

論文リスト

September 11, 2017

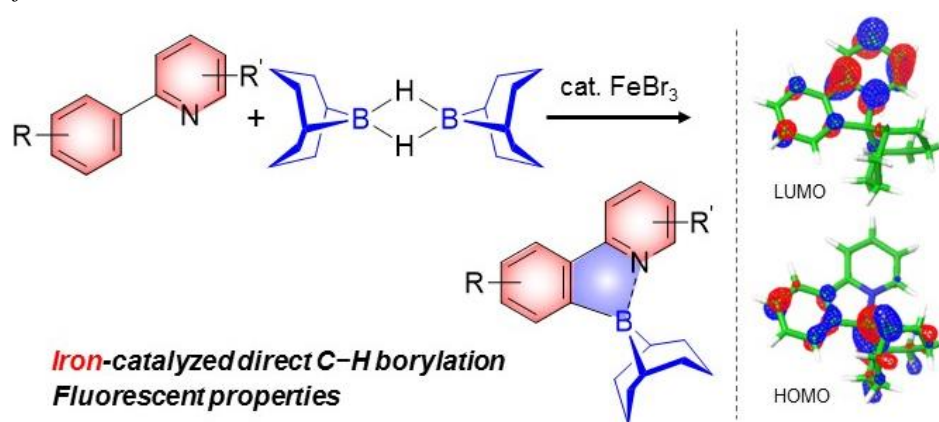
[2017]

[104] Yoshigoe, Y.; Kuninobu, Y.*

Iron-Catalyzed *ortho*-Selective C-H Borylation of 2-Phenylpyridines and Their Analogs.

Org. Lett. **2017**, *19*, 3450-3453 (10.1021/acs.orglett.7b01423).

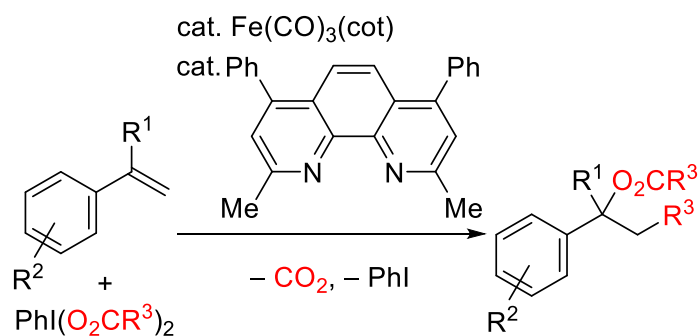
[*Synfacts* **2017**, *13*, 976]



[103] Wang, Z.; Kanai, M.; Kuninobu, Y.*

Iron-Catalyzed Alkene Oxyalkylation Using Hypervalent Iodine(III) Reagents.

Org. Lett. **2017**, *19*, 2398-2401 (10.1021/acs.orglett.7b00923).

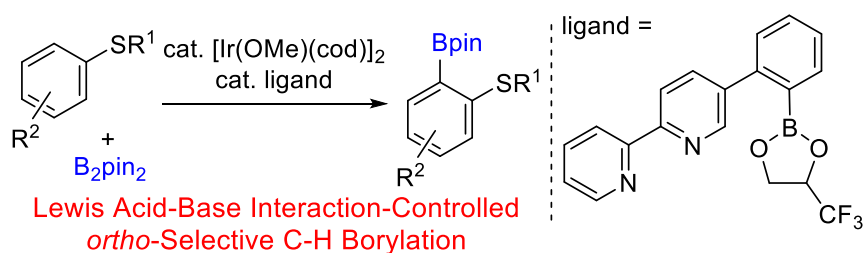


[102] Li, H.-L.; Kuninobu, Y.*; Kanai, M.*

Lewis Acid-Base Interaction-Controlled *ortho*-Selective C-H Borylation of Aryl Sulfides.

Angew. Chem. Int. Ed. **2017**, *56*, 1495-1499 (DOI: 10.1002/anie.201610041).

