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学歴

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職歴

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2014 年 4 月～2014 年 5 月	東京大学大学院薬学研究院 特別研究員
2014 年 6 月～2015 年 3 月	米国スタンフォード大学化学科 Matthew W. Kanan 研究室
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2015 年 3 月～2018 年 9 月	北海道大学大学院薬学研究院　助教
2018 年 10 月～2021 年 8 月	北海道大学大学院薬学研究院　講師
2021 年 9 月～2024 年 5 月	北海道大学大学院薬学研究院　准教授
2024 年 6 月～現在	京都大学白眉センター　特定准教授
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所属学会

日本薬学会、日本化学会、有機合成化学協会、近畿化学協会

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2017 年 日本化学会第 97 春季年会　優秀講演賞（学術）

2019 年 日本化学会第 99 春季年会　若い世代の特別講演賞

2020 年 北海道大学教育研究総長表彰

2022 年 日本化学会第 71 回進歩賞

2023 年 Chemist Award BCA 2023

2024 年 Thieme Chemistry Journals Award

教育歴

2015 年度：有機化学実習 II、有機化学実習 III、有機化学問題演習

2016 年度：有機化学実習 II、有機化学実習 III、有機化学問題演習

2017 年度：有機化学 VI、有機化学実習 II、有機化学実習 III、有機化学問題演習

2018 年度：無機化学、有機化学実習 II、有機化学実習 III、有機化学問題演習

2019 年度：無機化学、有機化学実習 I、有機化学実習 II、有機化学問題演習

2020 年度：無機化学、有機化学実習 I、有機化学実習 II、一般教育演習

2021 年度：無機化学、有機化学実習 I、有機化学実習 II、一般教育演習

2022 年度：有機化学実習 III、有機化学実習 IV、化学 II (全学教育)

2023 年度：有機化学 II、化学 II (全学教育)

Original Papers

(1) Long-Tao Huang, Yuta Kitakawa, Kodai Yamada, Futa Kamiyama, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Enantioselective Synthesis of 1,2-Benzothiazine 1-Imines via Ru^{II}/Chiral Carboxylic Acid-Catalyzed C–H Alkylation/Cyclization. *Angew. Chem., Int. Ed.* **2023**, *62*, e202305480.

(2) Satoko Hosoi, Yuki Hirata, Takumaru Kurihara, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Synthesis of Benzo[c]azepine-1,3(2*H*)-diones via C–H Alkylation/Cyclization with α,β-Unsaturated Acyl Fluorides. *Asian J. Org. Chem.* **2023**, *12*, e202300218.

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(4) Yusuke Seino, Yuto Yamaguchi, Akihiko Suzuki, Masaaki Yamashita, Yuji Kamei, Futa Kamiyama, **Tatsuhiko Yoshino**, Masahiro Kojima*, Shigeki Matsunaga*, Synthesis of Polysubstituted Enamides by Hydrogen Atom Transfer Alkene Isomerization Using Dual Cobalt/Photoredox Catalysis. *Chem. Eur. J.* **2023**, *29*, e202300804.

(5) Kazuki Ikeda, Riku Kojima, Kentaro Kawai, Takayasu Murakami, Takashi Kikuchi, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Formation of Isolable Dearomatized [4 + 2] Cycloadducts from Benzenes, Naphthalenes, and *N*-Heterocycles Using 1,2-Dihydro-1,2,4,5-tetrazine-3,6-diones as Arenophiles under Visible Light Irradiation. *J. Am. Chem. Soc.* **2023**, *145*, 9326–9333.

(6) Eiki Tomita, Masahiro Kojima, Yuki Nagashima, Ken Tanaka, Haruki Sugiyama, Yasutomo Segawa, Atsushi Furukawa, Katsumi Maenaka, Satoshi Maeda, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, An Electron-Deficient Cp^E Iridium(III) Catalyst: Synthesis, Characterization, and Application to Ether-Directed C−H Amidation. *Angew. Chem., Int. Ed.* **2023**, *62*, e202301259.

(7) Yoshimi Kato, **Tatsuhiko Yoshino**, Shigeki Matsunaga*, Iron/Photosensitizer-Catalyzed Directed C–H Activation Triggered by the Formation of an Iron Metallacycle. *ACS Catal.* **2023**, *13*, 4552–4559.

