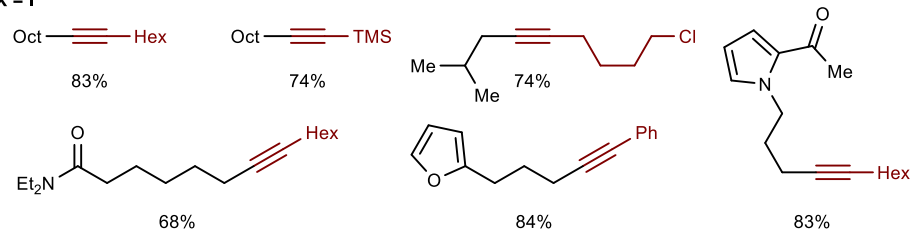


Altenhoff, G.; Würtz, S.; Glorius, F. *Tetrahedron Lett.* **2006**, *47*, 2925. <https://doi.org/10.1016/j.tetlet.2006.02.111>

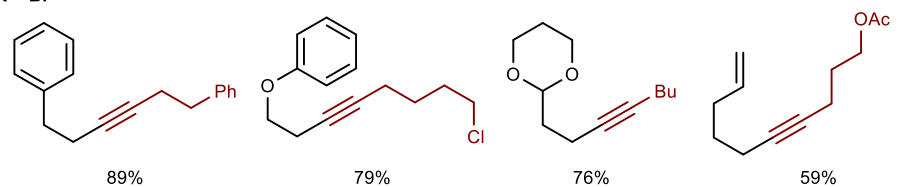
## Hu (2009, Ni/Cu, 1° chloride, bromide and iodide)



