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Specially Appointed Assistant Professor

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Personal Information

Date of Birth November 30th, 1989

Place of Birth Saitama, Japan

Gender Male

Nationality Japan

Education

2012.3 **B. Pharmaceutical Sciences**, Faculty of Pharmaceutical Sciences, Meiji Pharmaceutical University, Japan

(Professor Hiroshi Kogen)

2014.3 **M. Pharmaceutical Sciences**, Graduate School of Pharmaceutical Sciences, Meiji Pharmaceutical University, Japan

(Professor Hiroshi Kogen)

2017.3 **PhD. Pharmaceutical Sciences**, Graduate School of Pharmaceutical Sciences, Meiji Pharmaceutical University, Japan

(Professor Hiroshi Kogen)

Academic Career

2017.3–2018.4 **Postdoctoral Researcher**, Meiji Pharmaceutical University, Japan

(Professor Hiroshi Kogen)

2018.4–2019.3 **Postdoctoral Researcher**, School of Science, Department of Chemistry, Tokyo Institute of Technology, Japan

(Professor Nobuharu Iwasawa & Associate Professor Jun Takaya)

2019.4–2022.12 **Assistant Professor**, Department of Pharmacy, Showa Pharmaceutical University

(Professor Osamu Tamura)

2023.1–2024.3 **Postdoctoral Researcher**, Research Foundation Itsuu Laboratory

2024.4–present **Specially Appointed Assistant Professor**, WPI-ICReDD, Hokkaido University (JST-ERATO Maeda Artificial Intelligence for Chemical Reaction Design and Discovery Project)
(Professor Satoshi Maeda, Professor Tsuyoshi Mita)

Fellowships & Grants

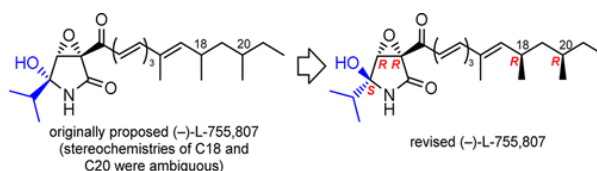
2021-2022 Grant-in-Aid for Young Scientists from Showa Pharmaceutical University
2021-2022 Sasakawa Scientific Research Grant from the Japan Science Society
2021-2023 JSPS Grant-in-Aid for Young Scientist (21K15233)

Publication

1. “Total Synthesis of (–)-L-755,807: Establishment of Relative and Absolute Configurations”

Tanaka, K., III; Kobayashi, K.; Kogen, H.

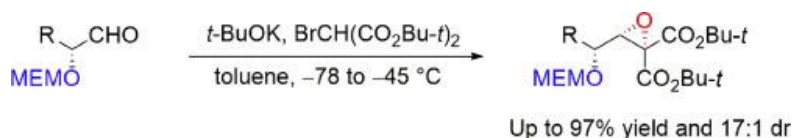
Org. Lett. **2016**, *18*, 1920-1923.



2. “Efficient synthesis of *syn*- α -alkoxy epoxide via a diastereoselective Darzens reaction”

Tanaka, K., III; Kobayashi, K.; Takatori, K.; Kogen, H.

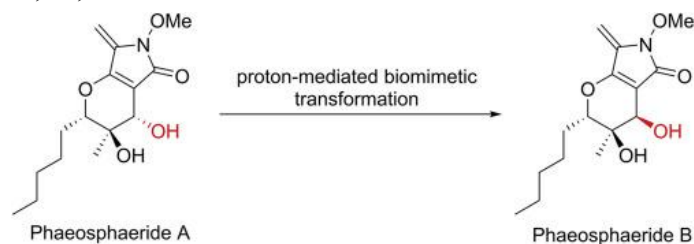
Tetrahedron **2017**, *73*, 2062-2067.



3. “Total synthesis of (–)-phaeosphaeride B by a biomimetic conversion from (–)-phaeosphaeride A.”

Kobayashi, K.; Kunimura, R.; Tanaka, K., III; Tamura, O.; Kogen, H.