[*Synfacts* **2017**, *13*, 297]



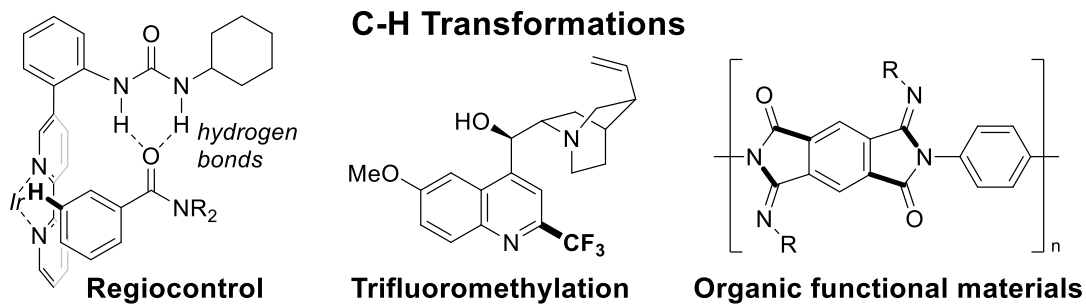
[2016]

[101] Kuninobu, Y.*

Development of Novel C-H Bond Transformations Directed Towards Organic Functional Molecules.

J. Synth. Org. Chem. Jpn. **2016**, *74*, 1058-1068.

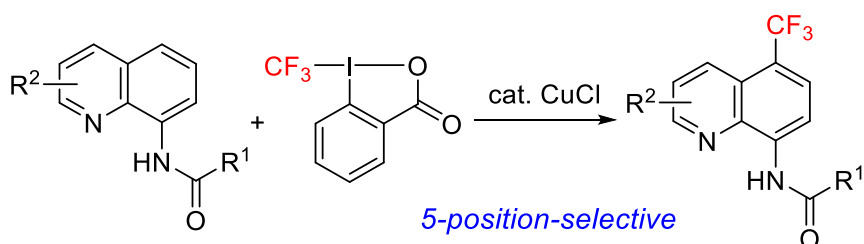
[Accounts]



[100] Kuninobu, Y.*; Nishi, M.; Kanai, M.*

5-Position-selective C-H Trifluoromethylation of 8-Aminoquinoline Derivatives.

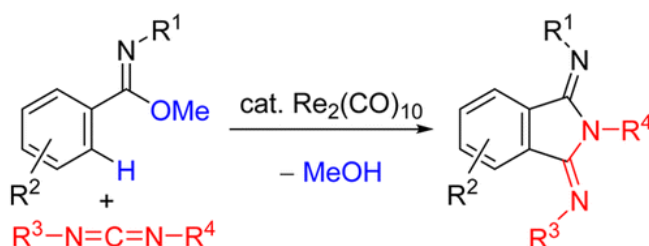
Org. Biomol. Chem. **2016**, *14*, 8092-8100 (DOI: 10.1039/C6OB01325B).



[99] Wang, J.; Sueki, S.; Kanai, M.; Kuninobu, Y.*

Rhenium-Catalyzed Synthesis of 1,3-Diiminoisoindolines via Insertion of Carbodiimides into a C-H Bond of Aromatic and Heteroaromatic Imidates.

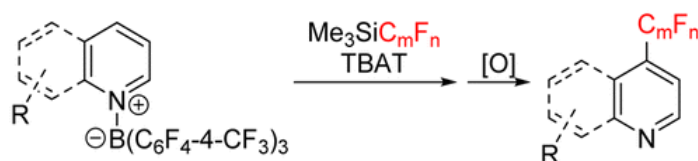
Org. Lett. **2016**, *18*, 2459-2462 (DOI: 10.1021/acs.orglett.6b01012).



[98] Nagase, M.; Kuninobu, Y.*; Kanai, M.*

4-Position-Selective C-H Perfluoroalkylation and Perfluoroarylation of Six-Membered Heteroaromatic Compounds.

