

原著論文 (Original Paper)

1. Kurihara, Y.; Yagi, M.; Noguchi, T.; Yasufuku, H.; Okita, A.; Yoshimura, S.; Oishi, T.; Chida, N.; Okamura, T.; *Sato T. “Total Synthesis of Keramaphidin B and Ingenamine by Base-Catalyzed Diels-Alder Reaction Using Dynamic Regioselective Crystallization”
J. Am. Chem. Soc. **2024**, *146*, accepted.
2. Soda, Y.; Tatsumi, K.; Forner, M.; Sato, S.; Shibuya, K.; Matagawa, T.; Simizu, S.; Chida, N.; *Okamura, T.; *Sato T. “Stereodivergent Synthesis of 2-Oxo-oligopyrrolidines by Iterative Coupling Strategy”
Org. Biomol. Chem. **2024**, *22*, accepted.
3. Yasui, S.; Banjo, S.; Nagashima, Y.; Okada, Y.; Yoshikawa, K.; Nakata, K.; Chida, N.; Okamura, T.; *Sato T. “Total Synthesis of Lobatamides A and C”
Angew. Chem. Int. Ed. **2024**, *63*, e202402335.
4. Sugiyama, Y.; Yamada, K.; Kaneko, D.; Kusagawa, K.; Okamura, T.; *Sato T. “Iridium-Catalyzed Reductive (3+2) Annulation of Lactams Enabling the Rapid Total Synthesis of (±)-Eburnamonine”
Angew. Chem. Int. Ed. **2024**, *63*, e202317290.
5. Kage, A.; Okuyama, Y.; Kato, E.; Matagawa, T.; Kawano, S.; Simizu, S.; Chida, N.; *Okamura, T.; *Sato T. “Synthesis and Evaluation of Saponins with All-Nitrogenated Sugars”
Synlett **2024**, *35*, 427–430.

This article was invited as the cluster of 11th Singapore International Chemistry Conference (SICC-11)

6. *Fukaya, K.; Sato, T.; Chida, N.; Urabe, D. “A computational study focusing on a comprehensive conformational analysis of transition states for aza-spiro ring formations with *N*-alkoxyamides”
J. Org. Chem. **2023**, *88*, 13655–13665.
7. Iiyama, S.; Mizutani, K.; *Sato, T. “Iridium-catalyzed Reductive Olefination of *N*-Methoxyamides”
Chem. Lett. **2023**, *52*, 682–684.
8. Iwamoto, S.; Tokuyama, A.; Hiraoka, S.; Takei, K.; Matsuzaka, K.; Matsumoto, T.; Chida, N.; *Sato T. “Synthesis of Chiral α,α -Disubstituted Cyclic Nitrones from Secondary Lactams”
Bull. Chem. Soc. Jpn. **2023**, *96*, 529–537.
9. Soda, Y.; Sugiyama, Y.; Sato, S.; Shibuya, K.; Saegusa, J.; Matagawa, T.; Kawano, S.; Yoritake, M.; Fukaya, K.; Urabe, D.; Oishi, T.; Mori, K.; Simizu, S.; Chida, N.; *Sato, T. “Total Synthesis and Anti-inflammatory Activity of Stemoamide-Type Alkaloids Including Totally Substituted Butenolides and Pyrroles”
Synthesis **2023**, *55*, 617–636.

This article was selected as the Synthesis Best Paper Award for 2023.

This article was highlighted in *Synform* 22/12, A202–A206.

10. Banjo, S.; Nakata, K.; Nakasuji, E.; Yasui, S.; Chida, N.; *Sato, T. “Copper-Catalyzed Electrophilic Enamidation Using Dioxazolones through Hydrozirconation of Alkynes”
Org. Lett. **2022**, *24*, 8662–8666.

This article was highlighted in Organic Chemistry Portal.

11. Kurihara, Y.; Azuma, A.; Yasufuku, H.; Takikawa, S.; Chida, N.; *Sato, T. “Synthesis of Two Macrocyclic Fragments of Manadomanzamine Alkaloids”
Chem. Lett. **2022**, *51*, 1146–1149.

12. Yoshii, T.; Mochida, M.; Kaizu, K.; Soda, Y.; Kanamori, K.; Nakanishi, K.; Sato, T.; Imai, H.; Citterio, D.; *Hiruta, Y. “Amphiphilic Copolymer-Modified Eggshell-Based Column Packing 2 Materials for the Preparative Separation of Basic Drugs”
ACS Appl. Polym. Mater. **2022**, *4*, 6949–6957.

This article was selected as the Selected Paper.

This article was selected as the inside cover.

13. Sugiyama, Y.; Soda, Y.; Yoritake, M.; Tajima, H.; Takahashi, Y.; Shibuya, K.; Ogihara, C.; Yokoyama, T.; Oishi, T.; *Sato, T.; *Chida, N. “Lactam Strategy Using Amide-Selective Nucleophilic Addition for the Quick Access to Complex Amines: Unified Total Synthesis of Stemoamide-Type Alkaloids”
Bull. Chem. Soc. Jpn. **2022**, *95*, 278–287.

14. Iiyama, S.; Fukaya, K.; Yamaguchi, Y.; Watanabe, A.; Yamamoto, H.; Mochizuki, S.; Saio, R.; Noguchi, T.; Oishi, T.; Sato, T.; *Chida, N. “Total Synthesis of Paclitaxel”
Org. Lett. **2022**, *24*, 202–206.

This article was selected as the most read articles on a monthly basis.

This article was selected as the most read articles on an annual basis.