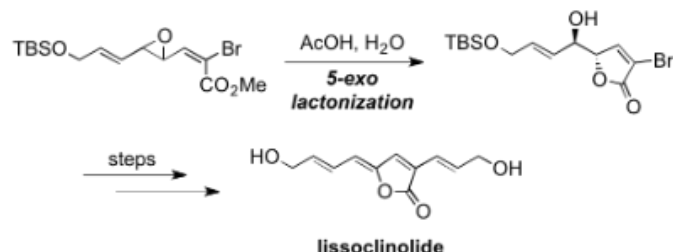
Tetrahedron **2017**, *73*, 2382-2388.



4. “Total synthesis of lissoclinolide by acid-induced lactonization of an (*E*)- α -bromo- γ,δ -epoxy acrylate derivative”

Kobayashi, K.; Kuwahara, K.; [Tanaka, K., III](#); Kunimura, R.; Kogen, H.

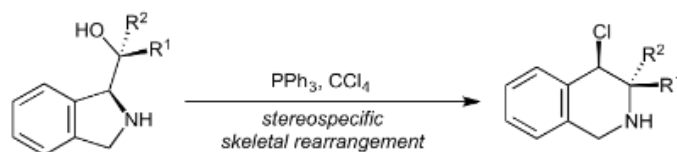
Heterocycles **2018**, 97, 1019-1027.



5. “Stereospecific Ring-Expanding Skeletal Rearrangement of Isoindoline to Tetrahydroisoquinoline via a Sequential Aziridine Ring Formation/Opening”

Kobayashi, K.; Kuwahara, K.; [Tanaka, K., III](#); Kunimura, R.; Kogen, H.

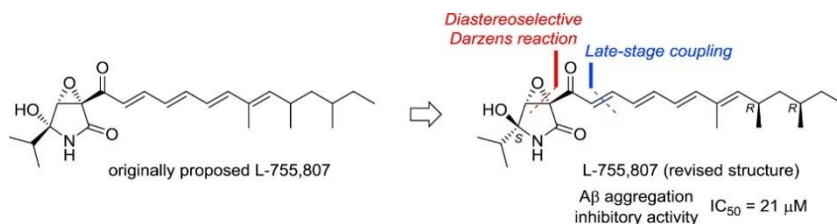
Heterocycles **2019**, 99, 1239-1250.



6. “Total synthesis, stereochemical assignment, and biological evaluation of L-755,807”

[Tanaka, K., III](#); Honma, Y.; Yamaguchi, C.; Aoki, L.; Saito, M.; Suzuki, M.; Arahata, K.; Kinoshita, K.; Koyama, K.; Kobayashi, K.; Kogen, H.

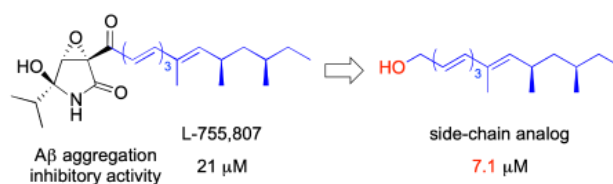
Tetrahedron **2019**, 75, 1085-1097.



7. “Studies toward Identifying the Pharmacophore of L-755,807 for Amyloid- β Aggregation Inhibitory Activity.”

Kobayashi, K.; [Tanaka, K., III](#); Honma, Y.; Suzuki, M.; Kogen, H.

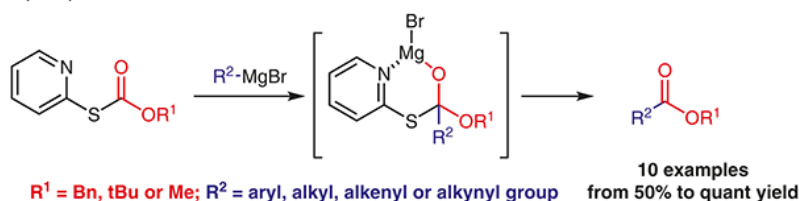
Heterocycles **2019**, 98, 1769-1776.



