

Publications List:

December 14, 2021

1. “ 8π Electrocyclic Reaction of Phosphonate Derivatives: Access to Seven-Membered Cross-Conjugated Cyclic Trienes”
H. Saito, R. Kato, K. Ikeuchi, T. Suzuki, K. Tanino*
Org. Lett., **2021**, *ASAP*. DOI: [10.1021/acs.orglett.1c03815](https://doi.org/10.1021/acs.orglett.1c03815)
2. “Synthetic Studies on Tubiferal A: Asymmetric Synthesis of ABC-ring Model Compound”
Y. Yukutake, T. Hiramatsu, R. Itoh, K. Ikeuchi, T. Suzuki, K. Tanino*
Synlett, **2021**, *accepted*, DOI: [10.1055/a-1697-7477](https://doi.org/10.1055/a-1697-7477).
3. “Synthesis of a Bicyclo[2.2.1]heptane Skeleton with Two Oxy-functionalized Bridgehead Carbons via the Diels–Alder Reaction”
K. Ikeuchi*, T. Sasage, G. Yamada, T. Suzuki, K. Tanino*
Org. Lett. **2021**, *23*, 9123–9127. DOI: [10.1021/acs.orglett.1c03451](https://doi.org/10.1021/acs.orglett.1c03451).
4. “Synthesis of Seven-Membered Cross-Conjugated Cyclic Trienes by 8π Electrocyclic Reaction”
R. Kato, H. Saito, S. Uda, D. Domon, K. Ikeuchi, T. Suzuki, K. Tanino*
Org. Lett. **2021**, *23*, 8878–8882. DOI: [10.1021/acs.orglett.1c03383](https://doi.org/10.1021/acs.orglett.1c03383)
5. “Synthetic Studies of *Daphniphyllum* Alkaloids: A New Method for the Construction of [7-5-5] All-carbon Tricyclic Skeleton”
J. Kishi, K. Ikeuchi, T. Suzuki, K. Tanino*
Synlett **2021**, *Accepted*, DOI: [10.1055/a-1682-9415](https://doi.org/10.1055/a-1682-9415)
6. “Synthesis of Illisimonin A Skeleton by Intramolecular Diels–Alder Reaction of Ortho-Benzoquinones and Biomimetic Skeletal Rearrangement of Allo-Cedranes”
T. Suzuki*, R. Nagahama, M. A. Fariz, Y. Yukutake, K. Ikeuchi, K. Tanino
Organics, **2021**, *2*, 306–312. DOI: [org/10.3390/org2030016](https://doi.org/10.3390/org2030016)
7. “Glycosylation by the Alkyne Activation of the 2-*O*-Substituted Propargyl Group in a β -Phenylthioglucoside with a 5S_1 Conformation”
K. Ikeuchi*, S. Matsumoto, D. Ikuta, H. Yamada
Synlett, **2021**, *32*, 817–821. DOI: [10.1055/a-1384-2931](https://doi.org/10.1055/a-1384-2931)
8. “ β -Selective glycosylation using axial-rich and 2-*O*-rhamnosylated glucosyl donors controlled by the protecting pattern of the second sugar”
M. Bando, Y. Kawasaki, O. Nagata, Y. Okada, D. Ikuta, K. Ikeuchi*, H. Yamada
Chem. Pharm. Bull. **2021**, *69*, 124–140. DOI: [org/10.1248/cpb.c20-00733](https://doi.org/10.1248/cpb.c20-00733)
9. “Synthesis of an Ellagitannin Component, the Macaranoyl Group with a tetra-*ortho*-Substituted Diaryl Ether Structure”