J. Am. Chem. Soc. **2016**, *138*, 6103-6106 (DOI: 10.1021/jacs.6b01753).

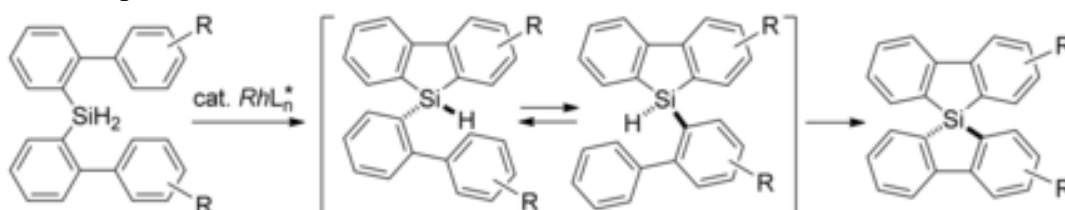


[97] Murai, M.*; Takeuchi, Y.; Yamauchi, K.; Kuninobu, Y.; Takai, K.*

Rhodium-Catalyzed Synthesis of Chiral Spiro-9-silabifluorenes via Dehydrogenative Silylation: Mechanistic Insights into the Construction of Tetraorganosilicon Stereocenters.

Chem. Eur. J. **2016**, *22*, 6048-6058 (DOI: 10.1002/chem.201504718).

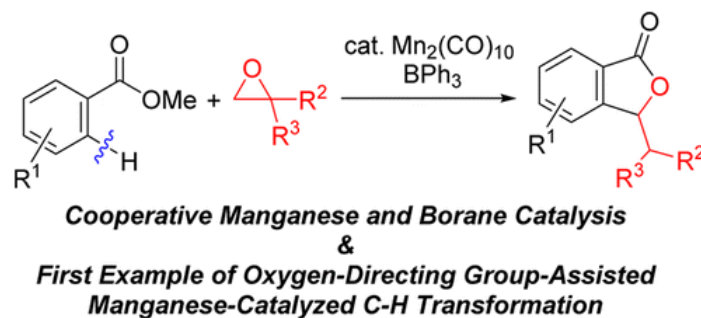
[Hot Paper]



[96] Sueki, S.; Wang, Z.; Kuninobu, Y.*

Manganese- and Borane-Mediated Synthesis of Isobenzofuranones from Aromatic Esters and Oxiranes via C-H Bond Activation.

Org. Lett. **2016**, *18*, 304-307 (DOI: 10.1021/acs.orglett.5b03474).



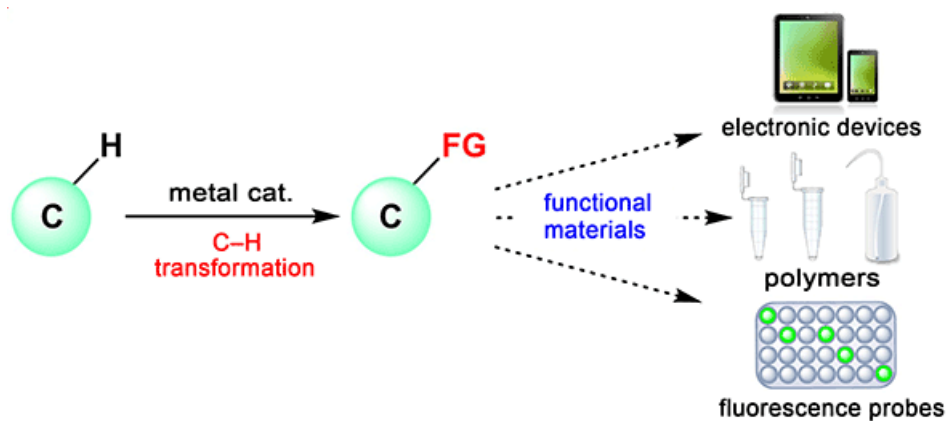
[2015]

[95] Kuninobu, Y.*; Sueki, S.