8. “Chelation-Based Homologation by Reaction of Organometallic Reagents with *O*-Alkyl *S*-Pyridin-2-yl Thiocarbonates: Synthesis of Esters from Grignard Reagents”

Usami, S.; Suzki, S.; Mano, K.; [Tanaka, K., III](#); Hashimoto, Y.; Morita, N.; Tamura, O.

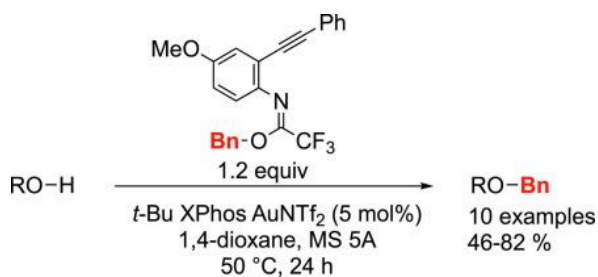
Synlett **2019**, 30, 1561-1564.



9. “Intramolecular Activation of Imidate with Cationic Gold(I) Catalyst: a New Benzylolation Reaction of Alcohols”

Ban, S.; Endo, T.; Matsui, R.; Morita, N.; Hashimoto, Y.; [Tanaka, K., III](#); Tamura, O.

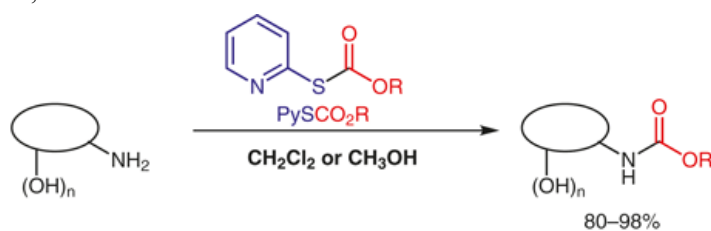
Tetrahedron lett. **2020**, 30, 152233-152235.



10. “*O*-Alkyl *S*-(Pyridin-2-yl)carbonothiolates: Operationally Simple and Highly Nitrogen-Selective Reagents for Alkoxy Carbonylation of Amino Groups”

Suzuki, T.; [Tanaka, K., III](#); Hashimoto, Y.; Morita, N.; Tamura, O.

Synlett **2020**, 31, 899-902.

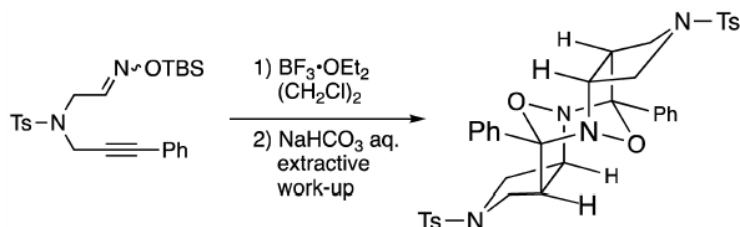


PySCO₂R: PyS-Moc, PyS-Eoc, PyS-Fmoc, PyS-Troc, PyS-Teoc, PyS-Boc, PyS-Cbz

11. “Synthesis and Formation Mechanism of a Compound with an Unprecedented Skeleton: Dodecahydro-4,10:5,9-diepoxydipyrrolo[3,4-b:3',4'-f][1,5]diazocine”

Shinoda, M.; Morita, N.; Tanaka, K. III; Hashimoto, Y.; Ban, S.; Tamura, O.

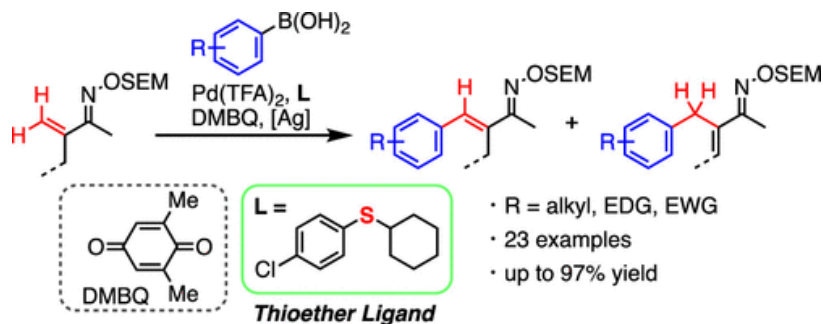
Chem. Pharm. Bull. **2020**, 21, 4245-4249.