(8) Shunta Sato, Wataru Sasaki, Tomoyuki Sekino, **Tatsuhiko Yoshino**, Masahiro Kojima*, Shigeki Matsunaga*, Noble-Metal-Free C–H Allylation of Tetrahydroisoquinolines Using a Cobalt-Organophotoredox Dual Catalyst System. *Chem. Pharm. Bull.* **2023**, *71*, 79–82.

(9) Akihiko Suzuki, Yuji Kamei, Masaaki Yamashita, Yusuke Seino, Yuto Yamaguchi, **Tatsuhiko Yoshino**, Masahiro Kojima*, Shigeki Matsunaga*, Photocatalytic Deuterium Atom Transfer Deuteration of Electron-Deficient Alkenes with High Functional Group Tolerance. *Angew. Chem., Int. Ed.* **2022**, *61,* e202214433.

(10) Takumi Wakikawa, Daichi Sekine, Yuta Murata, Youka Bunno, Masahiro Kojima, Yuki Nagashima, Ken Tanaka*, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Native Amide-Directed C(sp^3)–H Amidation Enabled by Electron-Deficient Rh(III) Catalyst and Electron-Deficient 2-Pyridone Ligand. *Angew. Chem., Int. Ed.* **2022**, *61,* e202213659.

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(20) Qi Mou, Ruyuan Zhao, Ruihan Niu, Seiya Fukagawa, Taiki Shigeno, **Tatsuhiko Yoshino**, Shigeki Matsunaga*, Bo Sun*, Cp*Ir(III)/Chiral Carboxylic Acid-Catalyzed Enantioselective C–H Alkylation of Ferrocene Carboxamides with Diazomalonates. *Org. Chem. Front.* **2021**, *8*, 6923–6930.

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(25) Keitaro Matsuoka, Narumi Komami, Masahiro Kojima, Tsuyoshi Mita, Kimichi Suzuki, Satoshi Maeda, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Chemoselective Cleavage of Si–C(sp^3) Bonds in Unactivated Tetraalkylsilanes Using Iodine Tris(trifluoroacetate). *J. Am. Chem. Soc.* **2021**, *143*, 103–108.

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(27) Long-Tao Huang, Seiya Fukagawa, Masahiro, Tatsuhiko Yoshino*, Shigeki Matsunaga*, Rhodium(III)/Chiral Carboxylic Acid Catalyzed Enantioselective C(sp^3)–H Alkylation of 8-Ethylquinolines with α,β-Unsaturated Carbonyl Compounds. *Org. Lett.* **2020**,

22, 8256–8260.

(28) Taku Miyazawa, Takuro Suzuki, Yuhei Kumagai, Koji Takizawa, Takashi Kikuchi, Shunsuke Kato, Akira Onoda, Takashi Hayashi, Yuji Kamei, Futa Kamiyama, Masahiro Anada, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Chiral Paddle-Wheel Diruthenium Complexes for Asymmetric Catalysis. *Nat*. *Catal.* **2020**, *3*, 851–858.

(29) Tomoyuki Sekino, Shunta, Sato, Kazuki Kuwabara, Koji Takizawa, **Tatsuhiko Yoshino**, Masahiro Kojima,* Shigeki Matsunaga*, Allyl 4-Chlorophenyl Sulfone as a Versatile 1,1-Synthon for Sequential α-Alkylation/Cobalt-Catalyzed Allylic Substitution. *Synthesis* **2020**, *52*, 1934–1946.

(30) Eiki Tomita, Kodai Yamada, Yu Shibata, Ken Tanaka, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Iridium(III) Catalysts with an Amide-Pendant Cyclopentadienyl Ligand: Double Aromatic Homologation Reactions of Benzamides by Fourfold C−H Activation. *Angew. Chem., Int. Ed.* **2020**, *59*, 10474–10478.

(31) Takumaru Kurihara, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Cp*Co^{III}/Chiral Carboxylic Acid-Catalyzed Enantioselective 1,4-Addition Reactions of Indoles to Maleimides. *Asian J. Org. Chem.* **2020**, *9*, 368–371.

(32) Seiya Fukagawa, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Catalytic Enantioselective Methylene C(sp^3)–H Amidation of 8-Alkylquinolines Using Cp*Rh^{III}/Chiral Carboxylic Acid System. *Angew. Chem., Int. Ed.* **2019**, *58*, 18154–18158.

