

Publication List

Researcher ID: [D-4198-2009](#)

OCRID: [0000-0002-3896-5882](#)

Scopus Author ID: [7103415328](#)

Sum of the Times Cited: **9776** h-index: **49** (by Scopus)

Representative publications

1. "Ring-Opening Fluorination of Bicyclic Azaarenes"
Komatsuda, M.; Suto, A.; Kondo Jr. H.; Takada, H.; Kato, K.; Saito, M.; Yamaguchi, J.
Chem. Sci. **2022**, *13*, 665–670.
2. "Convergent Azaspirocyclization of Bromoarenes with NTosylhydrazones by a Palladium Catalyst"
Yanagimoto, A.; Uwabe, Y.; Wu, Q.; Muto, K.*; [Yamaguchi, J.*](#)
ACS Catal. **2021**, *11*, 10429–10435.
3. "Ni-Catalyzed Aryl Sulfide Synthesis through an Aryl Exchange Reaction"
Isshiki, R.; Kurosawa, M. B.; Muto, K.; [Yamaguchi, J.*](#)
J. Am. Chem. Soc. **2021**, *143*, 10333–10340.
4. "Transition-Metal-Catalyzed Denitrative Coupling of Nitroarenes"
Muto, K.; Okita, T.; [Yamaguchi, J.*](#)
ACS Catal. **2020**, *10*, 9856–9871. (Review)
5. "Catalytic Three-component C–C Bond Forming Dearomatization of Bromoarenes with Malonates and Diazo Compounds"
Kato, H.; Musha, I.; Komatsuda, M.; Muto, K.*; Yamaguchi, J.*
Chem. Sci. **2020**, *11*, 8779–8784.
6. "Ester Dance Reaction on the Aromatic Ring"
Matsushita, K.; Takise, R.; Muto, K.; [Yamaguchi, J.*](#)
Science Advances **2020**, *6*, eaba7614.
7. " σ -Bond Hydroboration of Cyclopropanes"
Kondo H.; Miyamura, S.; Matsushita, K.; Kato, H.; Kobayashi, C.; Arifin; Itami, K.; Yokogawa, D.*; [Yamaguchi, J.*](#)
J. Am. Chem. Soc. **2020**, *142*, 11306–11313.
8. "Catalytic Deoxygenative Coupling of Aromatic Esters with Organophosphorus Compounds"
Kurosawa, M. B.; Isshiki, R.; Muto, K.; [Yamaguchi, J.*](#)
J. Am. Chem. Soc. **2020**, *142*, 7386–7392.
9. "Ester Transfer Reaction of Aromatic Esters with Haloarenes and Arenols by a Nickel Catalyst"
Isshiki, R.; Inayama, N.; Muto, K.; [Yamaguchi, J.*](#)
ACS Catal. **2020**, *10*, 3490–3494.
10. "Pd-Catalyzed Alkenyl Thioether Synthesis from Thioesters and N-Tosylhydrazones"
Ishitobi, K.; Muto, K.; [Yamaguchi, J.*](#)
ACS Catal. **2019**, *9*, 11685–11690.
11. "Pd-Catalyzed Dearomative Three-Component Reaction of Bromoarenes with Diazo Compounds and Allylborates"
Komatsuda, M.; Kato, H.; Muto, K.*; [Yamaguchi, J.*](#)
ACS Catal. **2019**, *9*, 8991–8995.
12. "Casein kinase 1 family regulates PRR5 and TOC1 in the Arabidopsis circadian clock"
Uehara, T. N.; Mizutani, Y.; Kuwata, K.; Hirota, T.; Sato, A.; Mizoi, J.; Takao, S.; Matsuo, H.; Suzuki, T.; Ito, S.; Saito, A. N.; Nishiwaki Ohkawa, T.; Yamaguchi-Shinozaki, K.; Yoshimura, T.; Kay, S. A.; Itami, K.; Kinoshita, T.; [Yamaguchi, J.*](#); Nakamichi, N.*
Proc Natl Acad Sci USA **2019**, *116*, 11528–11536.
13. "Synthesis of Octaaryl Naphthalenes and Anthracenes with Different Substituents"
Suzuki, S.; Itami, K.*; [Yamaguchi, J.*](#)