15. Minamikawa, R.; Fukaya, K.; Kobayashi, A.; Komiya, Y.; Yamamoto, S.; Urabe, D.; Chida, N.; *Sato, T. “Development of Chiral *N*-Alkoxyamide Strategy and Application to Asymmetric Total Synthesis of Fascicularin”
Synthesis **2021**, *53*, 4621–4635.

This Feature Article was invited.

16. Katahara, S.; Sugiyama, Y.; Yamane, M.; Komiya, Y.; *Sato, T.; *Chida, N. “Five-Step Total Synthesis of (±)-Aspidospermidine by a Lactam Strategy via an Azomethine Ylide”
Org. Lett. **2021**, *23*, 3058–3063.

This article was selected as the most read articles on a monthly basis.

17. Okuyama, Y.; Kidena, M.; Kato, E.; Kawano, S.; Ishii, K.; Maie, K.; Miura, K.; Simizu, S.; *Sato, T.; *Chida, N. “Seven-step Synthesis of All-nitrogenated Sugar Derivatives Using Sequential Overman Rearrangements”
Angew. Chem. Int. Ed. **2021**, *60*, 5193–5198.

This article was selected as a Hot Paper.

This article was selected as the inside back cover.

18. Miura, K.; Kawano, S.; Suto, T.; Sato, T.; Chida, N.; *Simizu S. “Identification of madangamine A as a novel lysosomotropic agent to inhibit autophagy”
Bioorg. Med. Chem. **2021**, *34*, 116041.

This article was selected as the front cover.

19. Okuyama, Y.; Okamoto, R.; Mukai, Kinoshita, K.; Sato, T.; *Chida, N. “Synthesis of Saxitoxin and Its Derivatives”
Org. Lett. **2020**, *22*, 8697–8701.

20. Soda, Y.; Sugiyama, Y.; Yoritake, M.; Tajima, H.; Shibuya, K.; Ogihara, C.; Oishi, T.; *Sato, T.; *Chida, N. “Unified Total Synthesis of Pentacyclic Stemoamide-type Alkaloids”
Org. Lett. **2020**, *22*, 7502–7507.

This article was selected as the most read articles on a monthly basis.

This article was selected as the most read articles on an annual basis.

21. Katahara, S.; Takahashi, T.; Nomura, K.; *Uchiyama, M.; *Sato, T.; *Chida, N. “Copper-Catalyzed Electrophilic Etherification of Arylboronic Esters with Isoxazolidines”
Chem. Asian J. **2020**, *15*, 1869–1872.

This article was selected as a VIP article.

22. Nagashima, Y.; Okada, Y.; *Sato, T.; *Chida, N. “Enantioselective Stereodivergent Approach to α -Hydroxy Skipped Dienes: Synthesis of the Western Polyene Fragment of Corallopyronin A”
Chem. Lett. **2019**, *48*, 1519–1521.
23. Takahashi, Y.; Yoshii, R.; *Sato, T.; *Chida, N. “Iridium-Catalyzed Reductive Nucleophilic Addition to Tertiary Amides”
Chem. Lett. **2019**, *48*, 1138–1141.

This article was selected as an Editor’s Choice.

24. Banjo, S.; B.; Nakasuji, E.; Meguro, T.; *Sato, T.; *Chida, N. “Copper-Catalyzed Electrophilic Amidation of Organotrifluoroborates with Use of *N*-Methoxyamides”
Chem. Eur. J. **2019**, *25*, 7941–7947.
25. Ishii, K.; Seki-Yoritake, Y.; Ishibashi, M.; Liaw, M. W.; Oishi, T.; *Sato, T.; *Chida, N. “Total Synthesis of (–)-Zephyranthine”
Heterocycles **2019**, *99*, 111–117.

This article was invited as a special issue in honor of Professor Tohru Fukuyama on 70th Birthday.

26. Hiraoka, S.; Matsumoto, T.; Matsuzaka, K.; *Sato, T.; *Chida, N. “Nucleophilic Approach to Fully Substituted Cyclic Nitrones from *N*-Hydroxylactam Derivatives: Development and Application to the Total Synthesis of Cylindricine C”
Angew. Chem. Int. Ed. **2019**, *58*, 4381–4385.

This article was selected as a Hot Paper.

27. Yamamoto, S.; Komiya, Y.; Kobayashi, A.; Minamikawa, R.; Oishi, T.; *Sato, T.; *Chida, N. “Asymmetric Total Synthesis of Fascicularin by Chiral *N*-Alkoxyamide Strategy”
Org. Lett. **2019**, *21*, 1868–1871.

This article was selected as the most read articles on a monthly basis.

28. Suto, T.; Yanagita, Y.; Nagashima, Y.; Takikawa, S.; Kurosu, Y.; Matsuo, N.; Miura, K.; Simizu, S.; *Sato, T.; *Chida, N. “Unified Total Synthesis of Madangamine Alkaloids”
Bull. Chem. Soc. Jpn. **2019**, *92*, 545–571.

This article was selected as Top Accessed Articles.

This article was selected as the Selected Paper.

29. Takahashi, Y.; Yoshii, R.; *Sato, T.; *Chida, N. “Iridium-Catalyzed Reductive Nucleophilic Addition to Secondary Amides”
Org. Lett. **2018**, *20*, 5705–5708.
30. Nagashima, Y.; Sasaki, K.; Suto, T.; *Sato, T.; *Chida, N. “Stereodivergent Hydroboration of Allenes”
Chem. Asian J. **2018**, *13*, 1024–1028.
31. Sugai, T.; Okuyama, Y.; Shin, J.; Usui, S.; Hisada, S.; Osanai, R.; Oishi, T.; *Sato, T.; *Chida, N. “Synthesis of Kaitocephalin Facilitated by Three Stereoselective Allylic Transposition Reactions”
Chem. Lett. **2018**, *47*, 454–457.