- H. Hashimoto, T. Ishimoto, H. Konishi, T. Hirokane, S. Wakamori, K. Ikeuchi*, H. Yamada
Org. Lett. **2020**, *22*, 6729–6733. DOI: [org/10.1021/acs.orglett.0c02066](https://doi.org/10.1021/acs.orglett.0c02066)
10. “Total Synthesis of Mallotusin”
K. Yamashita, Y. Kume, S. Ashibe, C. A. D. Puspita, K. Tanigawa, N. Michihata, S. Wakamori, K. Ikeuchi*, H. Yamada
Chem. Eur. J. **2020**, *26*, 16408–16421. DOI: [org/10.1002/chem.202002753](https://doi.org/10.1002/chem.202002753)
11. “*p*-Methylbenzyl 2,2,2-trichloroacetimidate: Simple Preparation and Application to Alcohol Protection”
K. Ikeuchi*, K. Murasawa, T. Arai, H. Yamada
Chem. Lett. **2020**, *49*, 1034–1037. DOI: [org/10.1246/cl.200303](https://doi.org/10.1246/cl.200303)
12. “Total Synthesis of Casuarinin”
S. Wakamori*, S. Matsumoto, R. Kusuki, K. Ikeuchi, H. Yamada
Org. Lett. **2020**, *22*, 3392–3396. DOI: [org/10.1021/acs.orglett.0c00876](https://doi.org/10.1021/acs.orglett.0c00876)
13. “Synthesis of Diaryl Ether Components of Ellagitannins Using Ortho-quinone with Consonant Mesomeric Effects”
H. Konishi, T. Hirokane, H. Hashimoto, K. Ikeuchi, S. Matsumoto, S. Wakamori*, H. Yamada*
Chem. Commun., **2020**, *56*, 3991–3994. DOI: [10.1039/D0CC00889C](https://doi.org/10.1039/D0CC00889C)
14. “First Total Synthesis of Neostictinin”
K. Ikeuchi*, T. Ueji, S. Matsumoto, S. Wakamori, H. Yamada*
Eur. J. Org. Chem. **2020**, 2077–2085. DOI: [10.1002/ejoc.202000053](https://doi.org/10.1002/ejoc.202000053)
15. “*p*-Methylbenzyl Group: Oxidative Removal and Orthogonal Alcohol Deprotection”
K. Ikeuchi*, K. Murasawa, K. Ohara, H. Yamada*
Org. Lett. **2019**, *21*, 6638–6642. DOI: [10.1021/acs.orglett.9b02144](https://doi.org/10.1021/acs.orglett.9b02144)
16. “A Fairy Chemical, Imidazole-4-carboxamide, is Produced on a Novel Purine Metabolic Pathway in Rice”
H. Takemura, J.-H. Choi, N. Matsuzaki, Y. Taniguchi, J. Wu, H. Hirai, R. Motohashi, T. Asakawa, K. Ikeuchi, M. Inai, T. Kan, H. Kawagishi*
Sci. Rep. **2019**, *9*:9899. DOI: [10.1038/s41598-019-46312-7](https://doi.org/10.1038/s41598-019-46312-7)
17. “A Simple Method for the Preparation of Stainless and Highly Pure Trichloroacetimidates”
K. Ikeuchi*, K. Murasawa, H. Yamada*
Synlett **2019**, *30*, 1308–1312. DOI: [10.1055/s-0037-1611551](https://doi.org/10.1055/s-0037-1611551)

