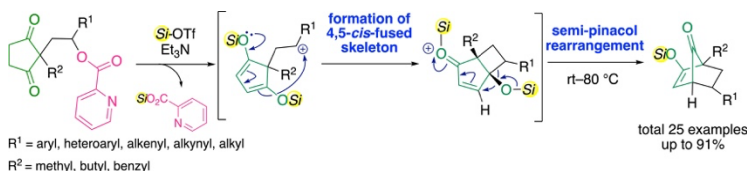


【主要論文】

1. [Ikeuchi, K.*](#), Hirokawa, Y., Sasage, T., Fujii, R., Yoshitani, A., Suzuki, T., Tanino, K.

Unique Reactivity of the 1,4-Bis(silyloxy)-1,3-cyclopentadiene Moiety: Application to the Synthesis of 7-Norbomanone Derivatives

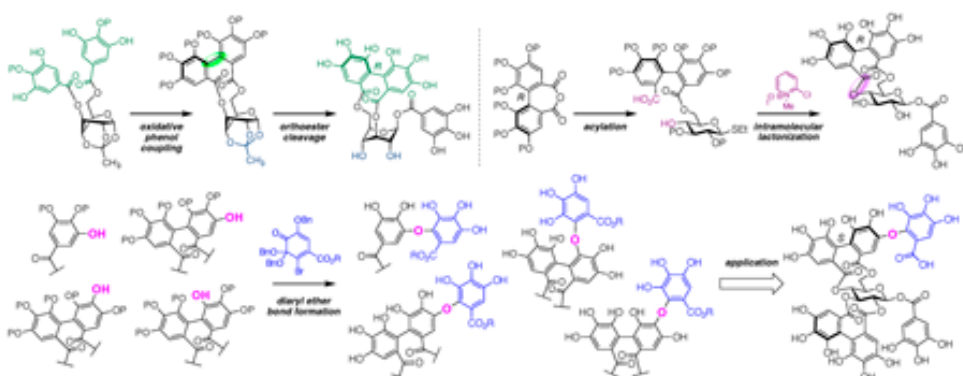
[Chem. Eur. J. 2024, 30, e202401908.](#) [selected as a front cover]



2. [Ikeuchi, K.*](#)

Development of Methodologies toward the Unified Synthesis of Ellagitannins

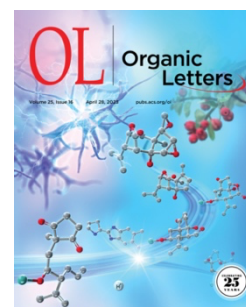
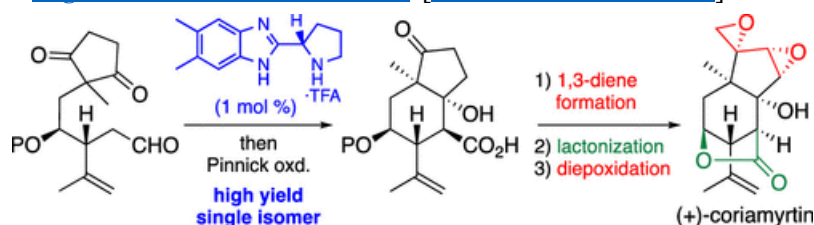
[Chem. Pharm. Bull. 2024, 72, 349–359.](#) [selected as a front cover]



3. [Ikeuchi, K.*](#), Haraguchi, S., Fujii, R., Yamada, H., Suzuki, T., Tanino, K.*

Total Synthesis of (+)-Coriamyrtin involving a Desymmetrizing Strategy of a 1,3-Cyclopentanedione Moiety.