C-H Bond Transformations Leading to the Synthesis of Organic Functional Materials.

Synthesis **2015**, *47*, 3823-3845 (DOI: 10.1055/s-0035-1560346).

[Review] [Cover]



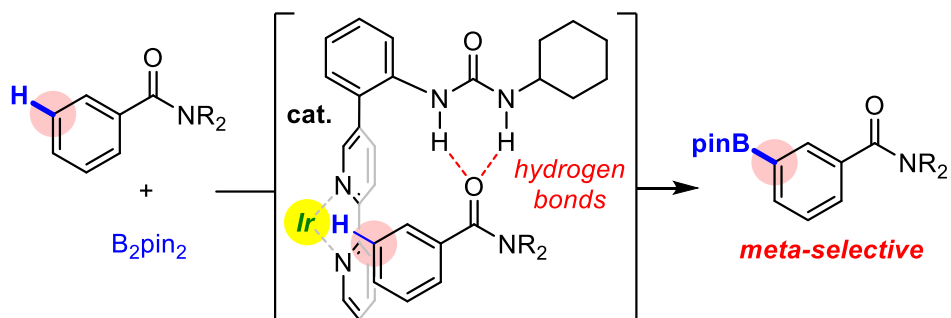
[94] Kuninobu, Y.*; Ida, H.; Nishi, M.; Kanai, M.*

A *meta*-selective C-H borylation directed by a secondary interaction between ligand and substrate.

Nature Chem. **2015**, *7*, 712-717 (DOI: 10.1038/nchem.2322).

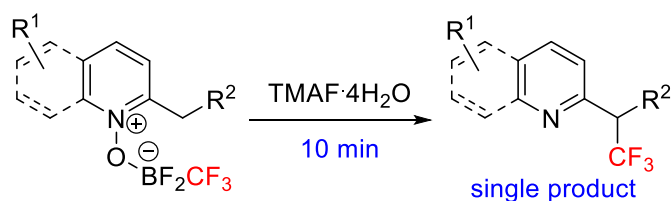
[Nature Chem. news & views: Ackermann, L.; Li, J. *Nature Chem.* **2015**, *7*, 686-687]

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[93] Kuninobu, Y.*; Nagase, M.; Kanai, M.*

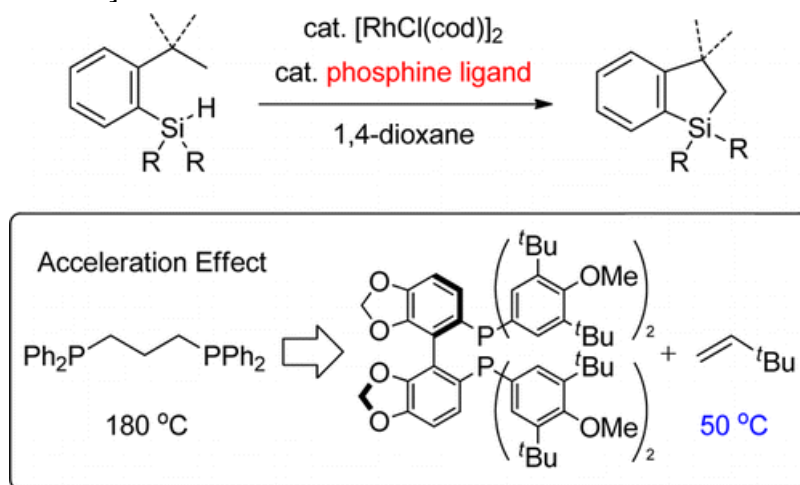
Benzylic C(sp³)-H Perfluoroalkylation of 6-Membered Heteroaromatic Compounds.
Angew. Chem. Int. Ed. **2015**, *54*, 10263-10266 (DOI: 10.1002/anie.201505335).