18. “Conformationally supple glucose monomers enable synthesis of the smallest cyclodextrins”
D. Ikuta, Y. Hirata, S. Wakamori, H. Shimada, Y. Tomabechi, Y. Kawasaki, K. Ikeuchi, T. Hagimori, S. Matsumoto, H. Yamada*
Science, **2019**, *364*, 674–677. DOI: [10.1126/science.aaw3053](https://doi.org/10.1126/science.aaw3053)
19. “Development of Methods Aimed at Syntheses of All Ellagitannins”
K. Ikeuchi, S. Wakamori, T. Hirokane, H. Yamada*
J. Synth. Org. Chem. **2018**, *76*, 904–913. DOI: [org/10.5059/yukigoseikyokaishi.76.904](https://doi.org/10.5059/yukigoseikyokaishi.76.904)
20. “Synthesis of double-¹³C-labeled imidazole derivatives”
H. Ouchi, T. Asakawa, K. Ikeuchi, M. Inai, J.-H. Choi, H. Kawagishi, T. Kan*
Tetrahedron Lett. **2018**, *59*, 3516–3518. DOI: [org/10.1016/j.tetlet.2018.07.048](https://doi.org/10.1016/j.tetlet.2018.07.048)
21. “Structural Revisions in Natural Ellagitannins”
H. Yamada*, S. Wakamori, T. Hirokane, K. Ikeuchi, S. Matsumoto
Molecular, **2018**, *23*, 1901/1–1901/46. DOI: [org/10.3390/molecules23081901](https://doi.org/10.3390/molecules23081901)
22. “ α -Selective glycosylation of 3,6-*O*-xylylene bridged glucosyl fluoride”
A. Motoyama, T. Arai, K. Ikeuchi, K. Aki, S. Wakamori, H. Yamada*
Synthesis, **2018**, *50*, 282–294. DOI: [10.1055/s-0036-1590927](https://doi.org/10.1055/s-0036-1590927)
23. “Non-enzymatic Oxidation of a Pentagalloylglucose Analog to Ellagitannins”
S. Ashibe, K. Ikeuchi, Y. Kume, S. Wakamori, Y. Ueno, T. Iwashita, H. Yamada*
Angew. Chem. Int. Ed. **2017**, *56*, 15402–15406. DOI: [org/10.1002/anie.201708703](https://doi.org/10.1002/anie.201708703)
24. “Total Synthesis of Lagerstannin C: Follow-up of the Khanbabae’s Synthesis”
Y. Kaneko, S. Wakamori, K. Ikeuchi, K. Ohara, T. Tanaka, H. Yamada*
Synthesis, **2017**, *49*, 5003–5006. DOI: [10.1055/s-0036-1588477](https://doi.org/10.1055/s-0036-1588477)
25. “Fundamental methods in ellagitannin synthesis”
H. Yamada*, T. Hirokane, K. Ikeuchi, S. Wakamori
Nat. Prod. Commun. **2017**, *12*, 1351–1358. DOI: [10.1177/1934578X1701200846](https://doi.org/10.1177/1934578X1701200846)
26. “Total Syntheses of Laevigatin A and E”
T. Hirokane, K. Ikeuchi, H. Yamada*
Eur. J. Org. Chem. **2015**, 7352–7359. DOI: [org/10.1002/ejoc.201501037](https://doi.org/10.1002/ejoc.201501037)
27. “Practical synthesis of natural plant-growth regulator 2-azahypoxanthine, its derivatives, and biotin-labeled probes”
K. Ikeuchi, R. Fujii, S. Sugiyama, T. Asakawa, M. Inai, Y. Hamashima, J.-H. Choi, T.

Suzuki, H. Kawagishi*, T. Kan*

Org. Biomol. Chem. **2014**, *12*, 3813–3815. DOI: [org/10.1039/C4OB00705K](https://doi.org/10.1039/C4OB00705K)

28. “Enantioselective Synthesis of SB-203207”

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

Org. Lett. **2014**, *16*, 1646–1649. DOI: [org/10.1021/ol5002973](https://doi.org/10.1021/ol5002973)

29. “Stereocontrolled total synthesis of sphingofungin E”

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

Eur. J. Org. Chem. **2013**, 6789–6792. DOI: [org/10.1002/ejoc.201301065](https://doi.org/10.1002/ejoc.201301065)

30. “Catalytic Desymmetrization of Cyclohexadienes by Asymmetric Bromolactonization”

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

Org. Lett. **2012**, *14*, 6016–6019. DOI: [org/10.1021/ol302908a](https://doi.org/10.1021/ol302908a)

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

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

Synlett, **2010**, 827–829. DOI: [10.1055/s-0029-1219386](https://doi.org/10.1055/s-0029-1219386)