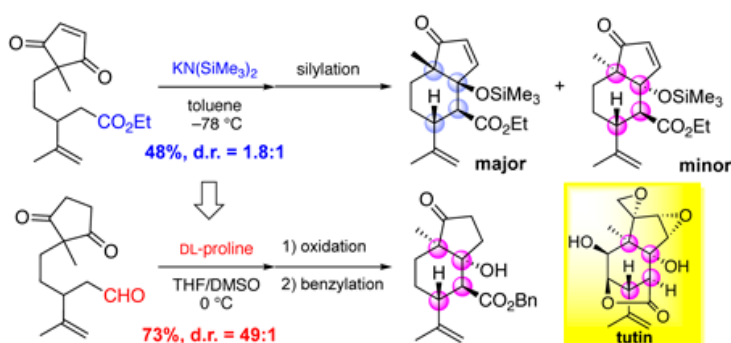
[Org. Lett. 2023, 25, 2751–2755.](#) [selected as a front cover]



4. [Ikeuchi, K.*](#), Haraguchi, S., Yamada, H., [Tanino, K.*](#)

Model Synthetic Study of Tutin, a Picrotoxane-type Sesquiterpene: Stereoselective Construction of a *cis*-Fused 5,6-Ring Skeleton

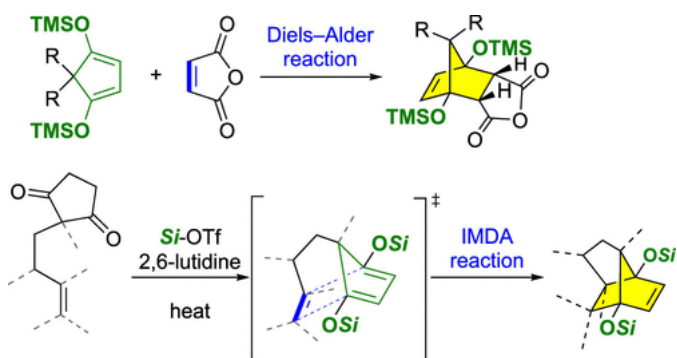
[Chem. Pharm. Bull. 2022, 70, 435–442.](#)



5. [Ikeuchi, K.*](#), Sasage, T., Yamada, G., Suzuki, T., Tanino, K.*

Synthesis of a Bicyclo[2.2.1]heptane Skeleton with Two Oxy-functionalized Bridgehead Carbons via the Diels–Alder Reaction.

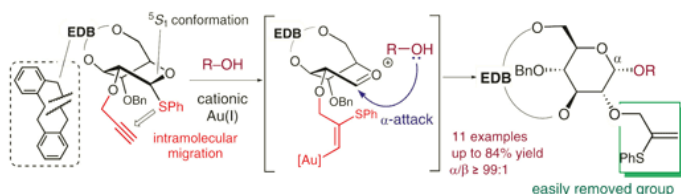
[Org. Lett. 2021, 23, 9123–9127.](#)



6. [Ikeuchi, K.*](#), Matsumoto, S., Ikuta, D., Yamada, H.

Glycosylation by the Alkyne Activation of the 2-*O*-Substituted Propargyl Group in a β -Phenylthioglucoside with a 5S_1 Conformation

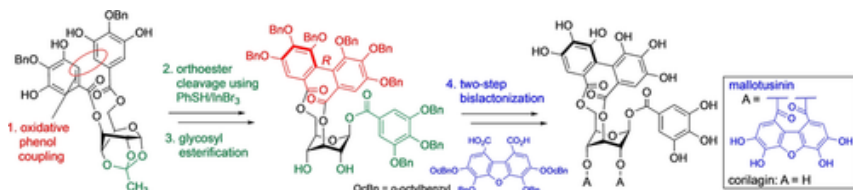
[Synlett 2021, 32, 817–821.](#)



7. Yamashita, K., Kume, Y., Ashibe, S., Puspita, C. A. D., Tanigawa, K., Michihata, N., Wakamori, S., [Ikeuchi, K.*](#), Yamada, H.

Total Synthesis of Mallotusin

[Chem. Eur. J. 2020, 26, 16408–16421.](#)



8. [Ikeuchi, K.*](#), Ueji, T., Matsumoto, S., Wakamori, S., Yamada, H.*

First Total Synthesis of Neostriectinin.