- Angew. Chem., Int. Ed.* **2017**, *56*, 15010-15013.
14. "Cross-coupling of Aromatic Esters and Amides"
Takise, R.; Muto, K.; [Yamaguchi, J.*](#)
Chem. Soc. Rev. **2017**, *46*, 5864-5888 (Review).
 15. "Rh-catalyzed Regiodivergent Hydrosilylation of Acyl Aminocyclopropanes Controlled by Monophosphine Ligands"
Kondo, H.; Itami, K.; [Yamaguchi, J.*](#)
Chem. Sci. **2017**, *8*, 3799-3803.
 16. "Decarbonylative Diaryl Ether Synthesis by Pd and Ni Catalysis"
Takise, R.; Isshiki, R.; Muto, K.; Itami, K.*; [Yamaguchi, J.*](#)
J. Am. Chem. Soc. **2017**, *139*, 3340-3343.
 17. "C-H Arylation and Alkenylation of Imidazoles by Nickel Catalysis: Solvent-accelerated Imidazole C-H Activation"
Muto, K.; Hatakeyama, T.; [Yamaguchi, J.*](#); Itami, K.*
Chem. Sci. **2015**, *6*, 6792-6798.
 18. "Decarbonylative Organoboron Cross-coupling of Esters by Nickel Catalysis"
Muto, K.; [Yamaguchi, J.*](#); Musaeov, D. G.*; Itami, K.*
Nature Commun **2015**, *6*, 7508.
 19. "C-H Activation Generates Period-Shortening Molecules That Target Cryptochrome in the Mammalian Circadian Clock"
Oshima, T.; Yamanaka, I.; Kumar, A.; [Yamaguchi, J.](#); Nishiwaki Ohkawa, T.; Muto, K.; Kawamura, R.; Hirota, T.; Yagita, K.; Irle, S.; Kay, S. A.; Yoshimura, T.*; Itami, K.*
Angew. Chem., Int. Ed. **2015**, *54*, 7193-7197.
 20. "Synthesis and Characterization of Hexaarylbenzenes with Five or Six Different Substituents Enabled by Programmed Synthesis"
Suzuki, S.; Segawa, Y.; Itami, K.*; [Yamaguchi, J.*](#)
Nature Chem. **2015**, *7*, 227-233.
 21. "Concise Syntheses of Dictyodendrins A and F by a Sequential C-H Functionalization Strategy"
Yamaguchi, A. D.; Chepiga, K. M.; [Yamaguchi, J.*](#); Itami, K.*; Davies, H. M. L.
J. Am. Chem. Soc. **2015**, *137*, 644-647.
 22. "Stereodivergent Synthesis of Arylcyclopropylamines by Sequential C-H Borylation and Suzuki-Miyaura Coupling"
Miyamura, S.; Araki, M.; Suzuki, T.; [Yamaguchi, J.*](#); Itami, K.*
Angew. Chem., Int. Ed. **2015**, *54*, 846-851.
 23. "Key Mechanistic Features of the Ni-catalyzed C-H/C-O Biaryl Coupling with Azoles and NaphthalenylPivalates"
Xu, H. Muto, K.; [Yamaguchi, J.](#); Itami, K.*; Musaeov, D.G.*
J. Am. Chem. Soc. **2014**, *136*, 14834-14844.
 24. "β-Selective C-H Arylation of Pyrroles: Leading to Concise Syntheses of Lamellarins C and I"
Ueda, K.; Amaike, K.; Maceiczky, R. M.; Itami, K.*; [Yamaguchi, J.*](#)
J. Am. Chem. Soc. **2014**, *136*, 13226-13232.
 25. "Ni-Catalyzed α-Arylation of Ketones with Phenol Derivatives"
Takise, R.; Muto, K.; [Yamaguchi, J.*](#); Itami, K.*
Angew. Chem., Int. Ed. **2014**, *53*, 6791-6794.
 26. "Aromatic C-H Coupling with Hindered Arylboronic Acids by Pd/Fe Dual Catalysts"
Yamaguchi, K.; Kondo, H.; [Yamaguchi, J.*](#); Itami, K.*
Chem. Sci. **2013**, *4*, 3753-3757.
 27. "Isolation, Structure, and Reactivity of an Arylnickel(II) Pivalate Complex in Catalytic C-H/C-O Biaryl Coupling"
Muto, K.; [Yamaguchi, J.*](#); Lei, A.*; Itami, K.*
J. Am. Chem. Soc. **2013**, *135*, 16384-16387.
 28. "C-H Alkenylation of Azoles with Enols and Esters by Nickel Catalysis"
Lingkui, M.; Kamada, Y.; Muto, K.; [Yamaguchi, J.*](#); Itami, K.*
Angew. Chem., Int. Ed. **2013**, *52*, 38, 10048-10051.

29. "Aromatic C–H Coupling with Hindered Arylboronic Acids by Pd/Fe Dual Catalysts"
Yamaguchi, K.; Kondo, H.; [Yamaguchi, J.*](#); Itami, K.*
Chem. Sci. **2013**, *4*, 3753–3757.
30. "C–H Bond Functionalization: Emerging Synthetic Tools for the Synthesis of Natural Products and Pharmaceuticals"
[Yamaguchi J.*](#); Yamaguchi, A. D.; Itami, K.*
Angew. Chem., Int. Ed. **2012**, *51*, 8960–9009 (Review).
31. "Decarbonylative C–H Coupling of Azoles and Aryl Esters: Unprecedented Nickel Catalysis and Application to the Synthesis of Muscoride A"
Amaike, K.; Muto, K.; [Yamaguchi, J.*](#); Itami, K.*
J. Am. Chem. Soc. **2012**, *134*, 13573–13576.
32. "Nickel-Catalyzed C–H/C–O Coupling of Azoles with Phenol Derivatives"
Muto, K.; [Yamaguchi, J.](#); Itami, K.*
J. Am. Chem. Soc. **2012**, *134*, 169–172.
33. "Synthesis of Dragmacidin D via Direct C–H Couplings"
Mandal, D.; Yamaguchi, A. D.; [Yamaguchi, J.*](#); Itami, K.*
J. Am. Chem. Soc. **2011**, *133*, 19660–19663.

Under revision, submitted and to be submitted

1. "TBA: Plant circadian rhythm"
Takahara, T. T.; [Yamaguchi, J.*](#); Nakamichi, N. et al
2020, to be submitted.
2. "TBA: Essay"
Narayama, K.; [Yamaguchi, J.*](#)
2020, to be submitted.
3. "TBA: Medicinal Chemistry"
Kasahara, T. Takada, F. Saito, B. Otake, K.; Yoshikawa, M.,; Muto, K. [Yamaguchi, J.*](#)
2020, to be submitted.
4. "TBA: Fluorination"
Suto, A.; [Yamaguchi, J.*](#)
2021, publication soon.
5. "TBA: Fluorination"
Komatsuda, M.; Suto, A.; Kondo, H.; [Yamaguchi, J.*](#)
2020, to be submitted.

Full publications

Published on Preprint Server

1. "Reverse Regioselectivity in Reductive Ring Opening of Epoxide Enabled by Zirconocene and Photoredox Catalysis"
Aida, K.; Hirao, M.; Funabashi, A.; Sugimura, N.; Ota, E.*; [Yamaguchi, J.*](#)
ChemRxiv 2021, preprint DOI: [10.26434/chemrxiv.14605392.v1](https://doi.org/10.26434/chemrxiv.14605392.v1)
2. "Formal Syntheses of Dictyodendrins B, C, and E by a Multi-substituted Indole Synthesis"
Kabuki, A; Yamaguchi, J.
ChemRxiv 2021, preprint DOI: [10.26434/chemrxiv.14355812](https://doi.org/10.26434/chemrxiv.14355812)
3. "A unique small molecule pair controls the plant circadian clock"
Uehara, T. N.; Takao, S.; Matsuo, H.; Saito, A.N.; Ota, E.; Ono, A.; Itami, K.; Kinoshita, T.; [Yamaguchi, J.*](#); Nakamichi, N.*
BioRxiv 2020, preprint DOI: [10.1101/2020.05.25.113746](https://doi.org/10.1101/2020.05.25.113746)