12. “Thioether Ligand-Enabled Cationic Palladium(II)-Catalyzed Electrophilic C-H Arylation of α,β -Unsaturated Oxime Ethers”

Yamada, T.; Hashimoto, Y.; Tanaka, K. III; Morita, N.; Tamura, O.

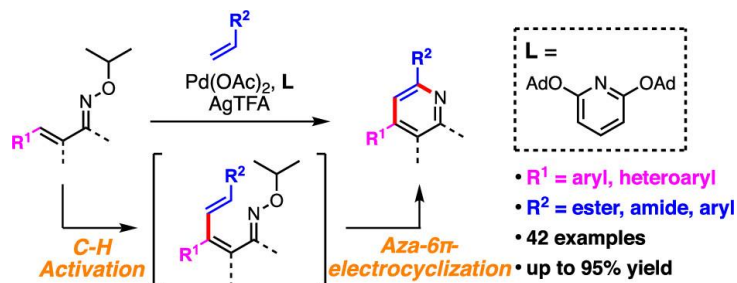
J. Org. Chem. **2020**, 85, 12315-12328.



13. “Palladium(II)-Catalyzed Substituted Pyridine Synthesis from α,β -Unsaturated Oxime Ethers via a C-H Alkenylation/Aza-6 π -Electrocyclization Approach.”

Yamada, T.; Hashimoto, Y.; Tanaka, K. III; Morita, N.; Tamura, O.

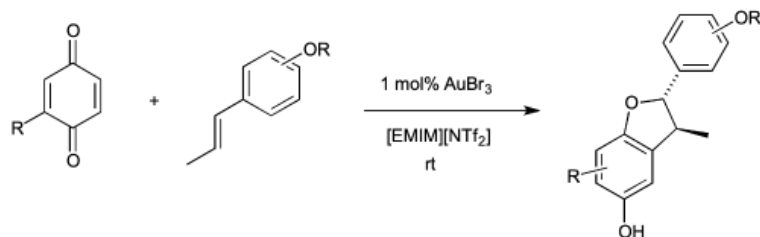
Org. Lett. **2021**, 23, 1659-1663.



14. “Gold-Catalyzed Formal [3+2]Cycloaddition of p-Quinones and 1-Phenylpropenes in Ionic Liquid: Environmentally Friendly and Stereoselective Synthesis of Benzofuran Neolignans.”

Morita, N.; Ikeda, K.; Chiaki, H.; Araki, R.; Tanaka, K. III; Hashimoto Y.; Tamura, O.

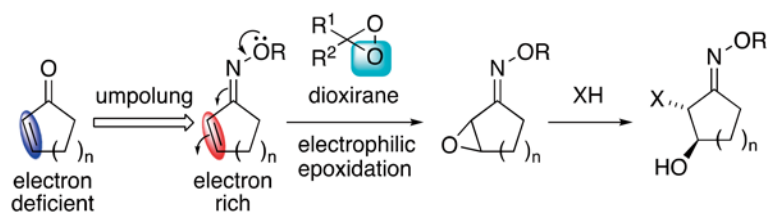
Heterocycles **2021**, 103, 714-722.



15. “Electrophilic Epoxidation of α,β -Unsaturated Oximes with Dioxiranes and Ring Opening of the Epoxides”

Furugoori, M.; Yoshida, K.; Hashimoto, Y.; Morita, N.; [Tanaka, K. III](#); Tamura, O.