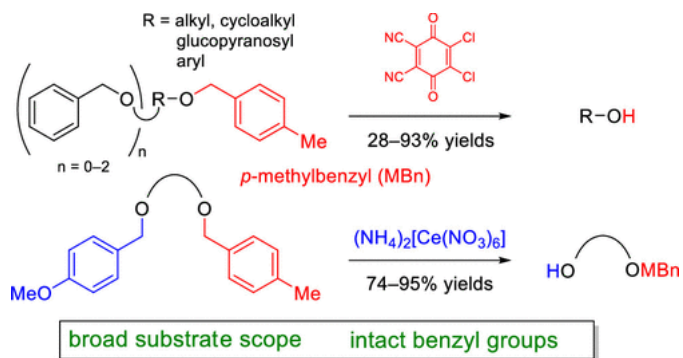
[Eur. J. Org. Chem. 2020, 2077–2085.](#)



9. [Ikeuchi, K.*](#), Murasawa, K., Ohara, K., Yamada, H.*

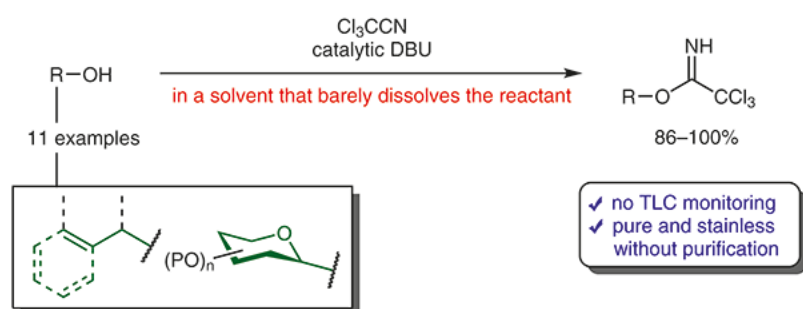
p-Methylbenzyl Group: Oxidative Removal and Orthogonal Alcohol Deprotection

[Org. Lett. 2019, 21, 6638–6642.](#)



10. Ikeuchi, K.*, Murasawa, K., Yamada, H.*

A Simple Method for the Preparation of Stainless and Highly Pure Trichloroacetimidates [Synlett, 2019, 30, 1308–1312](#).



【全ての原著論文】

1. Suzuki, T.*, Yamashita, K., Ikeda, W., Ikeuchi, K., Tanino, K.
Novel Radical Cyclization Cascade for the Unified Synthesis of the Cedrane and Clovane Sesquiterpene Skeletons
Asian J. Org. Chem. **2024**, *13*, e202400242.
2. Ikeuchi, K.*, Hirokawa, Y., Sasage, T., Fujii, R., Yoshitani, A., Suzuki, T., Tanino, K.
Unique Reactivity of the 1,4-Bis(silyloxy)-1,3-cyclopentadiene Moiety: Application to the Synthesis of 7-Norbornanone Derivatives
Chem. Eur. J. **2024**, *30*, e202401908.
3. Sato, K., Fujita, T., Takeuchi, T., Suzuki, T., Ikeuchi, K. Tanino, K.
Alcohol synthesis based on the S_N2 reactions of alkyl halides with squarate dianion
Org. Biomol. Chem. **2024**, *22*, 1369–1373.
4. Ikeuchi, K.*, Haraguchi, S., Fujii, R., Yamada, H., Suzuki, T., Tanino, K.*
Total Synthesis of (+)-Coriamyrtin involving a Desymmetrizing Strategy of a 1,3-Cyclopentanedione Moiety
Org. Lett. **2023**, *25*, 2751–2755
5. Ikeuchi, K.*, Ozoe, Y., Kato, R., Suzuki, T., Tanino, K.*
Synthesis of 2-alkyl-2-(2-furanyl)-1,3-cyclopentanedione
Synthesis **2023**, *55*, 2751–2755.
6. Suzuki, T.*, Ikeda, W., Kanno, A., Ikeuchi, K., Tanino, K.
Diastereoselective Synthesis of trans-anti-Hydrophenanthrenes via Ti-mediated Radical Cyclization and Total Synthesis of Kamebanin
Chem. Eur. J. **2023**, *29*, e202203511
7. Kato, R., Saito, H., Ikeuchi, K., Suzuki, T., Tanino, K.*
Total Synthesis and Structural Revision of the 6,11-Epoxyisodaucane Natural Sesquiterpene Using an Anionic 8π Electrocyclic Reaction
Org. Lett. **2022**, *24*, 7939–7943.
8. Kato, K., Ikeuchi, K., Suzuki, T., Tanino, K.*
Total Synthesis of 2-Isocyanallopupukeanane: Construction of Caged Skeleton by Intramolecular Alkylation of Bromonitriles
Org. Lett. **2022**, *24*, 6407–6411.
9. Hashimoto, H., Wakamori, S., Ikeuchi, K.*, Yamada, H.
Divergent Synthesis of Four Monomeric Ellagitannins toward the Total Synthesis of an Oligomeric Ellagitannin, Nobotanin K
Organics **2022**, *3*, 293–303.
10. Ikuta, D., Kumagai, K., Hagimori, T., Hirokane, T., Ikeuchi, K., Wakamori, S.*, Yamada, H.
Indium(III) bromide-mediated β-selective thioglycosylation of 1,2,4-O-orthoacetylglucose derivatives
Carbohydrate Res. **2022**, *519*, 108609–108609.
11. Ogura, R., Satoh, K., Kiuchi, W., Kato, K., Ikeuchi, K., Suzuki, T., Tanino, K.*