Published on Journals

4. "Pd-Catalyzed Asymmetric Dearomative Arylation of Indoles via a Desymmetrization Strategy"
Nie, Y.-H.; Komatsuda, M.; Yang, P.; Zheng, C.; [Yamaguchi, J.](#); You, S.-L.*
Org. Lett. 2022, ASAP.
5. "Phosphorylation of RNA Polymerase II by CDKC2 Maintains the Arabidopsis Circadian Clock Period"
Uehara, T. N.; Nonoyama, T.; Taki, K.; Kuwata, K.; Sato, A.; Fujimoto, K.J.; Hirota, T.; Matsuo, H.; Ono, A.; Takahara, T. T.; Tsutsui, H.; Suzuki, T.; Higashiyama, T.; Yanai, T.; Kay, S. A.; Itami, K.; Kinoshita, T.; [Yamaguchi, J.*](#); Nakamichi, N.*
Plant Cell Physiol, 2022, ASAP.
6. "Ring-Opening Fluorination of Bicyclic Azaarenes"
Komatsuda, M.; Suto, A.; Kondo Jr. H.; Takada, H.; Kato, K.; Saito, M.; Yamaguchi, J.
Chem. Sci. 2022, 13, 665–670.
Selected as Cover picture
7. "Fluorination –A Decade of Progress (2010-2020)"
Suto, S.; [Yamaguchi, J.*](#)
J. Synth. Org. Chem. Jpn. 2021, 79, 910–967 (Review).
8. "Convergent Azaspirocyclization of Bromoarenes with NTosylhydrazones by a Palladium Catalyst"
Yanagimoto, A.; Uwabe, Yota.; Wu, Q.; Muto, K.*; [Yamaguchi, J.*](#)
ACS Catal. 2021, 11, 10429–10435.
Selected as Cover picture
Most Read Article (Aug, 2021)
9. "Ni-Catalyzed Aryl Sulfide Synthesis through an Aryl Exchange Reaction"
Isshiki, R.; Kurosawa, M. B.; Muto, K.; [Yamaguchi, J.*](#)
J. Am. Chem. Soc. 2021, 143, 10333–10340.
Most Read Article (July, 2021)
Highlighted in Nikkan Kogyo Shinbun
10. "Development of Pd-Catalyzed Denitrative Couplings"
Asahara, K.; Kashihara, M. Muto, K.; Nakao, Y.*; [Yamaguchi, J.*](#)
J. Synth. Org. Chem. Jpn. 2021, 79, 11–21.
11. "Synthesis of Decaaryl anthracene with Nine Different Substituents"
Asako, T.; Suzuki, S.; Tanaka, S.; Ota, E.; [Yamaguchi, J.](#)
J. Org. Chem. 2020, 85, 15437–15448.
Most Read Article (Nov, 2020)
Highlighted in Synfacts
12. "Decarbonylative Synthesis of Aryl Nitriles from Aromatic Esters and Organocyanides by a Nickel Catalyst"
Iizumi, K.; Kurosawa, M. B.; Isshiki, R.; Muto, K.; Yamaguchi, J.
Synlett 2020, eFirst.

Published as part of the Cluster Nickel Catalysis (Invited contribution).

13. Transition-Metal-Catalyzed Denitrative Coupling of Nitroarenes
Muto, K.; Okita, T.; [Yamaguchi, J.*](#)
ACS Catal. **2020**, *10*, 9856–9871. (Review)
Most Read Article (Aug, 2020)
14. “Catalytic Three-component C–C Bond Forming Dearomatization of Bromoarenes with Malonates and Diazo Compounds”
Kato, H.; Musha, I.; Komatsuda, M.; Muto, K.*; [Yamaguchi, J.*](#)
Chem. Sci. **2020**, *11*, 8779–8784.
15. “Ester Dance Reaction on the Aromatic Ring”
Matsushita, K.; Takise, R.; Muto, K.; [Yamaguchi, J.*](#)
Science Advances **2020**, *6*, eaba7614.
Highlighted in C&EN, Chemical Daily, Azo Materials
16. “ σ -Bond Hydroboration of Cyclopropanes”
Kondo H.; Miyamura, S.; Matsushita, K.; Kato, H.; Kobayashi, C.; Arifin; Itami, K.; Yokogawa, D.*; [Yamaguchi, J.*](#)
J. Am. Chem. Soc. **2020**, *142*, 11306–11313.
Highlighted in newspaper(Chemicadaily) and news media (Chemistry Views)
Most Read Article (June, 2020)
Highlighted in newspaper (Chemicadaily) and news media (Chemistry Views)
17. “Synthesis of A Pentaarylcarbazole: Installation of Different Aryl Groups on Benzenoid Moiety”
Tannaka, K.; Asako, T.; Ota, E.; [Yamaguchi, J.*](#)
Chem Lett. **2020**, *49*, 918–920.
18. “Solvent Selection Scheme Using Machine Learning Based on Physicochemical Description of Solvent Molecules: Application to Cyclic Organometallic Reaction”
Fujinami, M.; Maekawara, H.; Isshiki, R.; Seino, J.; [Yamaguchi, J.](#); Nakai, H.*
Bull. Chem. Soc. Jpn **2020**, *93*, 841–845.
19. “Catalytic Deoxygenative Coupling of Aromatic Esters with Organophosphorus Compounds”
Kurosawa, M. B.; Isshiki, R.; Muto, K.; [Yamaguchi, J.*](#)
J. Am. Chem. Soc. **2020**, *142*, 7386–7392.
Most Read Article (May, 2020)
Highlighted in newspaper(Chemicadaily)
20. “Pd-Catalyzed C4-Dearomative Allylation of Benzyl Ammoniums with Allyltributylstannane”
Kayashima, Y.; Komatsuda, M.; Muto, K.*; [Yamaguchi, J.*](#)
Chem Lett. **2020**, *49*, 836–839.
Selected as an Editor’s Choice
Selected as an inside cover
21. “Dearomative Allylation of Naphthyl Cyanohydrins by Palladium Catalysis: Catalyst-Enhanced Site Selectivity”
Yanagumoto, A.; Komatsuda, M.; Muto, K.*; [Yamaguchi, J.*](#)
Org. Lett. **2020**, *22*, 3423–3427.
22. “Palladium-Catalyzed Mizoroki–Heck Reaction of Nitroarenes and Styrene Derivatives”
Okita, T.; Asahara, K. K.; Muto, K.; [Yamaguchi, J.*](#)
Org. Lett. **2020**, *22*, 3205–3208.
Most Read Article (May, 2020)
23. “Ester Transfer Reaction of Aromatic Esters with Haloarenes and Arenols by a Nickel Catalyst”
Isshiki, R.; Inayama, N.; Muto, K.; [Yamaguchi, J.*](#)
ACS Catal. **2020**, *10*, 3490–3494.
Most Read Article (March and April 2020)
Highlighted in NikkeiSangyo Shinbun, Chemical Daily
24. “Pd-Catalyzed Denitrative Intramolecular C–H Arylation”
Asahara, K. K.; Okita, T.; Saito, A. N. Muto, K.; Nakao, Y.; [Yamaguchi, J.*](#)
Org. Lett. **2019**, *21*, 4721–4724.