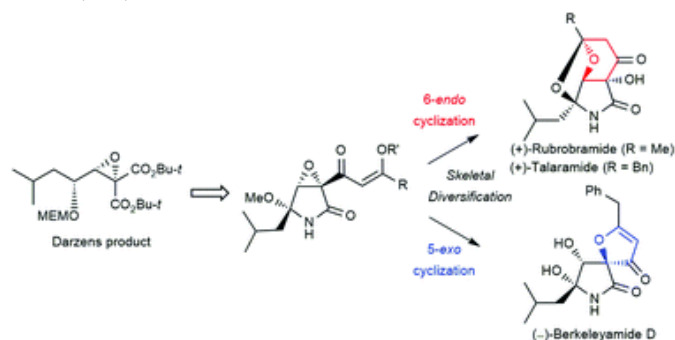
Chem. Pharm. Bull. **2021**, 69, 1010-1016.



16. “Enantioselective total synthesis of (+)-rubrobramide, (+)-talaramide A, and (-)-berkeleyamide D by a skeletal diversification strategy”

[Tanaka, K. III](#); Kobayashi, K.; Kogen, H.

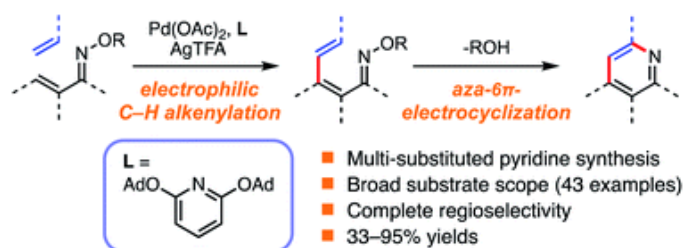
Chem. Commun., **2021**, 57, 9780-9783.



17. “Cationic palladium(II)-catalyzed synthesis of substituted pyridines from α,β -unsaturated oxime ethers”

Yamada, T.; Hashimoto, Y.; [Tanaka, K. III](#); Morita, N.; Tamura, O.

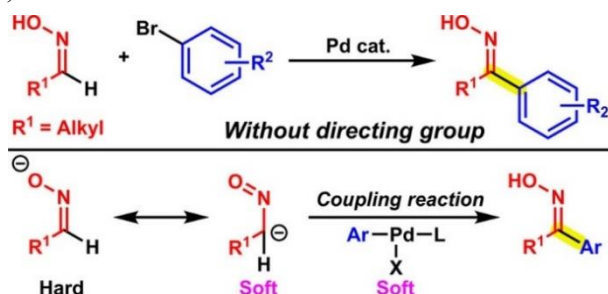
RSC Adv. **2022**, 12, 21548–21557.



18. “Directing-Group-Free Palladium-Catalyzed C–H Arylation of Aldoxime Using Oxime’s Umpolung Properties.”

Tanaka, K. III; Hashimoto, Y.; Morita, N.; Tamura, O.

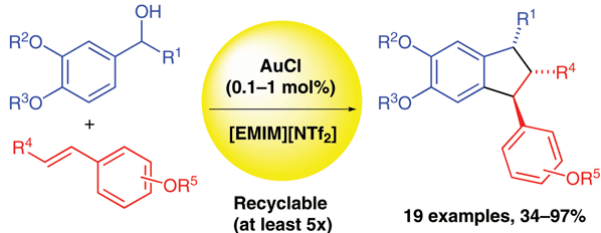
Org. Lett. **2022**, *24*, 8954–8958.



19. “Gold-Catalyzed Formal (3+2) Cycloaddition in Ionic Liquid: Environmentally Friendly and Stereoselective Synthesis of Poly-substituted Indanes from Benzyl Alcohols with 1-Phenylpropenes.”

Morita, N.; Chiaki, H.; Ikeda, K.; Tanaka, K. III; Hashimoto, Y.; Tamura, O.

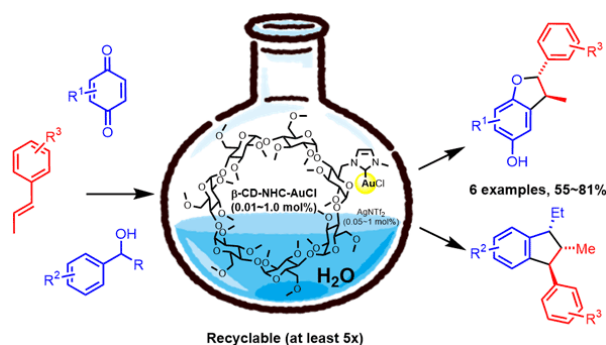
Synlett **2023**, *34*, 1068–1074.