(33) Ryo Tanaka, Iku Tanimoto, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Imidate as the Intact Directing Group for the Cobalt-Catalyzed C–H Allylation. *J. Org. Chem.* **2019**, *84*, 13203–13210.

(34) Daichi Sekine, Kazuki Ikeda, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Chiral 2-Aryl Ferrocene Carboxylic Acids for the Catalytic Asymmetric C(sp^3)–H Activation of Thioamides. *Organometallics* **2019**, *48*, 1046–1049.

(35) Ryo Tanaka, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Cobalt-catalyzed Synthesis of Homoallylic Amines from Imines and Terminal Alkenes. *Chem. Lett.* **2019**, *48*, 1046–1049.

(36) Yuhei Kumagai, Nanami Murakami, Futa Kamiyama, Ryo Tanaka, **Tatsuhiko Yoshino***, Masahiro Kojima*, Shigeki Matsunaga*, C–H γ,γ,γ-Trifluoroalkylation of Quinolines via Visible-Light-Induced Sequential Radical Additions. *Org. Lett.* **2019**, *21*, 3600–3605.

(37) Keitaro Matsuoka, Narumi Komami, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Synthesis of Heteroaryl Iodanes(III) via *ipso*-Substitution Reactions Using Iodine Triacetate Assisted by HFIP. *Asian J. Org. Chem.* **2019**, *8*, 1107–1110.

(38) Koji Takizawa. Tomoyuki Sekino, Shunta Sato, **Tatsuhiko Yoshino**, Masahiro Kojima*, Shigeki Matsunaga*, Cobalt-catalyzed Allylic Alkylation Enabled by Organophotoredox Catalysis. *Angew. Chem., Int. Ed.* **2019**, *58*, 9199–9203.

(39) Narumi Komami, Keitaro Matsuoka, Ayako Nakano, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Synthesis of Functionalized Monoaryl-λ^3-iodanes through Chemo- and Site-selective *ipso*-Substitution Reactions. *Chem. Eur. J.* **2019**, *25*, 1217–1220.

(40) Seiya Fukagawa, Yoshimi Kato, Ryo Tanaka, Masahiro Kojima, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Enantioselective C(sp^3)–H Amidation of Thioamides Catalyzed by a Cobalt^{III}/Chiral Carboxylic Acid Hybrid System. *Angew. Chem., Int. Ed.* **2019**, *58*, 1153–1157.

(41) Iku Tanimoto, Kentaro Kawai, Akane Sato, **Tatsuhiko Yoshino***, and Shigeki Matsunaga*, One-Step Synthesis of 4*H*-3,1-Benzoxazin-4-ones from Weinreb Amides and 1,4,2-Dioxazol-5-ones via Cobalt-Catalyzed C–H Bond Activation. *HeteroCycles* **2019**, *99*, 118–125.

(42) Luqing Lin*, Seiya Fukagawa, Daichi Sekine, Eiki Tomita, **Tatsuhiko Yoshino***, and Shigeki Matsunaga*, Chiral Carboxylic Acid-Enabled Achiral Rhodium(III)-Catalyzed Enantioselective C–H Functionalization. *Angew. Chem., Int. Ed.* **2018**, *57*, 12048–

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(45) Kentaro Kawai, Youka Bunno, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Weinreb Amide Directed Versatile C–H Bond Functionalization under (η^5-Pentamethylcyclopentadienyl)cobalt(III) Catalysis. *Chem. Eur. J.* **2018**, *24*, 10231–10237.

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(51) Hideya Ikemoto, Ryo Tanaka, Ken Sakata, Motomu Kanai, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Stereoselective Synthesis of Tetrasubstituted Alkenes via a Cp*Co^{III}-Catalyzed C–H Alkenylation/Directing Group Migration Sequence. *Angew. Chem., Int. Ed.* **2017**, *56*, 7156–7160.

(52) Misaki Yoshida, Kentaro Kawai, Ryo Tanaka, **Tatsuhiko Yoshino***, Shigeki Matsunaga*, Cp*Co^{III}-Catalyzed Directed C–H Trifluoromethylthiolation of 2-Phenylpyridines and 6-Arylpurines. *Chem. Commun.* **2017**, 53, 5974–5977.

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