25. "Generation of Strong Casein Kinase 1 Inhibitor of Arabidopsis Thaliana"
Saito, A. N.; Matsuo, H.; Kuwata, K.; Ono, A.; Kinoshita, T.; [Yamaguchi, J.*](#); Nakamichi, N.*
Plant Direct **2019**, 3, e00172.
26. "Pd-Catalyzed Alkenyl Thioether Synthesis from Thioesters and N-Tosylhydrazones"
Ishitobi, K.; Muto, K.; [Yamaguchi, J.*](#)
ACS Catal. **2019**, 9, 11685–11690.
27. "Pd-Catalyzed Dearomative Three-Component Reaction of Bromoarenes with Diazo Compounds and Allylborates"
Komatsuda, M.; Kato, H.; Muto, K.;* [Yamaguchi, J.*](#)
ACS Catal. **2019**, 9, 8991–8995.
[Most Read Article \(September 2019\)](#)
28. "Pd-Catalyzed Denitrative Intramolecular C-H Arylation"
Asahara, K. K.; Okita, T.; Saito, A. N. Muto, K.; Nakao, Y.; [Yamaguchi, J.*](#)
Org. Lett. **2019**, 21, 4721–4724.
29. "Casein Kinase 1 Family Regulates PRR5 and TOC1 in the Arabidopsis Circadian Clock"
Uehara, T. N.; Mizutani, Y.; Kuwata, K.; Hirota, T.; Sato, A.; Mizoi, J.; Takao, S.; Matsuo, H.; Suzuki, T.; Ito, S.; Saito, A. N.; Nishiwaki Ohkawa, T.; Yamaguchi-Shinozaki, K.; Yoshimura, T.; Kay, S. A.; Itami, K.; Kinoshita, T.; [Yamaguchi, J.*](#); Nakamichi, N.*
Proc Natl Acad Sci USA **2019**, 116, 11528–11536.
[Highlighted in Chunichi Shinbun](#)
30. "Cell-based Screen Identifies a New Potent and Highly Selective CK2 Inhibitor for Modulation of Circadian Rhythms and Cancer Cell Growth"
Oshima, T.; Niwa, Y.; Kuwata, K.; Srivastava, A.; Hyoda, T.; Tsuchiya, Y.; Kumagai, M.; Tsuyuguchi, M.; Tamaru, T.; Sugiyama, A.; Ono, N.; Zolboot, N.; Aikawa, Y.; Oishi, S.; Nonami, A.; Arai, F.; Hagihara, S.; [Yamaguchi, J.](#); Tama, F.; Kunisaki, Y.; Yagita, K.; Ikeda, M.; Kinoshita, T.; Kay, S. A.; Itami, K.; Hirota, T.*
Science Advances **2019**, 5, eaau9060.
31. "Studying Abroad Led to New Friendships and New Research Directions"
[Yamaguchi, J.*](#)
Yakugaku zasshi **2019**, 139, 229–233.
32. "Pd-Catalyzed Dearomative Allylation of Benzyl Phosphates"
Komatsuda, M. Muto, K.*; [Yamaguchi, J.*](#)
Org. Lett. **2018**, 20, 4354–4357.
33. "Synthesis of A Heptaaryloquinoline: Unusual Disconnection for Constructing Isoquinoline Frameworks"
Asako, T.; Suzuki, S.; Itami, K.; Muto, K.; [Yamaguchi, J.*](#)
Chem. Lett. **2018**, 47, 968–970.
[Selected as an Editor's Choice](#)
[Selected as a Front Cover](#)
34. "Dibenzofuran Synthesis: Decarbonylative Intramolecular C-H Arylation of Aromatic Esters"
Okita, T.; Komatsuda, M.; Saito, A. N.; Hisada, T.; Takahara, T. T.; Nakayama, K. P.; Isshiki, R.; Takise, R.; Muto, K.; [Yamaguchi, J.*](#)
Asian J. Org. Chem. **2018**, 7, 1358–1361.
[Invitation to Contribute to a Special Issue: C-H Activation](#)
35. "Decarbonylative Methylation of Aromatic Esters by a Nickel Catalyst"
Okita, T.; Muto, K.; [Yamaguchi, J.*](#)
Org. Lett. **2018**, 20, 3132–3135.
[Highlighted in Synfacts](#)
36. "Modular Synthesis of Heptaaryloindole"
Suzuki, S.; Asako, T.; Itami, K.; [Yamaguchi, J.*](#)
Org. Biomol. Chem. **2018**, 16, 3771–3776.
37. "Pd-Catalyzed Decarbonylative C-H Coupling of Azoles and Aromatic Esters"
Matsushita, K.; Takise, R.; Hisada, T.; Suzuki, S.; Isshiki, R.; Itami, K.; Muto, K.; [Yamaguchi, J.*](#)
Chem Asian. J. **2018**, 13, 2393–2396.
[Invitation to Contribute to a Special Issue: Homogeneous Catalysis from Young Investigators in Asia](#)