20. “Sustainable Chemical Synthesis of 2,3-Dihydrobenzofurans/1,2,3-Trisubstituted Indanes in Water Using a Permethylated β -Cyclodextrin-tagged NHC-Gold Catalyst.”

Morita, N.; Chiaki, H.; Tanaka, K. III; Hashimoto, Y.; Tamura, O.; Krause, N.

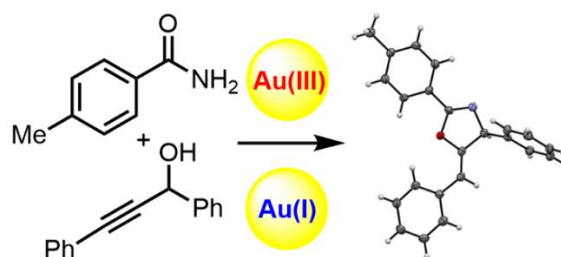
Synlett **2023**, *34*, 1425–1432.



21. “(Z)-5-Benzylidene-4-phenyl-2-(p-tolyl)-4,5-dihydrooxazole.”

Morita, N.; Chiaki, H.; Aonuma, S.; [Tanaka, K. III](#); Hashimoto, Y.; Tamura, O.

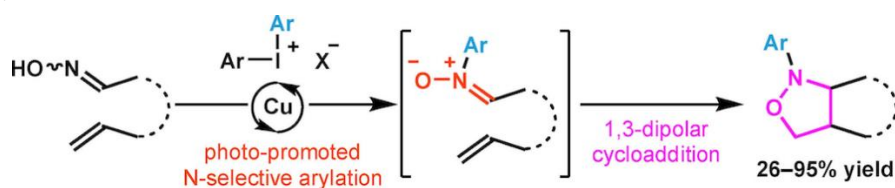
Molbank **2023**, 2023, M1600.



22. “Synthesis of *N*-Aryl Isoxazolidines by Photo-Promoted *N*-Selective Arylation of Oximes and Cyclization Using Hypervalent Iodine Reagents and Copper Catalyst.”

[Tanaka, K. III](#); Yoshida, M.; Yamamoto, A.; Hashimoto, Y.; Morita, N.; Tamura, O.

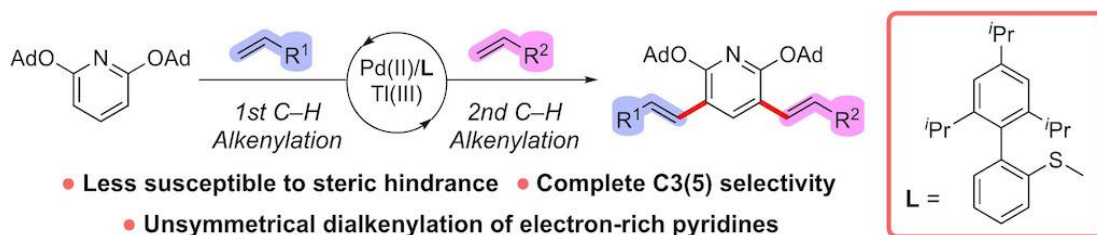
Adv. Synth. Catal. **2023**, 365, 1419–1424.



23. “Electrophilic C3–H Alkenylation of 2,6-Dialkoxyppyridine Derivatives via Pd(II)/Tl(III) Reaction System.

Yamada, T.; [Tanaka, K. III](#); Hashimoto, Y.; Morita, N.; Tamura, O.”