[92] Murai, M.*; Takeshima, H.; Morita, H.; Kuninobu, Y.; Takai, K.*

Acceleration Effects of Phosphine Ligands on the Rhodium-Catalyzed Dehydrogenative Silylation and Gernylation of Unactivated C(sp³)-H Bonds.
J. Org. Chem. **2015**, *80*, 5407-5414 (DOI: 10.1021/acs.joc.5b00920).

[Featured Article]

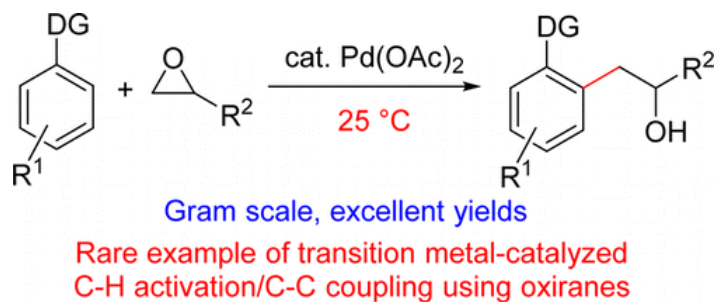


[91] Wang, Z.; Kuninobu, Y.*; Kanai, M.*

Palladium-Catalyzed Oxirane-Opening Reaction with Arenes via C-H Bond Activation.

J. Am. Chem. Soc. **2015**, *137*, 6140-6143 (DOI: 10.1021/jacs.5b02435).

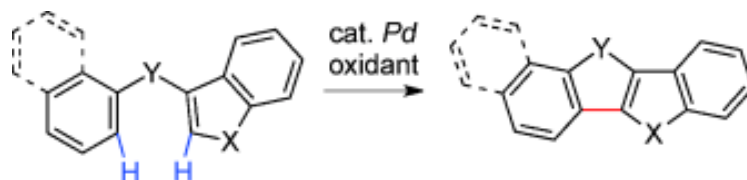
[Web of Science 高被引用文献]



[90] Saito, K.; Chikkade, P. K.; Kanai, M.*; Kuninobu, Y.*

Palladium-Catalyzed Construction of Heteroatom-Containing π -Conjugated Systems by Intramolecular Oxidative C-H/C-H Coupling Reaction.

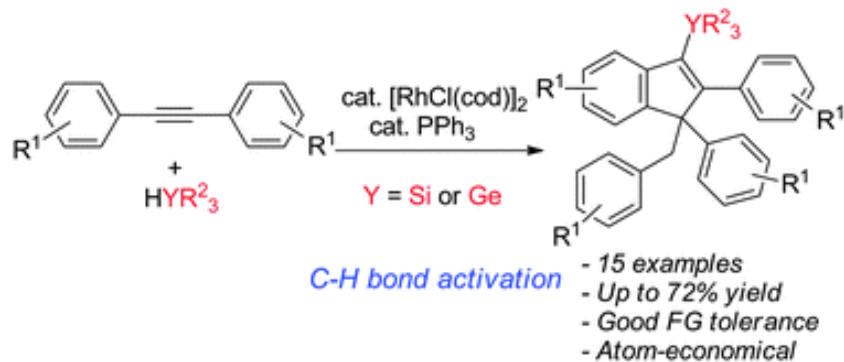
Chem. Eur. J. **2015**, *21*, 8365-8368 (DOI: 10.1002/chem.201501116).



[89] Sueki, S.; Kuninobu, Y.*

Rhodium-Catalyzed Synthesis of Multi-Substituted Silylindenes from Aryl Alkynes and Hydrosilanes via C-H Bond Activation.

Chem. Commun. **2015**, *51*, 7685-7688 (DOI: 10.1039/c5cc01569c).