32. Sugai, T.; Usui, S.; Tsuzaki, S.; Oishi, H.; Yasushima, D.; Hisada, S.; Fukuyasu, T.; Oishi, T.; *Sato, T.; *Chida, N. "Synthesis of β -Hydroxy- α,α -disubstituted Amino Acids through the Orthoamide-Type Overman Rearrangement of an α,β -Unsaturated Ester and Stereodivergent Intramolecular S_N2' Reaction: Development and Application to the Total Synthesis of Sphingofungin F" *Bull. Chem. Soc. Jpn.* **2018**, *91*, 594–607.

This article was selected as the Selected Paper.

33. Yoritake, M.; Takahashi, Y.; Tajima, H.; Ogihara, C.; Yokoyama, T.; Soda, Y.; Oishi, T.; *Sato, T.; *Chida, N. "Unified Total Synthesis of Stemoamide-Type Alkaloids by Chemoselective Assembly of Five-Membered Building Blocks" *J. Am. Chem. Soc.* **2017**, *139*, 18386–18391.

This article was selected as the most read articles on a monthly basis.

This article was highlighted in SYNFACTS (2018, 14, 231).

34. Katahara, S.; Kobayashi, S.; Fujita, K.; Matsumoto, T.; *Sato, T.; *Chida, N. "Reductive Approach to Nitrones from *N*-Siloxyamides and *N*-Hydroxyamides" *Bull. Chem. Soc. Jpn.* **2017**, *90*, 893–904.

This article was selected as BCSJ award.

This article was selected as the front cover.

35. Suto, T.; Yanagita, Y.; Nagashima, Y.; Takikawa, S.; Kurosu, Y.; Matsuo, N.; *Sato, T.; *Chida, N. "Unified Total Synthesis of Madangamines A, C, and E" *J. Am. Chem. Soc.* **2017**, *139*, 2952–2955.

This article was selected as the most read articles on a monthly basis.

This article was highlighted in SYNFACTS (2017, 13, 450).

36. Fukami, Y.; Wada, T.; Meguro, T.; Chida, N.; *Sato, T. "Copper-Catalyzed Electrophilic Amination Using *N*-Methoxyamines" *Org. Biomol. Chem.* **2016**, *14*, 5486–5489.

This article was invited in New Talent Themed Issue.

This article was selected as a HOT article.

37. Nakayama, Y.; Maeda, Y.; Hama, N.; *Sato, T.; *Chida, N. "Total Synthesis of (–)-Stemoamide by Sequential Overman/Claisen Rearrangement" *Synthesis*, **2016**, *48*, 1647–1654.

This article was invited in Target Oriented Synthesis of Complex Molecules Issue.

38. Fukaya, K.; Yamaguchi, Y.; Watanabe, A.; Yamamoto, H.; Sugai, S.; Sugai, T.; Sato, T.; *Chida, N. "Practical Synthesis of the C-ring Precursor of Paclitaxel from 3-Methoxytoluene" *J. Antibiot.* **2016**, *69*, 273–279.

39. Katahara, S.; Kobayashi, S.; Fujita, K.; Matsumoto, T.; *Sato, T.; *Chida, N. "An Iridium-Catalyzed Reductive Approach to Nitrones from *N*-Hydroxyamides" *J. Am. Chem. Soc.* **2016**, *138*, 5246–5249.

40. Nakayama, Y.; Maeda, Y.; Kotatsu, M.; Sekiya, R.; Ichiki, M.; *Sato, T.; *Chida, N. "Enantioselective Total Synthesis of (+)-Neostenine" *Chem. Eur. J.* **2016**, *22*, 3300–3303.

41. Yokoyama, T.; Fukami, Y.; *Sato, T.; *Chida, N. "Synthesis of (±)-Lasubine II Using *N*-Methoxyamines" *Chem. Asian J.* **2016**, *11*, 470–473.

42. Fukaya, K.; Kodama, K.; Tanaka, Y.; Yamazaki, H.; Sugai, T.; Yamaguchi, Y.; Watanabe, A.; Oishi, T.; *Sato, T.; *Chida, N. "Synthesis of Paclitaxel. 2. Construction of the ABCD-Ring and Formal Synthesis"
Org. Lett. **2015**, *17*, 2574–2577.
43. Fukaya, K.; Tanaka, Y.; Sato, A.; Kodama, K.; Yamazaki, H.; Ishimoto, T.; Nozaki, Y.; Iwaki, Y.; Yuki, Y.; Umei, K.; Sugai, T.; Yamaguchi, Y.; Watanabe, A.; Oishi, T.; Sato, T.; *Chida, N. "Synthesis of Paclitaxel. 1. Synthesis of the ABC-Ring of Paclitaxel by SmI₂-Mediated Cyclization"
Org. Lett. **2015**, *17*, 2570–2573.

This article was selected as the most read articles on a monthly basis.