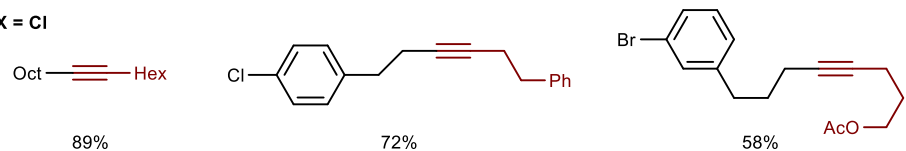
X = I



X = Br



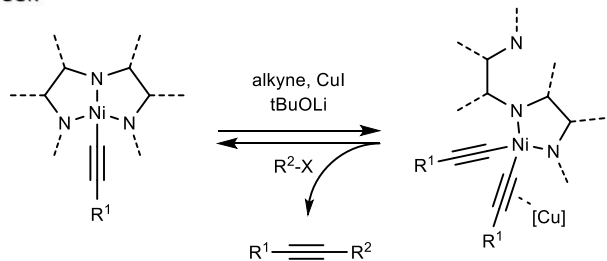
X = Cl



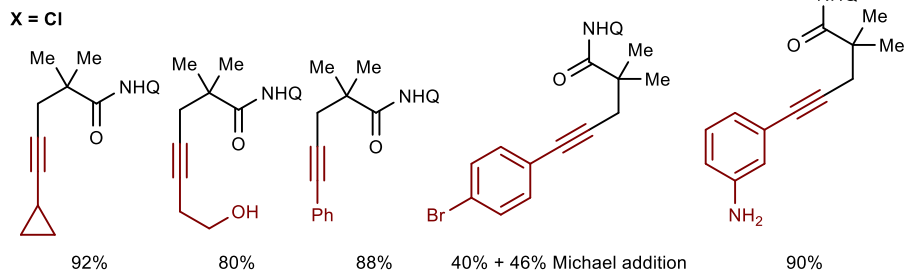
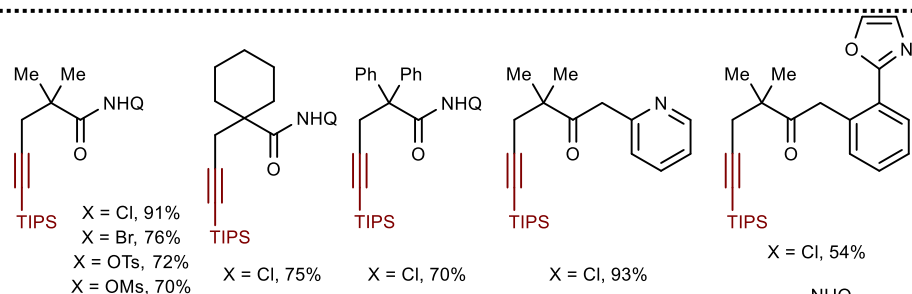
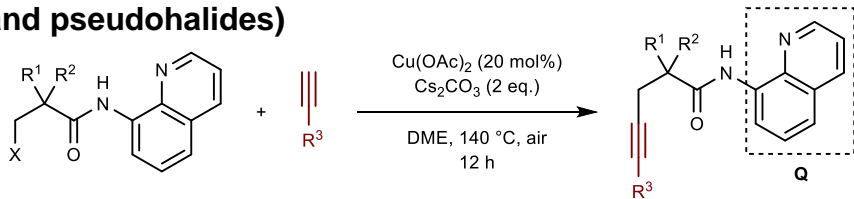
Vechorkin, O.; Barmaz, D.; Proust, V.; Hu, X. *J. Am. Chem. Soc.* **2009**, *131*, 12078. <https://doi.org/10.1021/ja906040t>

**Similar work:** Liu (2013, Ni/Cu, 1° and 2° bromide and iodide)  
Yi, J.; Lu, X.; Sun, Y.-Y.; Xiao, B.; Liu, L. *Angew. Chem. Int. Ed.* **2013**, *52*, 12409. <https://doi.org/10.1002/anie.201307069>

**Ligand design:** Hu (2015)  
Pérez García, P. M.; Ren, P.; Scopelliti, R.; Hu, X. *ACS Cat.* **2015**, *5*, 1164. <https://doi.org/10.1021/cs501502u>



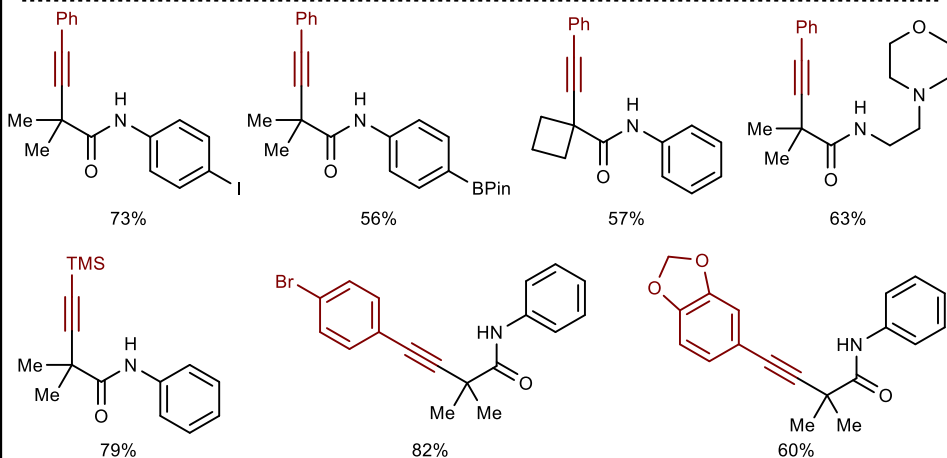
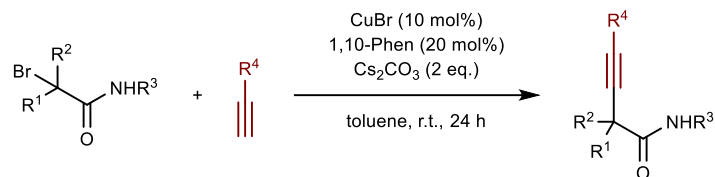
## Shi (2016, Cu, directed, 1° chloride, bromide, iodide and pseudohalides)