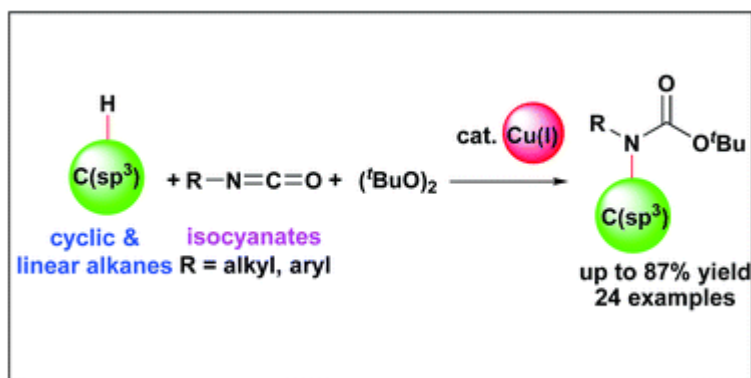


[88] Chikkade, P. K.; Kuninobu, Y.*; Kanai, M.*

Copper-Catalyzed Intermolecular C(sp³)-H Bond Functionalization Towards Synthesis of Tertiary Carbamates.

Chem. Sci. **2015**, *6*, 3195-3200 (DOI: 10.1039/C5SC00238A).

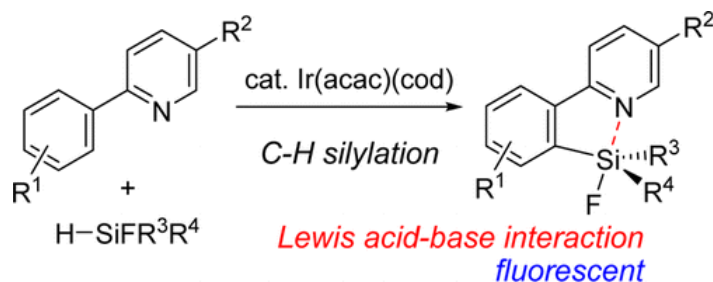
[Twenty-five most downloaded articles between April and June, 2015]



[87] Wakaki, T.; Kanai, M.*; Kuninobu, Y.*

Iridium-Catalyzed *ortho*-Selective C-H Silylation of Aromatic Compounds Directed toward the Synthesis of π -Conjugated Molecules with Lewis Acid-Base Interaction.

Org. Lett. **2015**, *17*, 1758-1761 (DOI: 10.1021/acs.orglett.5b00529).

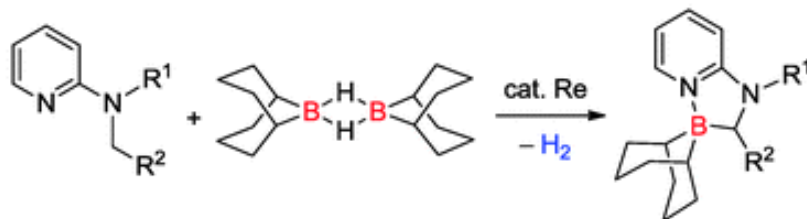


[86] Murai, M.*; Omura, T.; Kuninobu, Y.; Takai, K.*

Rhenium-Catalysed Dehydrogenative Borylation of Primary and Secondary C(sp³)-H Bonds Adjacent to a Nitrogen Atom.

Chem. Commun. **2015**, *51*, 4583-4586 (DOI: 10.1039/C4CC09508A).

Dehydrogenative borylation of primary and secondary C(sp³)-H bonds



Re-catalysed functionalization of C(sp³)-H bond.

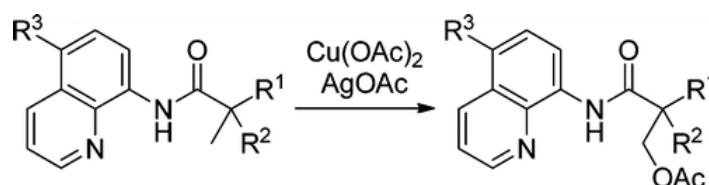
High atom economy. No oxidants, external ligands or additives.

[2014]

[85] Wang, Z.; Kuninobu, Y.*; Kanai, M.* Copper-Mediated Direct C(sp³)-H and C(sp²)-H Acetoxylation.

Org. Lett. **2014**, *16*, 4790-4793 (DOI: 10.1021/ol5022542).