44. Yanagita, Y.; Suto, T.; Matsuo, N.; Kurosu, Y.; *Sato T.; *Chida, N. "Synthesis of Diazatricyclic Common Structure of Madangamine Alkaloids"
Org. Lett. **2015**, *17*, 1946–1949.
45. Tsuzaki, S.; Usui, S.; Oishi, H.; Yasushima, D.; Fukuyasu, T.; Oishi, T.; *Sato T.; *Chida, N. "Total Synthesis of Sphingofungin F by Orthoamide-Type Overman Rearrangement of an Unsaturated Ester"
Org. Lett. **2015**, *17*, 1704–1707.
46. Nakajima, M.; *Sato T.; *Chida, N. "Iridium-Catalyzed Chemoselective Reductive Nucleophilic Addition to *N*-Methoxyamides"
Org. Lett. **2015**, *17*, 1696–1699.
47. Shirokane, K.; Tanaka, Y.; Yoritake, M.; Takayama, N.; *Sato T.; *Chida, N. "Total Syntheses of (±)-Gephyrotoxin and (±)-Perhydrogephyrotoxin"
Bull. Chem. Soc. Jpn. **2015**, *88*, 522–537.

This article was selected as BCSJ award.

This article was selected as a front cover.

48. Nakajima, M.; Oda, Y.; Wada, T.; Minamikawa, R.; Shirokane, K.; *Sato, T.; *Chida, N. "Chemoselective Reductive Nucleophilic Addition to Tertiary Amides, Secondary Amides and *N*-Methoxyamides"
Chem. Eur. J. **2014**, *20*, 17565–17571.
49. Yoritake, M.; Meguro, T.; Matsuo, N.; Shirokane, K.; *Sato, T.; *Chida, N. "Two-step Synthesis of Multi-Substituted Amines by Using an *N*-Methoxy Group as a Reactivity Control Element"
Chem. Eur. J. **2014**, *20*, 8210–8216.

This article was selected as VIP (Very Important Paper).

This article was selected as a front cover.

50. Shirokane, K.; Wada, T.; Yoritake, M.; Minamikawa, R.; Takayama, N.; *Sato T.; *Chida, N. "Total Synthesis of (±)-Gephyrotoxin by Amide-Selective Reductive Nucleophilic Addition"
Angew. Chem. Int. Ed. **2014**, *53*, 512–516.

This article was selected as VIP (Very Important Paper).

This article was selected as the most accessed articles in 12/2013.

This article was selected as the most accessed articles in 11/2013-10/2014.

This article was highlighted in SYNFACTS (**2014**, *10*, 116).

51. Nakayama, Y.; Sekiya, R.; Oishi, H.; Hama, N.; Yamazaki, M.; *Sato, T.; *Chida, N. "Cascade- and Orthoamide-type Overman Rearrangements of Allylic Vicinal Diols"
Chem. Eur. J. **2013**, *19*, 12052–12058.
52. Yanagita, Y.; Nakamura, H.; Shirokane, K.; Kurosaki, Y.; *Sato, T.; *Chida, N. "Direct Nucleophilic Addition to *N*-

Alkoxyamides”

Chem. Eur. J. **2013**, *19*, 678–684.

53. Ichiki, M.; Tanimoto, H.; Miwa, S.; Saito, R.; Sato, T.; *Chida, N. “Synthesis of (–)-Morphine: Application of Sequential Claisen/Claisen Rearrangement of an Allylic Vicinal Diol”
Chem. Eur. J. **2013**, *19*, 264–269.

This article was selected as the most read article Top 25 on an annually basis.

54. Kitamoto, K.; Nakayama, Y.; Sampei, M.; Ichiki, M.; Furuya, N.; *Sato, T.; *Chida, N. “Chirality Transfers through Sequential Sigmatropic Rearrangements of Allylic Vicinal Diols: Development and Application to Total Synthesis of (–)-Kainic Acid”
Eur. J. Org. Chem. **2012**, 4217–4231.

55. Kurosaki, Y.; Shirokane, K.; Oishi, T.; *Sato, T.; *Chida, N. “Concise Synthesis of α -Trisubstituted Amines from Ketones Using *N*-Methoxyamines”
Org. Lett. **2012**, *14*, 2098–2101.

56. Oda, Y.; *Sato, T.; *Chida, N. “Direct Chemoselective Allylation of Inert Amide Carbonyls”
Org. Lett. **2012**, *14*, 950–953.

This article was highlighted in SYNFACTS (**2012**, *14*, 428).

57. Hama, N.; Aoki, T.; Miwa, S.; Yamazaki, M.; Sato, T.; *Chida, N. “Total Synthesis of Broussonetine F: The Orthoamide Overman Rearrangement of an Allylic Diol”
Org. Lett. **2011**, *13*, 616–619.

This article was selected as the most read articles on a monthly basis.

This article was selected as the most read articles for quarter 1, 2011.

58. Kaiya, Y.; Hasegawa, J.; Momose, T.; *Sato, T.; *Chida, N. “Total Synthesis of (–)-Salinosporamide A”
Chem. Asian J. **2011**, *5*, 209–219.

This article was selected as the most read article Top 25 on an annually basis.

59. Kitamoto, K.; Sampei, M.; Nakayama, Y.; *Sato, T.; *Chida, N. “Novel Sequential Sigmatropic Rearrangements of Allylic Diols: Application to the Total Synthesis of (–)-Kainic Acid”
Org. Lett. **2010**, *12*, 5756–5759.

60. Shirokane, K.; Kurosaki, Y.; *Sato, T.; *Chida, N. “A Direct Entry to Substituted *N*-Methoxyamines from *N*-Methoxyamides via *N*-Oxyiminium Ions”
Angew. Chem. Int. Ed. **2010**, *49*, 6369–6372.

This article was highlighted in SYNFACTS (**2010**, *12*, 1412).