Two-Step Method for Constructing a Quaternary Carbon Atom with a Geminal Divinyl Group from a Ketone
Org. Lett. **2022**, *24*, 5040–5044.

12. Ikeuchi, K.*, Haraguchi, S., Yamada, H., Tanino, K.*
Model Synthetic Study of Tutin, a Picrotoxane-type Sesquiterpene: Stereoselective Construction of a cis-Fused 5,6-Ring Skeleton
Chem. Pharm. Bull. **2022**, *70*, 435–442.
13. Yukutake, Y., Hiramatsu, T., Itoh, R., Ikeuchi, K., Suzuki, T., Tanino, K.*
Synthetic Studies on Tubiferal A: Asymmetric Synthesis of ABC-ring Model Compound
Synlett **2022**, *33*, 296–300.
14. Kishi, J., Ikeuchi, K., Suzuki, T., Tanino, K.*
Synthetic Studies of *Daphniphyllum* Alkaloids: A New Method for the Construction of [7-5-5] All-carbon Tricyclic Skeleton
Synlett **2022**, *33*, 196–200.
15. Saito, H., Kato, R., Ikeuchi, K., Suzuki, T., Tanino, K.*
 8π Electrocyclic Reaction of Phosphonate Derivatives: Access to Seven-Membered Cross-Conjugated Cyclic Trienes
Org. Lett. **2021**, *23*, 9606–9610.
16. Ikeuchi, K.*, Sasage, T., Yamada, G., Suzuki, T., Tanino, K.*
Synthesis of a Bicyclo[2.2.1]heptane Skeleton with Two Oxy-functionalized Bridgehead Carbons via the Diels–Alder Reaction
Org. Lett. **2021**, *23*, 9123–9127.
17. Kato, R., Saito, H., Uda, S., Domon, D., Ikeuchi, K., Suzuki, T., Tanino, K.*
Synthesis of Seven-Membered Cross-Conjugated Cyclic Trienes by 8π Electrocyclic Reaction
Org. Lett. **2021**, *23*, 8878–8882.
18. Suzuki, T.*, Nagahama, R., Fariz, M. A., Yukutake, Y., Ikeuchi, K., Tanino, K.*
Synthesis of Illisimonin A Skeleton by Intramolecular Diels–Alder Reaction of Ortho-Benzoquinones and Biomimetic Skeletal Rearrangement of Allo-Cedranes
Organics **2021**, *2*, 306–312.
19. Ikeuchi, K.*, Matsumoto, S., Ikuta, D., Yamada, H.
Glycosylation by the Alkyne Activation of the 2-*O*-Substituted Propargyl Group in a β -Phenylthioglucoside with a 5S_1 Conformation
Synlett **2021**, *32*, 817–821.
20. Bando, M., Kawasaki, Y., Nagata, O., Okada, Y., Ikuta, D., Ikeuchi, K.*, Yamada, H.
 β -Selective glycosylation using axial-rich and 2-*O*-rhamnosylated glucosyl donors controlled by the protecting pattern of the second sugar
Chem. Pharm. Bull. **2021**, *69*, 124–140.
21. Hashimoto, H., Ishimoto, T., Konishi, H., Hirokane, T., Wakamori, S., Ikeuchi, K.*, Yamada, H.