Luo, F.-X.; Xu, X.; Wang, D.; Cao, Z.-C.; Zhang, Y.-F.; Shi, Z.-J. *Org. Lett.* **2016**, *18*, 2040.  
<https://doi.org/10.1021/acs.orglett.6b00289>

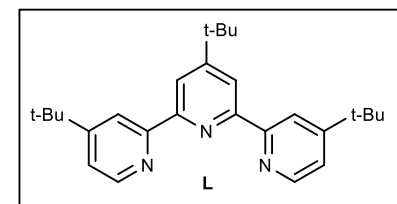
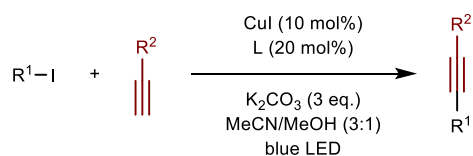
**Similar work:** Nishikata (2022, Cu, directed, activate 3° chloride, bromide, stereospecific) Akagawa, H.; Tsuchiya, N.; Morinaga, A.; Katayama, Y.; Sumimoto, M.; Nishikata, T. *ACS Catal.* **2022**, *12*, 9831. <https://doi.org/10.1021/acscatal.2c02433>

## Nishikata (2017, Cu, activated 3° bromide)



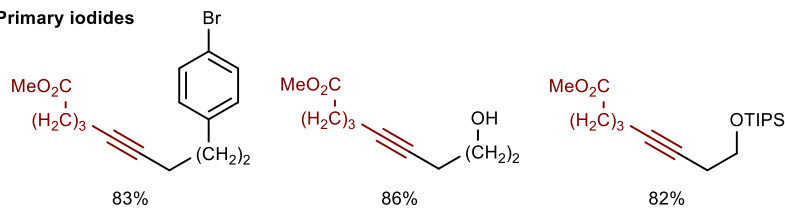
Yamane, Y.; Miwa, N.; Nishikata, T. *ACS Catal.* **2017**, *7*, 6872.  
<https://doi.org/10.1021/acscatal.7b02615>

## Lalic (2018, Cu/light, alkyl iodides)

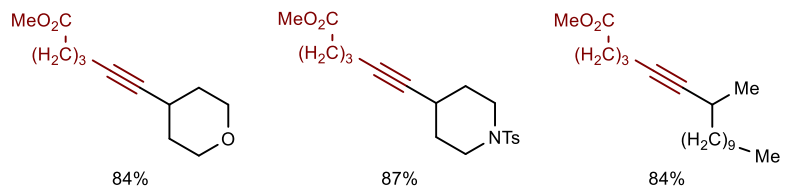


Hazra, A.; Lee, M. T.; Chiu, J. F.; Lalic, G. *Angew. Chem. Int. Ed.* **2018**, *57*, 5492.  
<https://doi.org/10.1002/anie.201801085>

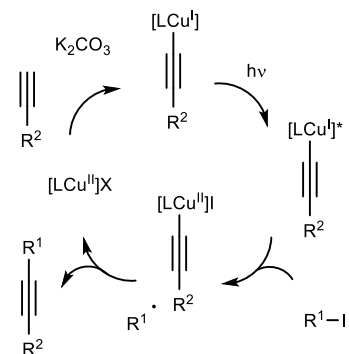
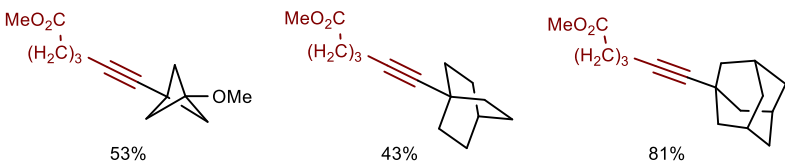
**Primary iodides**