38. “Decarbonylative Coupling Reaction of Aromatic Esters”
 Isshiki, R.; Okita, T; Muto, K.; [Yamaguchi, J.*](#)
J. Synth. Org. Chem. Jpn. **2018**, 76, 300-314 (Review).
39. “Decarbonylative Aryl Thioether Synthesis by Ni Catalysis”
 Ishitobi, K.; Isshiki, R.; Asahara, K. K.; Lim, C.; Muto, K.; [Yamaguchi, J.*](#)
Chem. Lett. **2018**, 47, 756–759.
40. “Decarbonylative C–P Bond Formation using Aromatic Esters and Organophosphorus Compounds”
 Isshiki R.; Muto, K.; [Yamaguchi, J.*](#)
Org. Lett. **2018**, 20, 1150–1153.
41. “Design, Synthesis and Evaluation of γ -Turn Mimetics as LSD1-Selective Inhibitors”
 Ota, Y.; Miyamura, S.; Araki, M; Itoh, Y.; Yasuda, S.; Masada, M.; Taniguchi, T; Sowa, Y.; Sakai, T; Itami, K.;
[Yamaguchi, J.*](#); Suzuki, T.*
Bioorg. Med. Chem. **2018**, 26, 775–785.
42. “Synthesis of fully arylated (hetero)arenes by Coupling Reaction”
 Asako, T; Muto, K.; [Yamaguchi, J.*](#)
J. Synth. Org. Chem. Jpn. **2018**, 76, 98–110 (Review).
43. “Catalytic α -Arylation of Ketones with Heteroaromatic Esters”
 Isshiki, R.; Takise, R.; Itami, K.; Muto, K.; [Yamaguchi, J.*](#)
Synlett **2017**, 28, 2599–2603.
 Published as part of the Cluster *C–O Activation* (Invited contribution).
44. “Synthesis of Octaaryl Naphthalenes and Anthracenes with Different Substituents”
 Suzuki, S.; Itami, K.*; [Yamaguchi, J.*](#)
Angew. Chem., Int. Ed. **2017**, 56, 15010-15013.
45. “Cross-coupling of Aromatic Esters and Amides”
 Takise, R.; Muto, K.; [Yamaguchi, J.*](#)
Chem. Soc. Rev. **2017**, 46, 5864-5888 (Review).
 Highlighted as an Inside Backcover
46. “Thiazole-based Sigma-1 Receptor Ligands: Diversity by Late-stage C-H Arylation of Thiazoles, Structure Affinity and Selectivity Relationships and Molecular Interactions”
 Kokornaczyk, A.; Schepmann, D.; [Yamaguchi, J.](#); Itami, K.; Laurini, E.; Fermeglia, M.; Prici, S.; Wünsch, B*
ChemMedChem **2017**, 12, 1070–1080.
47. “Theoretical Elucidation of Potential Enantioselectivity in a Pd-Catalyzed Aromatic C-H Coupling Reaction”
 Nishimoto, Y.; Kondo, H.; Yamaguchi, K.; Yokogawa, D.; [Yamaguchi, J.](#); Itami, K.; Irle, S*
J. Org. Chem. **2017**, 82, 4900–4906.
48. “Synthesis of Multiply Arylated Pyridines”
 Asako, T; Hayashi, W; Suzuki, S.; Amaike, K.; Itami, K.; Muto, K.; [Yamaguchi, J.*](#)
Tetrahedron **2017**, 73, 3669-3676
 Invitation to contribute for a Special Issue in Honor of Professor Ang Li
49. “Rh-Catalyzed Regiodivergent Hydrosilylation of Acyl Aminocyclopropanes Controlled by Monophosphine ligands”
 Kondo, H.; Itami, K.; [Yamaguchi, J.*](#)
Chem. Sci. **2017**, 8, 3799-3803.
50. “Decarbonylative Diaryl Ether Synthesis by Pd and Ni Catalysis”
 Takise, R.; Isshiki, R.; Muto, K.; Itami, K.*; [Yamaguchi, J.*](#)
J. Am. Chem. Soc. **2017**, 139, 3340–3343.
 Most Read Article (March, 2017)
 Highlighted in Chemical Daily, Nikkei-sangyo Shinbun, Phys.org, c2W, Science Daily, Chem-Station
51. “Synthesis of Fully Arylated (Hetero)arenes”
 Suzuki, S.; [Yamaguchi, J.*](#)
Chem. Commun. **2017**, 53, 1568–1582. (Review)
 Invited as a featured article
 Most downloaded articles of 2017: Organic and Biological Chemistry
52. “Structure-Activity Relation of AMOR Sugar Molecule that Activates Pollen-Tubes for Ovular Guidance”

Jiao J.; Mizukami, A.G.; Sankaranarayanan, S.; [Yamaguchi, J.](#); Itami, K.; Higashiyama, T.*
Plant Physiol. **2017**, *173*, 354–363.

Invited as a Forcus issue

53. “Toward an Ideal Synthesis of (Bio)molecules through Direct Arene Assembling Reactions”

[Yamaguchi, J.*](#); Itami, K.*

Bull. Chem. Soc. Jpn. **2017**, *90*, 367–383 (Accounts).

Invited contribution for Award accounts of The Chemical Society of Japan Award for Young Chemists for 2012

Selected As Back Cover Picture

Most Read Article (December 2016)

54. “Palladium-Catalyzed Decarbonylative Alkynylation of Aromatic Esters”

Okita, T.; Kumazawa, K.; Takise, R.; Muto, K.; Itami, K.*; [Yamaguchi, J.*](#)

Chem Lett. **2017**, *46*, 218–220.

Most Read Article (November–December 2016)

55. “Syntheses of Biologically Active 2-Arylcyclopropylamines”

Miyamura, S.; Itami, K.; [Yamaguchi, J.*](#)

Synthesis **2017**, *49*, 1131–1149 (Review).

Highlighted as a Front Cover

56. “Palladium-Catalyzed Decarbonylative Cross-Coupling of Azinecarboxylates with Arylboronic Acids”

Muto, K.; Hatakeyama, T.; Itami, K.*; [Yamaguchi, J.*](#)

Org. Lett. **2016**, *18*, 5106–5109.

57. “C–H Activation Enables Rapid Structure-Activity Relationship Study of Arylcyclopropyl amines for Potent and Selective LSD1 Inhibitors”

Miyamura, S.; Araki, M.; Ota, Y.; Itoh, Y.; Yasuda, S.; Masada, M.; Taniguchi, T.; Sowa, Y.; Sakai, T.; Suzuki, T.*; Itami, K.*; and [Yamaguchi, J.*](#)

Org. Biomol. Chem. **2016**, *14*, 8576–8585.

Editors Choice (December 2016).

58. “Cyanation of Phenol Derivatives with Aminoacetonitriles by Nickel Catalysis”

Takise, R.; Itami, K.*; [Yamaguchi, J.*](#)

Org. Lett. **2016**, *18*, 4428–4431.