Synthesis of an Ellagitannin Component, the Macaranoyl Group with a tetra-*ortho*-Substituted Diaryl Ether Structure

Org. Lett. **2020**, *22*, 6729–6733.

22. Yamashita, K., Kume, Y., Ashibe, S., Puspita, C. A. D., Tanigawa, K., Michihata, N., Wakamori, S., Ikeuchi, K.*, Yamada, H.
Total Synthesis of Mallotusin
Chem. Eur. J. **2020**, *26*, 16408–16421.
23. Ikeuchi, K.*, Murasawa, K., Arai, T., Yamada, H.
p-Methylbenzyl 2,2,2-trichloroacetimidate: Simple Preparation and Application to Alcohol Protection
Chem. Lett. **2020**, *49*, 1034–1037.
24. Wakamori, S.*, Matsumoto, S., Kusuki, R., Ikeuchi, K. Yamada, H.*
Total Synthesis of Casuarinin
Org. Lett. **2020**, *22*, 3392–3396.
25. Konishi, H., Hirokane, T., Hashimoto, H., Ikeuchi, K., Matsumoto, S., Wakamori, S.*, Yamada, H.*
Synthesis of Diaryl Ether Components of Ellagitannins Using Ortho-quinone with Consonant Mesomeric Effects
Chem. Commun. **2020**, *56*, 3991–3994.
26. Ikeuchi, K.*, Ueji, T., Matsumoto, S., Wakamori, S., Yamada, H.*
First Total Synthesis of Neostriatin
Eur. J. Org. Chem. **2020**, 2077–2085.
27. Ikeuchi, K.*, Murasawa, K., Ohara, K., Yamada, H.*
p-Methylbenzyl Group: Oxidative Removal and Orthogonal Alcohol Deprotection
Org. Lett. **2019**, *21*, 6638–6642.
28. Ikuta, D., Hirata, Y., Wakamori, S., Shimada, H., Tomabeche, Y., Kawasaki, Y., Ikeuchi, K., Hagimori, T., Matsumoto, S., Yamada, H.*
Conformationally supple glucose monomers enable synthesis of the smallest cyclodextrins
Science **2019**, *364*, 674–677.
29. Takemura, H., Choi, J.-H., Matsuzaki, N., Taniguchi, Y., Wu, J., Hirai, H., Motohashi, R., Asakawa, T., Ikeuchi, K., Inai, M., Kan, T., Kawagishi, H.*
A Fairy Chemical, Imidazole-4-carboxamide, is Produced on a Novel Purine Metabolic Pathway in Rice
Sci. Rep. **2019**, *9*:9899.
30. Ikeuchi, K.*, Murasawa, K., Yamada, H.*
A Simple Method for the Preparation of Stainless and Highly Pure Trichloroacetimidates
Synlett **2019**, *30*, 1308–1312.
31. Ouchi, H., Asakawa, T., Ikeuchi, K., Inai, M., Choi, J.-H., Kawagishi, H., Kan, T.*
Synthesis of double-¹³C-labeled imidazole derivatives
Tetrahedron Lett. **2018**, *59*, 3516–3518.
32. Motoyama, A., Arai, T., Ikeuchi, K., Aki, K., Wakamori, S., Yamada, H.*

α -Selective glycosylation of 3,6-*O*-xylylene bridged glucosyl fluoride

Synthesis **2018**, *50*, 282–294.