[*Synfacts* **2014**, *10*, 1310]

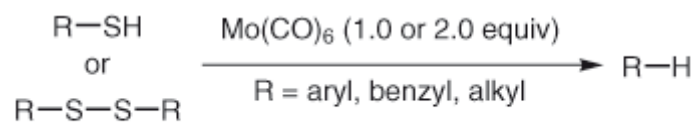


*First Row Transition Metal-Mediated
C(sp³)-H Acetoxylation*

[84] Wang, Z.; Kuninobu, Y.*; Kanai, M.*

Molybdenum-Mediated Desulfurization of Thiols and Disulfides.

Synlett **2014**, *25*, 1869-1872 (DOI: 10.1055/s-0034-1378315).

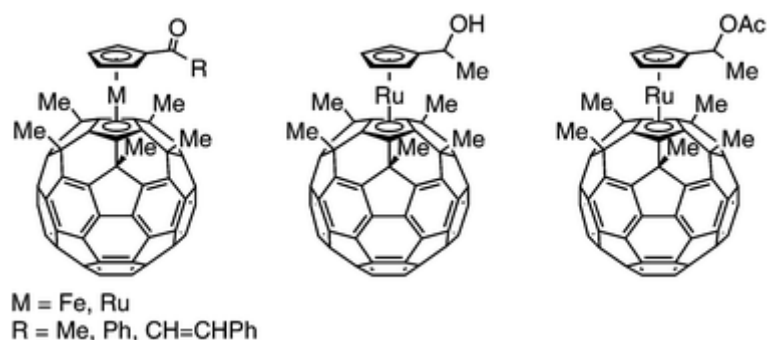


high functional group tolerance

[83] Matsuo, Y.*; Kuninobu, Y.; Ito, S.; Sawamura, M.; Nakamura, E.*

Fiedel-Crafts Functionalization of Cyclopentadienyl Ligand of Bucky Metallocenes.

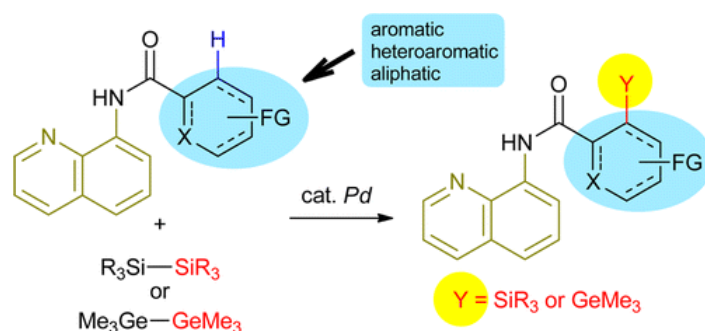
Dalton Trans. **2014**, *43*, 7407-7412 (DOI: 10.1039/c3dt52002a).



[82] Kanyiva, K. S.; Kuninobu, Y.*; Kanai, M.*

Palladium-Catalyzed C–H Silylation and Germanylation of Benzamides and Carboxyamides.

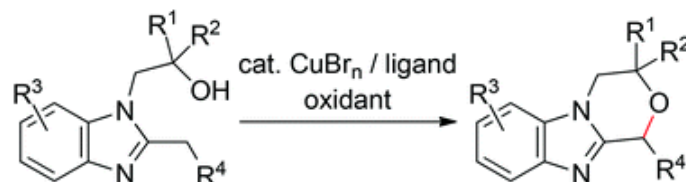
Org. Lett. **2014**, *16*, 1968-1971 (DOI: 10.1021/ol500519y).



[81] Takemura, N.; Kuninobu, Y.*; Kanai, M.*

Copper-Catalyzed Benzylic C(sp³)-H Alkoxylation of Heterocyclic Compounds.

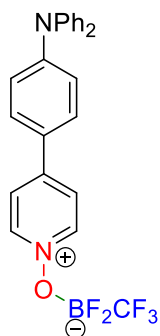
Org. Biomol. Chem. **2014**, *12*, 2528-2532 (DOI:10.1039/C4OB00215F).