61. Momose, T.; Kaiya, Y.; Hasegawa, J.; Sato, T.; *Chida, N. “Formal Synthesis of Salinosporamide A Starting from D-Glucose”
Synthesis, **2009**, 2983–2991.

62. Hama, N.; Matsuda, T.; Sato, T.; *Chida, N. “Total Synthesis of (–)-Agelastatin A: The Application of a Sequential Sigmatropic Rearrangement”
Org. Lett. **2009**, *11*, 2687–2690.

This article was highlighted in SYNFACTS (**2009**, *12*, 1314).

63. *Overman, L. E.; Sato, T. “Construction of Epidithiodioxopiperazines by Directed Oxidation of Hydroxyproline-

Derived Dioxopiperazines”
Org. Lett. **2007**, *9*, 5267–5270.

64. *Inoue, M.; Lee, N.; Kasuya, S.; Sato, T.; Hirama, M.; Moriyama, M.; Fukuyama, Y. “Total Synthesis and Bioactivity of an Unnatural Enantiomer of Merrilactone A: Development of an Enantioselective Desymmetrization Strategy”
J. Org. Chem. **2007**, *72*, 3065–3075.
65. *Inoue, M.; Sato, T.; Hirama, M. "Asymmetric Total Synthesis of (–)-Merrilactone A: Use of a Bulky Protecting Group as Long-Range Stereocontrolling Element"
Angew. Chem. Int. Ed. **2006**, *45*, 4843–4848.
66. *Inoue, M.; Sato, T.; *Hirama, M. "Total Synthesis of Merrilactone A"
J. Am. Chem. Soc. **2003**, *125*, 10772–10773.

X線結晶構造解析 (collaboration work)

67. *Oishi, T.; Fukaya, K.; Sato T.; Chida N. “Crystal structure of (+)-(1*S*,5*S*,6*S*,7*S*,10*S*,11*S*,16*S*)-16-hydroxy-7-methoxymethoxy-11,15,18,18-tetramethyl-3,13-dioxo-2,4-dioxatetracyclo-[12.3.1.0^{1,5}.0^{6,11}]octadeca-14-en-10-yl benzoate”
Acta Cryst. **2021**, *E77*, 1234–1238.
68. *Oishi, T.; Ishii, K.; Ishibashi, M.; Sato T.; Chida, ”Crystal structure of (–)-(*R,E*)-3-(1,3-benzodioxol-5-yl)-5-[(4*S*,5*R*)-5-hydroxymethyl-2,2-dimethyl-1,3-dioxolan-4-yl]-*N,N*-dimethylpent-4-enamide”
Acta Cryst. **2018**, *E74*, 825–828.
69. *Oishi, T.; Yoritate, M.; Sato T.; Chida, ”Crystal structure of (–)-(5*R*,7*R*,8*S*,9*R*,10*S*)-8-methyl-7-[(5*R*)-3-methyl-2-oxoxolan-3-en-5-yl]-1-aza-6-oxatricyclo-[8.3.0.0^{5,9}]tridecan-13-one monohydrate”
Acta Cryst. **2018**, *E74*, 555–558.
70. *Oishi, T.; Kidena, M.; Sugai, T. Sato T.; Chida, N. “Crystal structure of (–)-methyl (*R,E*)-4-[(2*R*,4*R*)-2-amino-2-trichloromethyl-1,3-dioxolan-4-yl]-4-hydroxy-2-methylbut-2-enoate”
Acta Cryst. **2017**, *E73*, 983–986.
71. *Oishi, T.; Tsuzaki, S.; Sugai, T. Sato T.; Chida, N. “Crystal structure of (+)-*N*-[(1*R*,5*S*,6*S*,9*S*)-5-hydroxymethyl-3,3,9-trimethyl-8-oxo-2,4,7-trioxabicyclo[4.3.0]nonan-9-yl]acetamide”
Acta Cryst. **2016**, *E72*, 756–759.
72. *Oishi, T.; Yasushima, D.; Yuasa, K.; Sato T.; Chida, N. “Crystal structure of (+)-methyl (*E*)-3-[(2*S*,4*S*,5*R*)-2-amino-5-hydroxymethyl-2-trichloromethyl-1,3-dioxolan-4-yl]-2-methylprop-2-enoate”
Acta Cryst. **2016**, *E72*, 343–346.
73. *Oishi, T.; Yamamoto, S.; Yokoyama, T.; Kobayashi, A.; Sato T.; Chida, N. “Crystal structure of (±)-(5*SR*,6*SR*)-6-ethenyl-1-[(*RS*)-1-phenylethoxy]-1-azaspiro[4.5]decan-2-one”
Acta. Cryst. **2015**, *E71*, 1528–1530.
74. *Oishi, T.; Yamamoto, H.; Sugai, T.; Fukaya, K.; Yamaguchi, Y.; Watanabe, A.; Sato T.; Chida, N. “Crystal structure of (±)-(7*RS*,8*SR*)-7-methyl-1,4-dioxaspiro[4.5]decane-7,8-diol”
Acta. Cryst. **2015**, *E71*, 1181–1184.
75. *Oishi, T.; Fukaya, K.; Yamaguchi, Y.; Sugai, T., Watanabe, A.; Sato T.; Chida N. “Crystal structure of (±)-(1*SR*,5*SR*,6*SR*,7*SR*,10*SR*,11*SR*,13*SR*)-13-benzyloxy-7-methoxymethoxy-11,15,18,18-tetramethyl-3-oxo-2,4-dioxatetracyclo[12.3.1.0^{1,5},0^{6,11}]octadeca-14,16-dien-10-ylbenzoate”
Acta. Cryst. **2015**, *E71*, 490–493.
76. *Oishi, T.; Fukaya, K.; Yamaguchi, Y.; Sugai, T., Watanabe, A.; Sato T.; Chida N. “Crystal structures of (±)-

(1*SR*,5*SR*,6*SR*,7*SR*,10*SR*,11*SR*,13*RS*,14*SR*)-13-hydroxy-7-methoxymethoxy-11,15,18,18-tetramethyl-3-oxo-2,4-dioxatetracyclo[12.3.1.0^{1,5}.0^{6,11}]octadec-15-en-10-yl benzoate, its 13-epimer and 13-one derivative”
Acta. Cryst. **2015**, *E71*, 466–472.

77. *Oishi, T.; Yamaguchi, Y.; Fukaya, K.; Sugai, T., Watanabe, A.; Sato T.; Chida N. “Crystal structure of (±)-(4*RS*,5*RS*,7*SR*)-4-[(1*RS*,2*RS*,3*RS*,6*RS*)-3-benzoyloxy-2-(2-hydroxyethyl)-6-methoxymethoxy-2-methylcyclohexyl]-8,10,10-trimethyl-2-oxo-1,3-dioxaspiro[4.5]dec-8-en-7-yl benzoate benzene monosolvate”
Acta. Cryst. **2015**, *E71*, 8–11.
78. *Oishi, T.; Yoritake, M.; Sato, T.; Chida, N. “(5*R**)-5-[(2*S**,5*S**)-1-Methoxy-5-phenylpyrrolidin-2-yl]-3-methylfuran-2(5*H*)-one”
Acta Cryst. **2014**, *E70*, o839.
79. *Oishi, T.; Oishi, H.; Tsuzaki, S.; Sato, T.; Chida, N. “(+)-(1*S*,5*R*,6*R*)-6-[(*S*)-1-Hydroxy-2-(methoxy methoxy)ethyl]-1-methyl-3-trichloromethyl-2-aza-4,7-dioxabicyclo-[3.3.0]oct-2-en-8-one”
Acta Cryst. **2012**, *E68*, o3185.

総説 (review, account)

1. *佐藤隆章 “立体発散のスキップジエン合成法の開発とマダンガミン類の網羅的全合成”
有機合成化学協会誌, **2022**, *80*, 343–356.

有機合成化学奨励賞 受賞論文

2. *Sato, T.; Suto, T. Nagashima, Y.; Mukai S. Chida, N. “Total Synthesis of Skipped Diene Natural Products”
Asian J. Org. Chem. **2021**, *10*, 2486–2502.

This is an invited review.

This review was selected as an Top Downloaded article in 2022.

3. *Sato, T.; Yoritake, M.; Tajima, H.; Chida, N. “Total Synthesis of Complex Alkaloids by Nucleophilic Addition to Amides”
Org. Biomol. Chem. **2018**, *16*, 3864–3875.

This is an invited review.

4. 佐藤隆章、千田憲孝 “*N*-アルコキシアミド基への求核付加反応の開発とゲフィロトキシンの全合成”
有機合成化学協会誌, **2016**, *74*, 599–610.

5. *Chida, N.; Sato, T. “Synthesis of Natural Products Containing Cyclohexane Units Utilizing the Ferrier Carbocyclization Reaction”
Chem. Rec. **2014**, *14*, 592–605.

6. *Sato, T.; Chida, N. “Nucleophilic Addition to *N*-Alkoxyamides”
Org. Biomol. Chem. **2014**, *12*, 3147–3150.

This is an invited account.

This article was selected as one of the highly cited articles.

7. 井上将行、佐藤隆章、平間正博 “メリラクトンAの全合成：遠隔不斉誘導と不斉非対称化”
有機合成化学協会誌, **2007**, *65*, 419–429.

著書 (Book)

1. 佐藤隆章 “博士研究員からはじまるアミド基への求核付加反応” ドラマチック有機合成化学 感動の瞬間 100, 有機合成化学協会編, 化学同人, **2023**, pp. 142–143.
2. Sato, T. “Nucleophilic Addition to Amides Toward Efficient Total Synthesis of Complex Alkaloids”, *New Tide of Natural Product Chemistry*, Ishikawa, H.; Takayama, H.; Springer, **2023**, pp. 275–293.
3. Chida, N.; Sato, T. “Chiral Pool Synthesis: Chiral Pool Syntheses Starting from Carbohydrates”, *Comprehensive Chirality*, Carreira, E. M.; Yamamoto, H.; Elsevier Science, **2012**, pp. 207–239.
4. 井上将行, 佐藤隆章 “[2+2]光付加環化” 天然物合成で活躍した反応 実験のコツとポイント, 有機合成化学協会編, 化学同人, **2011**, pp. 62–63.
5. 井上将行, 佐藤隆章, 平間正博 “対称性を利用したメリラクトンAの全合成 遠隔不斉誘導と不斉非対称化” 天然物全合成の最新動向, 監修 北泰行, シーエムシー出版, **2009**, pp. 3–17.

解説・その他

1. 佐藤隆章 “博士進学？ 研究室の学生に聞いてみた”
化学と工業, **2021**, 74, 30–31.
2. 佐藤隆章 “天然物合成で総収率を上げるには？”
有機合成化学協会誌, **2018**, 76, 454–457.
3. 佐藤隆章 “アミド基選択的な求核付加反応の開発と応用”
化学と工業, **2017**, 70, 621–622.
4. 佐藤隆章 “アミド基選択的な求核付加反応による天然物全合成の効率化”
化学と工業, **2014**, 67, 786.
5. Yoritake, M.; Meguro, T.; Matsuo, N.; Shirokane, K.; *Sato, T.; *Chida, N. “Cover Profile: Two-step Synthesis of Multi-substituted Amines Using *N*-Methoxy Group as a Reactivity Control Element”
Chem. – Eur. J. **2014**, 20, 7849.
6. 千田憲孝, 佐藤隆章 “カチオン- π 相互作用を利用した有機合成化学”
化学, **2008**, 63, 66–67.
7. 佐藤隆章 “酸化的カップリング反応を用いたインドールアルカロイド類の全合成”
有機合成化学協会誌, **2006**, 64, 679–670.

受賞 (Award)

1. The SYNTHESIS Best Paper Award 2023 (2023年3月)
“Total Synthesis and Anti-inflammatory Activity of Stemoamide-Type Alkaloids Including Totally Substituted Butenolides and Pyrroles”
2. Thieme Chemistry Journals Award (2019年1月)
3. International Symposium on Pure & Applied Chemistry 2017, Lecture Award (2017年6月)
“Unified Total Synthesis of Stemoamide-Type Alkaloids”

4. 日本化学会第 97 春季年会 第 31 回若い世代の特別講演会 講演証 (2017 年 3 月)
「*N*-メトキシアミド基への求核付加反応の開発と天然物合成への応用」
5. 第 35 回有機合成化学奨励賞 (2017 年 2 月)
Incentive Award in Synthetic Organic Chemistry, Japan
「反応性制御素子を用いたアミド変換反応の開発と応用」
6. BCSJ award
2015 年 4 月 “Total Syntheses of (±)-Gephyrotoxin and (±)-Perhydrogephyrotoxin”
2017 年 8 月 “Reductive Approach to Nitrones from *N*-Siloxyamides and *N*-Hydroxyamides”
7. 第 14 回天然物化学談話会奨励賞 (2014 年 10 月)
Young Scientist's Research Award in Natural Product Chemistry
「アミド基への求核付加反応から始まる天然物全合成」
8. 第 21 回有機合成化学協会研究企画賞 (2009 年 2 月)
「*N*-アルコキシアミド基を経由した実用的アルカロイド合成法の開発と天然物全合成への展開」
9. 日本化学会第 85 春季年会 学生講演賞 (2005 年 3 月)
「メリラクトン A の不斉全合成研究」

招待講演 (Invited lecture)

1. Takaaki Sato, “Amides Enabling Efficient Synthesis of Alkaloids”, International Symposium for the 80th Anniversary Symposium of the Tohoku Branch Chemical Society, September 10th, 2023, Sendai (Japan).
2. Takaaki Sato, “Unified Total Synthesis of Stemoamide-Type Alkaloids Based on the Amide-Selective Nucleophilic Addition”, The 11th Singapore International Chemistry Conference, December 12th, 2022, Singapore.
3. 佐藤隆章、「複雑分子の合成効率化を目指して」、ヘテロ原子部会 2022 年度第 2 回懇話会、2022 年 12 月 1 日、オンライン開催
4. 佐藤隆章、「天然物全合成の効率化について考えてみた」、第 55 回天然物談話会、2022 年 6 月 24 日、オンライン開催
5. 佐藤隆章、「複雑化合物の超短工程合成を実現するには」、静岡県立大学大学院特別講義、2021 年 11 月 5 日、オンライン開催
6. 佐藤隆章、「全合成の超短工程化を目指して」、第 4 回「生体適合化学の進歩」インタラクティブフォーラム (ABC-InFO)、2021 年 6 月 8 日、オンライン開催
7. 佐藤隆章、「アミド基への求核付加反応と天然物全合成」、第 7 回千葉大学キラリティーネットワーク研究会講演会、2020 年 1 月 24 日、千葉大学西千葉キャンパス (千葉県千葉市)
8. Takaaki Sato, “Unified Total Synthesis of Stemoamide-Type Alkaloids by Chemoselective Assembly of Five-Membered Building Blocks”, Nanyang Research Conference on Synthetic Chemistry and Catalysis, January 16th, 2020, Nanyang Technological University, Singapore.
9. Takaaki Sato, “Development and Application of Nucleophilic Addition to Amides”, Keio International Symposium on Innovative Synthesis of Complex Molecules, December 14th, 2019, Yokohama (Japan).
10. 佐藤隆章、「アミドが拓く有機合成化学」、日本薬学会東北支部主催 第 18 回化学系若手研究者セミナー、