59. “Nickel-Catalyzed Aromatic C–H Functionalization”

[Yamaguchi, J.*](#); Muto, K.; Itami, K.

Top Curr. Chem. **2016**, *374*, 55 (Review)

Invited contribution

60. “The AMOR Arabinogalactan Sugar Chain Induces Pollen-Tube Competency to Respond to Ovular Guidance”

Mizukami, A. G.; Inatsugi, R.; Jiao, J.; Kotake, T.; Kuwata, K.; Ootani, K.; Okuda, S.; Sankaranarayanan, S.; Sato, Y.; Maruyama, D.; Iwai, H.; Garénaux, E.; Sato, C.; Kitajima, K.; Tsumuraya, Y.; Mori, H.; [Yamaguchi, J.](#); Itami, K.; Sasaki, N.; Higashiya, T.*

Current Biology **2016**, *26*, 1091–1097.

Highlighted in Chunichi Shimbun, Asahi Shinbun, Nikkei Shinbun, Saga Shinbun, EurekAlert!,

Kyodo Tsushin, goo News, Gunosy, Chem-Station

61. “Development and Elucidation of the Ni-Catalyzed Direct Coupling Reaction”

[Yamaguchi, J.*](#); Muto, K.; Itami, K.

Chemical Times **2016**, 1–7 (Review).

Invited contribution

62. “Synthesis of Triarylpyridines in Thiopeptide Antibiotics by Using a C–H Arylation/Ring-Transformation Strategy”

Amai, K.; Itami, K.; [Yamaguchi, J.*](#)

Chem. Eur. J. **2016**, *22*, 4384–4388.

63. “Microwave-assisted regioselective direct C–H arylation of thiazole derivatives leading to increased σ_1 receptor affinity”

Kokornaczyk, A.; Schepmann, D.; [Yamaguchi, J.](#); Itami, K.; Wünsch, B.*

Med. Chem. Commun. **2016**, *7*, 327–331.

64. "C–H Arylation and Alkenylation of Imidazoles by Nickel Catalysis: Solvent-accelerated Imidazole C–H Activation"
Muto, K.; Hatakeyama, T.; [Yamaguchi, J.*](#); Itami, K.*
Chem. Sci. **2015**, *6*, 6792–6798.
65. "Decarbonylative Organoboron Cross-coupling of Esters by Nickel Catalysis"
Muto, K.; [Yamaguchi, J.*](#); Musaev, D. G.*; Itami, K.*
Nature Commun **2015**, *6*, 7508.
Highlighted in Science Daily, Phys. Org, Nature Communications Highlights Article
66. "C–H Activation Generates Period-Shortening Molecules That Target Cryptochrome in the Mammalian Circadian Clock"
Oshima, T.; Yamanaka, I.; Kumar, A.; [Yamaguchi, J.](#); Nishiwaki Ohkawa, T.; Muto, K.; Kawamura, R.; Hirota, T.; Yagita, K.; Irle, S.; Kay, S. A.; Yoshimura, T.*; Itami, K.*
Angew. Chem., Int. Ed. **2015**, *54*, 7193–7197.
Highlighted in Chunichi Shimbun, Yahoo! News, Zaikei Shimbun, Monolist, Alpha Galileo JP, EurekAlert! JP, Kagaku, ResearchSEA, Alpha Galileo, EurekAlert!, Biology News Net, ScienceNewline, Science Daily, Medical News Today, Press News Org, Deep Stuff, News Medical, Health Medicine Net, Bio Spectrum, Chemisch2Weekblad, Lab Roots, EN-CPhI.CN, Terra Daily, Open Science World, Sleep Review, Asian Scientist. Selected as Cover of the journal.
67. "Synthesis and Characterization of Hexaarylbenzenes with Five or Six Different Substituents Enabled by Programmed Synthesis"
Suzuki, S.; Segawa, Y.; Itami, K.*; [Yamaguchi, J.*](#)
Nature Chem. **2015**, *7*, 227–233.
Highlighted in Toyo Keizai, Yahoo! Japan News, Chunichi Shimbun, Asahi Shimbun, Nikkei Shimbun, Nifty News, Nokoniko News, Infoseek News, Nikkei Press News, Science Portal, Japanese Research, JPubb, Mynabi News, Zaikei Shimbun, The Huffington Post, Livedoor News, Bioimpact, Nikkei Biotech, Biglobe News, Ascii, EurekAlert!, ResearchSEA, Science Newline, Phys.Org, Chemicals Technology, Chemistry News, Health Medicine Network, Science Daily, Technobahn, Innovation Reports, Chemistry 2011, RevoScience, Asian Scientist, Kagaku Shimbun, Alpha Galileo, Chemical & Engineering News, Synfacts.
68. "Concise Syntheses of Dictyodendrins A and F by a Sequential C–H Functionalization Strategy"
Yamaguchi, A. D.; Chepiga, K. M.; [Yamaguchi, J.*](#); Itami, K.*; Davies, H. M. L.
J. Am. Chem. Soc. **2015**, *137*, 644–647.
Highlighted in EurekAlerts!, Phys.Org., ResearchSEA, Science Newline, Science Daily, Breaking New, Health Medicine Network, Bright Surf, Sci Casts, Medical News Today, Emory News Center, Society for Neuroscience.
69. "Synthesis, Affinity and Structure Activity Relationships of Novel, Selective and Dual Targeting CCR2 and CCR5 Receptor Antagonists"
Junker, A.; Kokornaczyk, A. K.; Frehland, B.; Schepmann, D.; [Yamaguchi, J.](#); Itami, K.; Faust, A.; Hermann, S. Wagner, S.; Kopka, K.; Schäfers, M.; Koch, M.; Weiss, C.; Zweemer, A. J. M. Heitman, L. H.; Wünsch, B.*
Org. Biomol. Chem. **2015**, *13*, 2407–2422.
70. "Ni-Catalyzed α -Arylation of Esters and Amides with Phenol Derivatives"
Koch, E.; Takise, R.; Studer, A.; [Yamaguchi, J.*](#); Itami, K.*
Chem. Commun. **2015**, *51*, 855–857.
Top 25 most downloaded articles (October–December 2014).
71. "Stereodivergent Synthesis of Arylcyclopropylamines by Sequential C–H Borylation and Suzuki–Miyaura Coupling"
Miyamura, S.; Araki, M.; Suzuki, T.; [Yamaguchi, J.*](#); Itami, K.*
Angew. Chem., Int. Ed. **2015**, *54*, 846–851.
72. "Key Mechanistic Features of the Ni-catalyzed C–H/C–O Biaryl Coupling with Azoles and NaphthalenylPivalates"
Xu, H. Muto, K.; [Yamaguchi, J.](#); Itami, K.*; Musaev, D.G.*
J. Am. Chem. Soc. **2014**, *136*, 14834–14844.
Highlighted in EurekAlerts!, Phys.Org., Science Codex, Science Newline, Science Daily, Emory University eScience Commons, Bright Surf, Laboratory Equipment, Web Newswire, Medical News Today,

Emory News Center, Jersey Tribune, Science Seeker, News Locker, USA News, News Nom, Bio Portfolio, Toronto Telegraph, Technobahn, The Daily Purrs, Chemistry2011.

73. "β-Selective C–H Arylation of Pyrroles: Leading to Concise Syntheses of Lamellarins C and I"
Ueda, K.; Amaike, K.; Maceiczky, R. M.; Itami, K.*; [Yamaguchi, J.*](#)
J. Am. Chem. Soc. **2014**, *136*, 13226–13232.
[Most Read Article \(September–October 2014\)](#)
74. "Regioselective Allylic C–H Oxidation of Terminal Alkenes with Pd/sulfoxide-oxazoline Catalyst"
Kondo, H.; Yu, F.; [Yamaguchi, J.](#); Liu, G.*; Itami, K.*
Org. Lett. **2014**, *16*, 4212–4215.
75. "Ni-Catalyzed α-Arylation of Ketones with Phenol Derivatives"
Takise, R.; Muto, K.; [Yamaguchi, J.*](#); Itami, K.*
Angew. Chem., Int. Ed. **2014**, *53*, 6791–6794.
Highlighted in BBC News, Chemistry Views, Phys.Org., Science Daily, Science Newline, R&D Magazine, The Chemical Daily, Kagaku Shimbun, Gendai Kagaku, Chemical Processing, Optronics Online, Wiley Science Café, EurekAlert!, Science Codex, Breaking News, Medindia, ResearchSEA, Innovations Report, Crazy Chucks, News nom, News Locker, USA News, Bio-Medicine, e! Science News, Technobahn, Brunch News, Interesting Tech, Press News, Chemistry 2011.org, Health Medicine Network, BioPortfolio, News Dump, Regator, Coyne Chemical, topix, Business News, Interceder, Nets247, I4U News, Jersey Tribune, Health News, Red Orbit, Medicininfos, Medic finder, Locker Dome, Chemistry Times.
76. "2,4- and 2,5-Disubstituted Arylthiazoles: Rapid Synthesis by C–H Coupling and Biological Evaluation"
Lohrey, L.; Uehara, T. N.; Tani, S.; [Yamaguchi, J.*](#); Humpf, H.-U.*; Itami, K.*
Eur. J. Org. Chem. **2014**, 3387–3394.
77. "Manganese-Catalyzed Intermolecular C–H/C–H Coupling of Carbonyls and Heteroarenes"
Hattori, K.; Ziadi, A.; Itami, K.; [Yamaguchi, J.*](#)
Chem. Comm. **2014**, *50*, 4105–4107.
[Most Read Article \(March 2014\)](#)
78. "Late-Stage C–H Coupling Enables Rapid Identification of HDAC Inhibitors: Synthesis and Evaluation of NCH-31 Analogues"
Sekizawa, H.; Amaike, K.; Itoh, Y.; Suzuki, T.*; Itami, K.*; [Yamaguchi, J.*](#)
ACS. Med. Chem. Lett. **2014**, 582–586.
[Most Read Article \(March 2014\)](#)
79. "Diverse Modification of the 4-Methylphenyl Moiety of TAK-779 by Late-Stage Suzuki-Miyaura Cross-Coupling"
Junker, A.; Schepmann, D.; [Yamaguchi, J.](#); Itami, K. Faust, A.; Kopka, K.; Wagner, S.; Wunsch, B.*
Org. Biomol. Chem. **2014**, *12*, 177–186.
80. "Programmed Synthesis of Arylthiazoles through Sequential C–H Couplings"
Tani, S.; Uehara, T. N.; [Yamaguchi, J.](#); Itami, K.*
Chem. Sci. **2014**, *5*, 123–135.
[Most Accessed Articles \(September–October 2013\)](#). Highlighted in SYNFACTS
81. "Isolation, Structure, and Reactivity of an Arylnickel(II) Pivalate Complex in Catalytic C–H/C–O Biaryl Coupling"
Muto, K.; [Yamaguchi, J.*](#); Lei, A.*; Itami, K.*
J. Am. Chem. Soc. **2013**, *135*, 16384–16387.
82. "Palladium-Catalyzed C–H and C–N Arylation of Aminothiazoles with Arylboronic Acids"
Uehara, T. N.; [Yamaguchi, J.*](#); Itami, K.*
Asian J. Org. Chem. **2013**, *2*, 1973–2013
[Invitation to contribute to a celebration of Mukaiyama Aldol Issue.](#)
[Highlighted in Chemistry Views.](#)
[Most Accessed Paper \(No.1 in November 2013\)](#).
83. "C–H Alkenylation of Azoles with Enols and Esters by Nickel Catalysis"
Lingkui, M.; Kamada, Y.; Muto, K.; [Yamaguchi, J.*](#); Itami, K.*
Angew. Chem., Int. Ed. **2013**, *52*, 38, 10048–10051.
[Highlighted in Newspapers \(Chunichi, The Chemical Daily, Yahoo! News\)](#)
84. "Aromatic C–H Coupling with Hindered Arylboronic Acids by Pd/Fe Dual Catalysts"

Yamaguchi, K.; Kondo, H.; [Yamaguchi, J.*](#); Itami, K.*

Chem. Sci. **2013**, *4*, 3753–3757.

[Most Accessed Articles \(June 2013\)](#)

85. “Synthesis of Thiophene-Based TAK-779 Analogues by C–H Arylation”
Junker, A.; [Yamaguchi, J.](#); Itami, K.*; Wunsch, B.*
J. Org. Chem. **2013**, *78*, 5579–5586.
86. “Nickel-Catalyzed Direct Coupling of Heteroarenes”
[Yamaguchi, J.*](#); Muto, K.; Amaike, K.; Yamamoto, T.; Itami, K.*
J. Synth. Org. Chem. Jpn. **2013**, *71*, 576–587 (Accounts).
87. “Decarbonylative C–H Biaryl Coupling”
[Yamaguchi, J.*](#); Itami, K.*
Kagaku **2013**, 35–39 (Accounts).
88. “Recent Progress in Nickel-Catalyzed Biaryl Coupling”
[Yamaguchi, J.*](#); Muto, K.; Itami, K.*
Eur. J. Org. Chem. **2013**, 19–30 (Review).
[Most Accessed Articles \(January 2013\)](#)
89. “Improvement of σ_1 receptor affinity by late-stage C–H bond arylation of spiro cyclic lactones”
Meyer, C.; Neue, B.; Schepmann, D.; Yanagisawa, S.; [Yamaguchi, J.](#); Würthwein, E.-U.; Itami, K.*; Wunsch, B.*
Bioorg. Med. Chem. **2013**, *21*, 1844–1856.
90. “Pd-catalyzed direct C–H bond functionalization of spirocyclic sigma-1 ligands: generation of a pharmacophore model and analysis of reverse binding mode by docking into a 3D homology model of the sigma-1 receptor”
Meyer, C.; Schepmann, D.; Yanagisawa, S.; [Yamaguchi, J.](#); Dal Col, V.; Laurini, E.; Itami, K.*; Pricl, S.; Wunsch, B.*
J. Med. Chem. **2012**, *55*, 8047–8065.
91. “Decarbonylative C–H Coupling of Azoles and Aryl Esters: Unprecedented Nickel Catalysis and Application to the Synthesis of Muscoride A”
Amaike, K.; Muto, K.; [Yamaguchi, J.*](#); Itami, K.*
J. Am. Chem. Soc. **2012**, *134*, 13573–13576.
[Highlighted in Newspapers \(Chunichi, Asahi, The Chemical Daily, Yahoo!News, Mynavi-News, Nikkan kogyo, Kagaku Shinbun\), Most Read Articles in August 2012](#)
92. “Late-Stage C–H Bond Arylation of Spirocyclic sigma-1 Ligands for Analysis of Complementary sigma-1 Receptor Surface”
Meyer, C.; Schepmann, D.; Yanagisawa, S.; [Yamaguchi, J.](#); Wunsch, B.; Itami, K.*
Eur. J. Org. Chem. **2012**, 5972–5979.
93. “Synthesis of Bioactive Compounds through C–H Bond Functionalization”
[Yamaguchi, J.*](#); Itami, K.*
Fine Chemicals **2012**, *41*, 38–44 (Review).
94. “Pd- and Cu-catalyzed C–H Arylation of Indazoles”
Hattori, K.; Yamaguchi, K.; [Yamaguchi, J.*](#); Itami, K.*
Tetrahedron **2012**, *68*, 7605–7612 (Invited contribution).
95. “Hindered Biaryls by C–H Coupling: Bisoxazoline-Pd Catalysis Leading to Enantioselective C–H Coupling”
Yamaguchi, K.; [Yamaguchi, J.*](#); Studer, A.; Itami, K.*
Chem. Sci. **2012**, *3*, 2165–2169.
[Highlighted RSC Chemical Science blog, Most Read Articles in March and April 2012](#)
96. “Mechanistic Studies on the Pd-catalyzed Direct C–H Arylation of 2-Substituted Thiophene Derivatives with Arylpalladium Bipyridyl Complexes”
Steinmetz, M.; Ueda, K.; Grimme, S.; [Yamaguchi, J.](#); Kirchberg, S.; Itami, K.*; Studer, A.*
Chem. Asian J. **2012**, *7*, 1256–1260.
97. “Nickel-Catalyzed C–H/C–O Coupling of Azoles with Phenol Derivatives”
Muto, K.; [Yamaguchi, J.](#); Itami, K.*
J. Am. Chem. Soc. **2012**, *134*, 169–172.
[Highlighted in Newspapers \(Yomiuri, Chu-nichi, The Chemical Daily, Yahoo!News, NanotechJapan Nikkan kogyo, Kagaku Shinbun\), Most Read Articles \(January, 2012\), Highlighted as a “SynStory” article in](#)

- SYNFORM (April 2012), Highlighted in Chemical Engineering (Feb 2012)
98. "C–H Bond Functionalization: Emerging Synthetic Tools for the Synthesis of Natural Products and Pharmaceuticals"
Yamaguchi, J.*; Yamaguchi, A. D.; Itami, K.*
Angew. Chem., Int. Ed. **2012**, *51*, 8960–9009 (Review).
Selected as the Cover of the Issue.
Highlighted in Chemistry Views. Most Accessed Articles (2011–2013).
99. "Synthesis of Dragmacidin D via Direct C–H Couplings"
Mandal, D.; Yamaguchi, A. D.; Yamaguchi, J.*; Itami, K.*
J. Am. Chem. Soc. **2011**, *133*, 19660–19663.
Most Read Articles (November 2011), Highlighted in Chemistry World.
100. "Exploitation of an Additional Hydrophobic Pocket of σ_1 Receptors: Late-stage Diverse Modifications of Spirocyclic Thiophenes by C–H Functionalization"
Meyer, C.; Neue, B.; Schepmann, D.; Yanagisawa, S.; Yamaguchi, J.; Würthwein, E.; Itami, K.*; Wunsch, B.*
Org. Biomol. Chem. **2011**, *9*, 8016–8029.
101. "Enantioselective Total Syntheses of (–)-Palau'amine, (–)-Axinellamines, and (–)-Massadines"
Seiple, I. B.; Su, S.; Young, I. S.; Nakamura, A.; Yamaguchi, J.; Jørgensen, L.; Rodriguez, R. A.; O'Malley, D. P.; Gaich, T.; Kock M.; Baran, P. S.*
J. Am. Chem. Soc. **2011**, *133*, 14710–14726.
Most Read Articles (October 2011)
102. "Nickel-Catalyzed C–H Arylation of Azoles with Haloarenes: Scope, Mechanism, and Applications to the Synthesis of Bioactive Molecules"
Yamamoto, T.; Muto, K.; Komiyama, M.; