

Selected Publications

2018 年

1. M. Pawliczek, T. Hashimoto, K. Maruoka
Alkylative kinetic resolution of vicinal diols under phase-transfer conditions: a chiral ammonium borinate catalysis.
Chem. Sci. Advance Article.

2016 年

2. T. Hashimoto, K. Takino, K. Hato, K. Maruoka
A bulky thiyl-radical catalyst for the [3+2] cyclization of N-tosyl vinylaziridines and alkenes.
Angew. Chem. Int. Ed. 55, 8081 (2016).

3. Y. Kawamata, T. Hashimoto, K. Maruoka
A Chiral Electrophilic Selenium Catalyst for Highly Enantioselective Oxidative Cyclization.
J. Am. Chem. Soc. 138, 5206 (2016).

2015 年

4. T. Hashimoto, H. Nakatsu, K. Maruoka
Catalytic asymmetric Diels-Alder reaction of quinone imine ketals: A site-divergent approach. *Angew. Chem. Int. Ed.* 54, 4617 (2015).
5. T. Hashimoto, A. O. Gálvez, K. Maruoka
Boronic Acid-Catalyzed, Highly Enantioselective Aza-Michael Additions of Hydroxamic Acid to Quinone Imine Ketals.
J. Am. Chem. Soc. 137, 16016 (2015).

6. T. Hashimoto, K. Maruoka
Recent advances of catalytic asymmetric 1,3-dipolar cycloadditions.
Chem. Rev. 115, 5366 (2015).

2014 年

7. T. Hashimoto, Y. Kawamata, K. Maruoka
An Organic Thiyl radical Catalyst for Enantioselective Cyclization.
Nature Chem. 6, 702 (2014).

2013 年

8. T. Hashimoto, H. Nakatsu, Y. Takiguchi, K. Maruoka
Axially chiral dicarboxylic acid catalyzed activation of quinone imine ketals:
Enantioselective arylation of enecarbamates.
J. Am. Chem. Soc. *135*, 16010 (2013).

9. T. Hashimoto, Y. Takiguchi, K. Maruoka
Catalytic asymmetric three-component 1,3-dipolar cycloaddition of aldehydes,
hydrazides, and alkynes.
J. Am. Chem. Soc. *135*, 11473 (2013).

10. T. Hashimoto, A. O. Gálvez, K. Maruoka
In Situ Assembled Boronate Ester Assisted Chiral Carboxylic Acid Catalyzed
Asymmetric Trans-Aziridinations.
J. Am. Chem. Soc. *135*, 17667 (2013).

11. T. Hashimoto, K. Sakata, F. Tamakuni, M. Dutton, K. Maruoka
Phase-transfer-catalysed asymmetric synthesis of tetrasubstituted allenes.
Nature Chem. *5*, 240 (2013).

12. T. Hashimoto, K. Maruoka
Development of synthetic transformations by control of acid-catalyzed reactions of
diazocarbonyl compounds.
Bull. Chem. Soc. Jpn. *86*, 1217 (2013).

2012 年

13. T. Hashimoto, H. Kimura, Y. Kawamata, K. Maruoka
A catalytic asymmetric Ugi-type reaction with acyclic azomethine imines.
Angew. Chem. Int. Ed. *51*, 7279 (2012).

2011 年

14. T. Hashimoto, H. Kimura, Y. Kawamata, K. Maruoka
Generation and exploitation of acyclic azomethine imines in chiral Brønsted acid
catalysis.
Nature Chem. *3*, 642 (2011).

15. T. Hashimoto, Y. Naganawa, K. Maruoka
Desymmetrizing asymmetric ring expansion of cyclohexanones with α -diazoacetates catalyzed by chiral aluminum Lewis acid.
J. Am. Chem. Soc. *133*, 8834 (2011).

16. T. Hashimoto, H. Nakatsu, K. Yamamoto, K. Maruoka
Chiral Brønsted acid-catalyzed asymmetric trisubstituted aziridine synthesis using α -diazoacyl oxazolidinones.
J. Am. Chem. Soc. *133*, 9730 (2011).

17. T. Hashimoto, M. Omote, K. Maruoka
Catalytic asymmetric alkynylation of C1-substituted C,N-cyclic azomethine imines by CuI/chiral Brønsted acid co-catalyst.
Angew. Chem. Int. Ed. *50*, 8952 (2011).

18. T. Hashimoto, M. Omote, K. Maruoka
Asymmetric inverse-electron-demand 1,3-dipolar cycloaddition of C,N-cyclic azomethine imines: An umpolung strategy.
Angew. Chem. Int. Ed. *50*, 3489 (2011).

2010 年

19. T. Hashimoto, Y. Maeda, M. Omote, H. Nakatsu, K. Maruoka
Catalytic enantioselective 1,3-dipolar cycloaddition of C,N-cyclic azomethine imines with α,β -unsaturated aldehydes.
J. Am. Chem. Soc. *132*, 4076 (2010).

20. T. Hashimoto, H. Kimura, K. Maruoka
Enantioselective formal alkenylations of imines catalyzed by axially chiral dicarboxylic acid using vinylogous aza-enamines.
Angew. Chem. Int. Ed. *49*, 6844 (2010).

2009 年

21. T. Hashimoto, H. Miyamoto, Y. Naganawa, K. Maruoka
Stereoselective synthesis of α -alkyl- β -keto imides via asymmetric redox C-C bond formation between α -alkyl- α -diazocarbonyl compounds and aldehydes.

J. Am. Chem. Soc. **131**, 11280 (2009).

22. T. Hashimoto, Y. Naganawa, K. Maruoka
Stereoselective construction of seven-membered rings with an all-carbon quaternary center by direct Tiffeneau-Demjanov-type ring expansion.
J. Am. Chem. Soc. **131**, 6614 (2009).

23. T. Hashimoto, K. Sakata, K. Maruoka
 α -Chiral acetylenes having an all-carbon quaternary center: Phase transfer catalyzed enantioselective α alkylation of α -alkyl- α -alkynyl esters.
Angew. Chem. Int. Ed. **48**, 5014 (2009).

24. T. Hashimoto, Y. Naganawa, K. Maruoka
Brønsted acid-catalyzed insertion of aryldiazoacetates to sp^2 carbon-CHO bond: Facile construction of chiral all-carbon quaternary center.
J. Am. Chem. Soc. **130**, 2434 (2008).

25. T. Hashimoto, M. Hirose, K. Maruoka
Asymmetric imino aza-enamine reaction catalyzed by axially chiral dicarboxylic acid: Use of arylaldehyde N,N-dialkylhydrazones as acyl anion equivalent.
J. Am. Chem. Soc. **130**, 7556 (2008).

26. T. Hashimoto, N. Uchiyama, K. Maruoka
Trans-selective asymmetric aziridination of diazoacetamides and N-Boc imines catalyzed by axially chiral dicarboxylic acid.
J. Am. Chem. Soc. **130**, 14380 (2008).

2007 年

27. T. Hashimoto, K. Maruoka
Design of axially chiral dicarboxylic acid for asymmetric Mannich reaction of arylaldehyde N-Boc imines and diazo compounds.
J. Am. Chem. Soc. **129**, 10054 (2007).

28. T. Hashimoto, K. Maruoka
Recent development and application of chiral phase-transfer catalysts.
Chem. Rev. **107**, 5656 (2007).

2006 年以前

29. T. Kano, T. Hashimoto, K. Maruoka

Enantioselective 1,3-dipolar cycloaddition reaction between diazoacetates and α -substituted acroleins: Total synthesis of manzacidin A.

J. Am. Chem. Soc. *128*, 2174 (2006).

30. T. Kano, T. Hashimoto, K. Maruoka

Asymmetric 1,3-dipolar cycloaddition reaction of nitrones and acrolein with a bis-titanium catalyst as chiral Lewis acid.

J. Am. Chem. Soc. *127*, 11926 (2005).