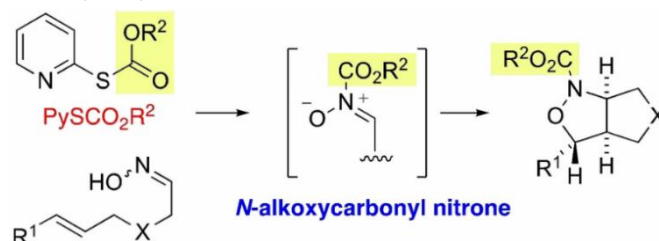
Adv. Synth. Catal. **2023**, 365, 3138–3148.



24. “Direct Generation of *N*-Alkoxy carbonyl Nitrones from Oximes: Intramolecular Cycloaddition of Oximes Having Alkene Moieties.”

Sagara, H.; Suzuki, Y.; Morita, N.; Ban, S.; [Tanaka, K. III](#); Yamamoto, A.; Hashimoto, Y.; Tamura, O.

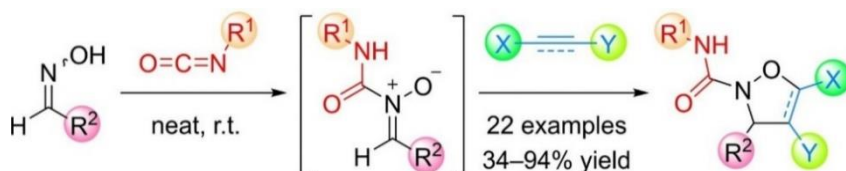
Adv. Synth. Catal. **2023**, *365*, 3927–3934.



25. “Intermolecular 1,3-Dipolar Cycloaddition Reaction of *N*-Carbamoyl Nitrones Generated by *N*-Selective Carbamoylation of Oximes with Isocyanates.”

Yamamoto, A.; [Tanaka, K. III](#); Hashimoto, Y.; Morita, N.; Tamura, O.

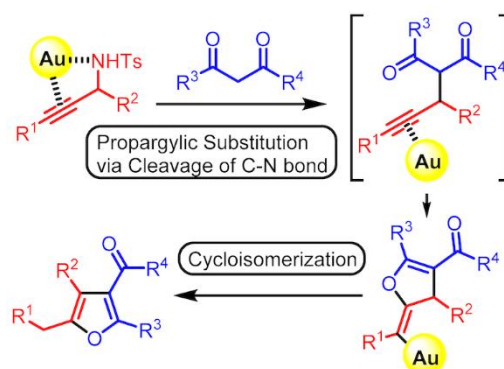
Chem. Eur. J., **2024**, *30*, e202303790.



26. “Gold(III)-Catalyzed Propargylic Substitution Reaction Followed by Cycloisomerization for Synthesis of Poly-Substituted Furans from *N*-Tosylpropargyl Amines with 1,3-Dicarbonyl Compounds.

Morita, N.; Uchida, S.; Chiaki, H.; Ishii, N.; Tanikawa, K.; [Tanaka, K. III](#); Hashimoto, Y.; Tamura, O.

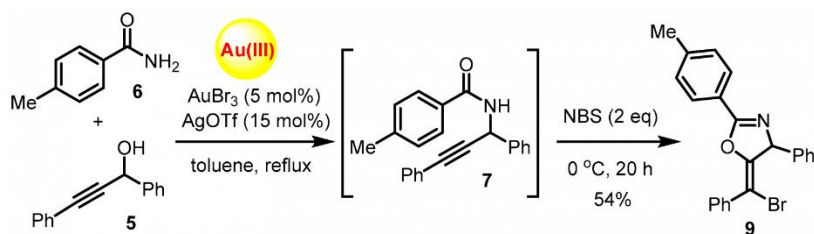
Molecules **2024**, *29*, 378.



27. (*E*)-5-[Bromo(phenyl)methylene]-4-phenyl-2-(*p*-tolyl)-4,5-dihydrooxazole.

Morita, N.; Kurami, S.; Ishii, N.; [Tanaka, K. III](#); Hashimoto, Y.; Tamura, O.