[80] Nishida, T.; Fukazawa, A.; Yamaguchi, E.; Oshima, H.; Yamaguchi, S.; Kanai, M.*; Kuninobu, Y.*

Synthesis of Pyridine *N*-Oxide-BF₂CF₃ Complexes and Their Fluorescence Properties.

Chem. Asian J. **2014**, *9*, 1026-1030 (DOI: 10.1002/asia.201301688).

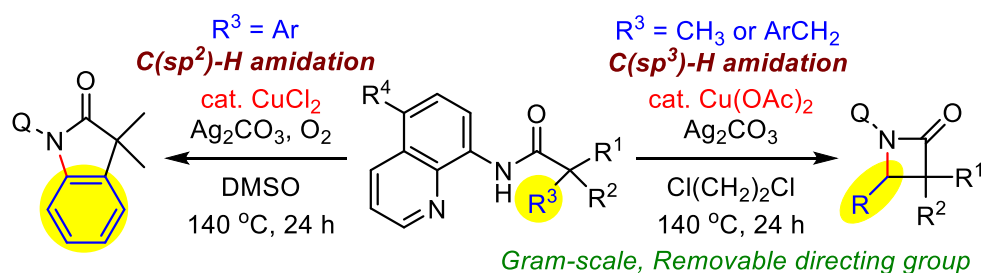


[79] Wang, Z.; Ni, J.; Kuninobu, Y.*; Kanai, M.*

Copper-Catalyzed Intramolecular C(sp³)-H and C(sp²)-H Amidation by Oxidative Cyclization.

Angew. Chem. Int. Ed. **2014**, *53*, 3496-3499 (DOI: 10.1002/anie.201311105)

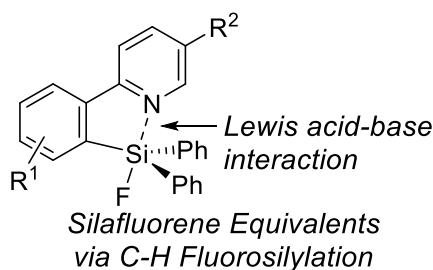
[*Synfacts* **2014**, *10*, 570]



[78] Xiao, Q.; Meng, X.; Kanai, M.*; Kuninobu, Y.*

Palladium-Catalyzed C-H Fluorosilylation of 2-Phenylpyridines: Synthesis of Silafluorene Equivalents.

Angew. Chem. Int. Ed. **2014**, *53*, 3168-3172 (DOI: 10.1002/anie.201310293).



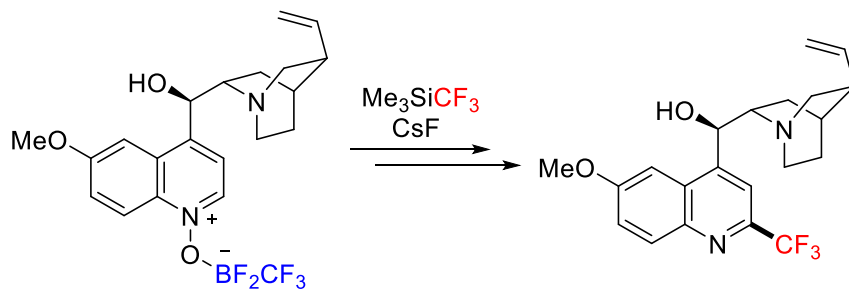
[77] Nishida, T.; Ida, H.; Kuninobu, Y.*; Kanai, M.*

Regioselective Trifluoromethylation of *N*-Heteroaromatic Compounds using

Trifluoromethyldifluoroborane Activator.

Nat. Commun. **2014**, *5*, 3387 (DOI: 10.1038/ncomms4387).

[Nature Communications Chemistry Selections]



First example of 2-position-selective C-H trifluoromethylation

2013 年以前はこちら