2019年9月7日、東北大学大学院薬学研究科（宮城県仙台市）

11. Takaaki Sato, “Stereodivergent Approach to Natural Products with Skipped Dienes”, KEIO International Symposium on Innovative Molecular Transformations, February 25th, 2019, Yokohama (Japan).
12. Takaaki Sato, “Total Synthesis of Complex Alkaloids by Nucleophilic Addition to Amides”, The 13th International Conference on Cutting-Edge Organic Chemistry in Asia, November 3rd, 2018, Bangkok (Thailand).
13. 佐藤隆章、「ありふれた官能基の潜在的反応性を活用した天然物全合成」、星薬科大学研究科助手会大学院自治会合同セミナー、2018年10月13日、星薬科大学（東京都品川区）
14. 佐藤隆章、「アミド変換反応の開発と天然物全合成の効率化」、第9回サブウェイセミナー、2018年8月20日、早稲田大学西早稲田キャンパス（東京都新宿区）
15. 佐藤隆章、「アミド基を基盤とした天然物全合成の効率化」、日本化学会第98春季年会 天然有機化合物の全合成：効率的分子構築のための新しい反応と戦略（CSJ カレントレビュー企画）、2018年3月23日、日本大学理工学部船橋キャンパス（千葉県船橋市）
16. Takaaki Sato, “Unified Total Synthesis of Madangamine Alkaloids”, International Congress on Pure & Applied Chemistry 2018 (award lecture of ISPAC 2017), March 9th, 2018, Siem Reap (Cambodia).
17. 佐藤隆章、「アミド基変換反応の開発と天然物合成への応用」第34回有機合成化学セミナー 奨励賞受賞講演、2017年9月13日、金沢市文化ホール（石川県金沢市）
18. Takaaki Sato, “Unified Total Synthesis of Stemoamide-Type Alkaloids”, International Symposium on Pure & Applied Chemistry 2017, June 8th, 2017, Ho Chi Minh City (Vietnam).
19. 佐藤隆章、「アミド基変換反応と天然物合成の効率化」、日本薬学会第137年会シンポジウム 有機合成化学の若い力、2017年3月25日、東北大学川内北キャンパス（宮城県仙台市）
20. Takaaki Sato, “Development and Application of Nucleophilic Addition to Amides”, Asian International Symposium in the 97th Chemical Society Japan Annual Meeting, March 17th, 2017, Yokohama (Japan).
21. 佐藤隆章、「*N*-メトキシアミド基への求核付加反応の開発と天然物合成への応用」、日本化学会第97春季年会 若い世代の特別講演、2017年3月16日、慶應義塾大学日吉キャンパス（神奈川県横浜市）
22. 佐藤隆章、「アミド変換反応の開発と天然物全合成の効率化」、東京農工大学応用化学部門主催講演会、2017年1月12日、東京農工大学小金井キャンパス（東京都小金井市）
23. 佐藤隆章、「アミド基への求核付加反応と天然物全合成の効率化」、第60回香料・テルペンおよび精油化学に関する討論会 依頼講演、2016年10月29日、東京農業大学オホーツクキャンパス（北海道網走市）
24. 佐藤隆章、「アミド変換反応の開発と天然物全合成の効率化」、第74回パネル討論会：次世代を切り拓く全合成研究の若い力、2016年10月1日、徳島大学蔵本キャンパス（徳島県徳島市）
25. Takaaki Sato, “An Iridium-Catalyzed Reductive Approach to Nitrones from *N*-Hydroxiamides”, International Symposium on Pure & Applied Chemistry 2016, August 17th, 2016, Kuching (Malaysia)
26. 佐藤隆章、「アミド変換反応の開発と天然物合成への応用」、2016年度物質生命理工学科コロキウム、2016年7月12日、上智大学四谷キャンパス（東京都千代田区）
27. 佐藤隆章、「アミド変換反応の開発と天然物合成への応用」、北里大学薬学部主催講演会、2015年12月14日、北里大学白金キャンパス（東京都港区）

28. 佐藤隆章、「アミド変換反応と天然物全合成」、第 50 回天然物談話会 談話会奨励賞受賞講演、2015 年 7 月 2 日、グリーンピア岩沼 モンタナリゾート（宮城県岩沼市）
29. 佐藤隆章、「*N*-アルコキシアミドと天然物全合成への挑戦」、第 3 回慶應有機化学若手シンポジウム、2015 年 5 月 9 日、慶應義塾大学矢上キャンパス（神奈川県横浜市）
30. Takaaki Sato, “Total Synthesis of Sphingofungin F”, Vietnam Malaysian International Chemical Congress, November 7th, 2014, Hanoi (Vietnam).
31. Takaaki Sato, “Total Synthesis of Gephyrotoxin by Amide-Selective Nucleophilic Addition”, 18th Malaysian International Chemical Congress, November 3rd, 2014, Kuala Lumpur (Malaysia).
32. Takaaki Sato, “Chemoselective Nucleophilic Addition to *N*-Alkoxyamides: Development and Application to the Total Synthesis of Gephyrotoxin”, 3rd International Conference on Organic Chemistry, September 26th, 2014, Tbilisi (Georgia).
33. Takaaki Sato, “Total Synthesis of Gephyrotoxin via Amide-Selective Nucleophilic Addition”, The Overman Symposium, September 12th, 2013, Indianapolis (USA).
34. Takaaki Sato, “Total Synthesis of Gephyrotoxin: Development and Application of Chemoselective Nucleophilic Addition to Amides”, 15th Asian Chemical Congress, August 22th, 2013, Singapore.
35. Takaaki Sato, “Direct Nucleophilic Addition to *N*-Alkoxyamides”, Cambodian Malaysian Chemical Conference, October 21th, 2012, Siem Reap (Cambodia).
36. Takaaki Sato, “Direct Nucleophilic Addition to *N*-Alkoxyamides”, 17th Malaysian Chemical Congress, October 17th, 2012, Kuala Lumpur (Malaysia).
37. 佐藤隆章、「天然物の全合成研究における Reaxys 活用法」、日本化学会第 92 春季年会、2012 年 3 月 25 日、慶應義塾大学矢上キャンパス（神奈川県横浜市）
38. Takaaki Sato, “Direct Functionalization of Inert Amide Carbonyls”, 14th Asian Chemical Congress, September 7th 2011, Bangkok (Thailand).
39. 佐藤隆章、「生物活性アルカロイドの全合成を指向した新規方法論の開発」、2009 年度若手研究者のためのセミナー、2009 年 12 月 12 日、東京大学農学部弥生講堂（東京都文京区）