33. Ashibe, S., Ikeuchi, K., Kume, Y., Wakamori, S., Ueno, Y., Iwashita, T., Yamada, H.*

Non-enzymatic Oxidation of a Pentagalloylglucose Analog to Ellagitannins

Angew. Chem. Int. Ed. **2017**, *56*, 15402–15406.

34. Kaneko, Y., Wakamori, S., Ikeuchi, K., Ohara, K., Tanaka, T., Yamada, H.*

Total Synthesis of Lagerstannin C: Follow-up of the Khanbabae's Synthesis

Synthesis **2017**, *49*, 5003–5006.

35. Hirokane, T., Ikeuchi, K., Yamada, H.*

Total Syntheses of Laevigatin A and E

Eur. J. Org. Chem. **2015**, 7352–7359.

36. Ikeuchi, K., Fujii, R., Sugiyama, S., Asakawa, T., Inai, M., Hamashima, Y., Choi, J.-H., Suzuki, T., Kawagishi, H.* ,
Kan, T.*

Practical synthesis of natural plant-growth regulator 2-azahypoxanthine, its derivatives, and biotin-labeled probes

Org. Biomol. Chem. **2014**, *12*, 3813–3815.

37. Hirooka, Y., Ikeuchi, K., Kawamoto, Y., Akao, Y., Furuta, T., Asakawa, T., Inai, M., Wakimoto, T., Fukuyama, T.,
Kan, T.*

Enantioselective Synthesis of SB-203207

Org. Lett. **2014**, *16*, 1646–1649.

38. Ikeuchi, K., Hayashi, M., Yamamoto, T., Inai, M., Asakawa, T., Hamashima, Y., Kan, T.*

Stereocontrolled total synthesis of sphingofungin E

Eur. J. Org. Chem. **2013**, 6789–6792.

39. Ikeuchi, K., Ido, S., Yoshimura, S., Asakawa, T., Inai, M., Hamashima, Y.*, Kan, T.*

Catalytic Desymmetrization of Cyclohexadienes by Asymmetric Bromolactonization

Org. Lett. **2012**, *14*, 6016–6019.

40. Sakai, Y., Ikeuchi, K., Yamada, Y., Wakimoto, T., Kan, T.*

Modified Julia-Kocienski Reaction Promoted by Means of *m*-NPT (Nitrophenyltetrazole) sulfone

Synlett **2010**, 827–829.

【総説】

1. 池内 和忠*

ピクロトキサン型セスキテルペンの合成研究—研究発案からコリアミルチンの全合成に至るまでの経緯—

有機合成化学協会誌 **2024**, 82, in press.

2. Ikeuchi, K.*

Development of Methodologies toward the Unified Synthesis of Ellagitannins

Chem. Pharm. Bull. **2024**, 72, 349–359.

3. Yamada, H.*, Wakamori, S., Hirokane, T., Ikeuchi, K., Matsumoto, S.

“Structural Revisions in Natural Ellagitannins”

Molecules **2018**, 23, 1901.

4. 池内 和忠, 若森 晋之介, 廣兼 司, 山田 英俊*

“エラジタンニンの全部合成を志向した合成法の発展”

有機合成化学協会誌 **2018**, 76, 904–913.

5. Yamada, H.*, Hirokane, T., Ikeuchi, K., Wakamori, S.

“Fundamental methods in ellagitannin synthesis”

Nat. Prod. Commun. **2017**, 12, 1351–1358.

【解説】

1. 構造特性を利用する新規合成手法の開発と天然物合成への応用

池内和忠、薬事日報、**2023**、URL: <https://www.yakuji.co.jp/entry101889.html>

2. 化学選択的な反応を利用した有機合成—糖含有化合物への合成展開

池内和忠、化学と工業 飛翔する若手研究者、**2022**、11月号、pp 657–658.

3. 配糖体合成に新たな手法：金・銀触媒による2-デオキシ- α -グリコシドの簡易合成

池内和忠、月刊化学 注目の論文、**2018**、3月号、pp 62–63.

4. Pd触媒反応と電気化学を組み合わせた不活性C–H結合の酸素官能基化

池内和忠、ファルマシアトピックス、**2017**、11月号、p 918.