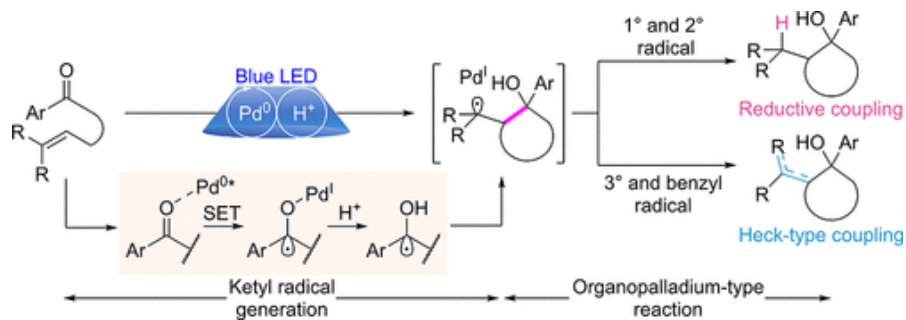
Molbank **2024**, 2024, M1769.



28. “Ketyl Radical Generation by Photoexcited Palladium and Development of Organopalladium-Type Reactions”

[Tanaka, K. III](#)

ACS Catal. **2024**, 14, 5269–5274

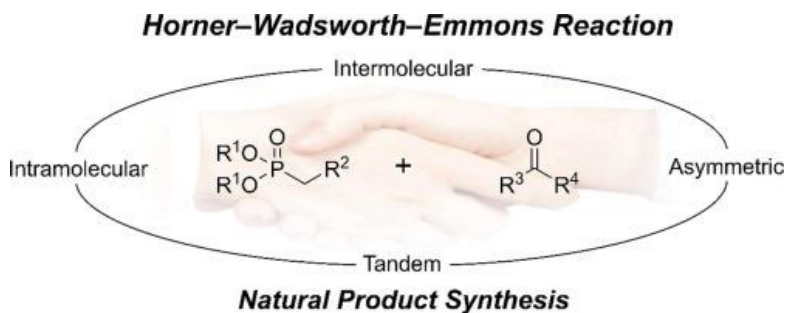


Review:

29. “Recent topics of the natural product synthesis by Horner–Wadsworth–Emmons reaction”

Kobayashi, K.; [Tanaka, K. III](#); Kogen, H.

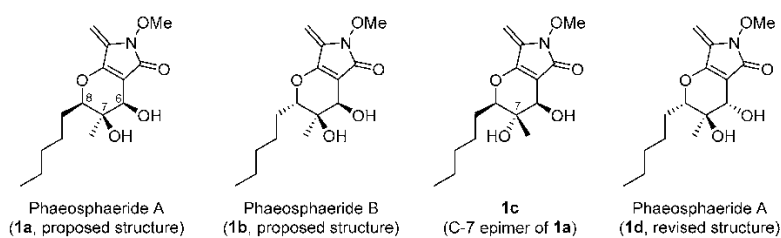
Tetrahedron Let. **2018**, *59*, 568–582.



30. “Total synthesis and biological evaluation of phaeosphaeride”

Kobayashi, K.; [Tanaka, K. III](#); Kogen, H.

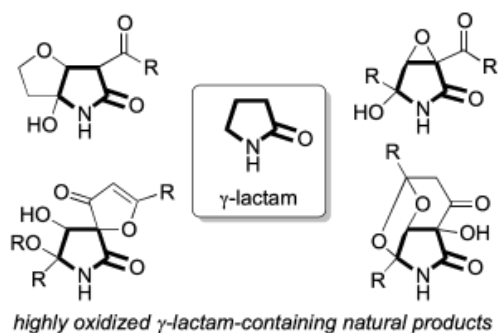
Catalysts **2018**, *8*, 206–215.



31. “Highly Oxidized γ -Lactam-Containing Natural Products: Total Synthesis and Biological Evaluation”

[Tanaka, K. III](#); Kobayashi, K.; Kogen, H.

Heterocycles **2021**, *7*, 1235–1285.



32. “Recent Advances in the Direct N–C(sp²) Nitron Synthesis from Oxime”

[Tanaka, K. III](#)

Eur. J. Org. Chem. **2024**, e202400202.