**Secondary iodides**



**Tertiary iodides**

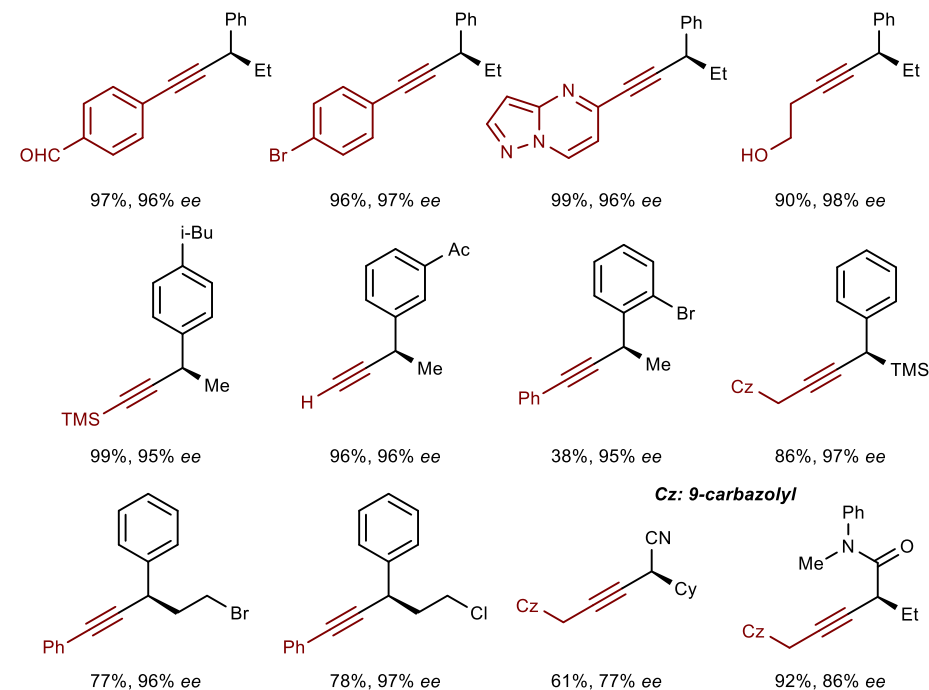
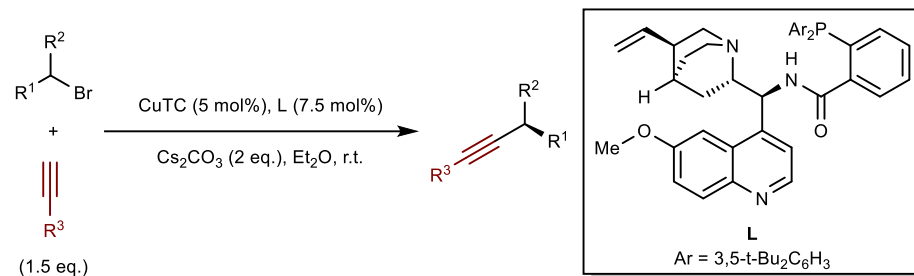


TEMPO was found to be able to inhibit the reaction, R<sup>1</sup>-TEMPO was isolated.

Hazra, A.; Lee, M. T.; Chiu, J. F.; Lalic, G. *Angew. Chem. Int. Ed.* **2018**, *57*, 5492. <https://doi.org/10.1002/anie.201801085>

**Similar work:** Xiao (2023, Cu, alkyl iodides, diazonium salt as radical initiator) Zeng, X.; Wang, C.; Yan, W.; Rong, J.; Song, Y.; Xiao, Z.; Cai, A.; Liang, S. H.; Liu, W. *ACS Catal.* **2023**, *13*, 2761. <https://doi.org/10.1021/acscatal.2c05901>

**Liu (2019, Cu, activated 1° and 2° bromide, enantioselective)**



Dong, X.-Y.; Zhang, Y.-F.; Ma, C.-L.; Gu, Q.-S.; Wang, F.-L.; Li, Z.-L.; Jiang, S.-P.; Liu, X.-Y. *Nat. Chem.* **2019**, *11*, 1158. <https://doi.org/10.1038/s41557-019-0346-2>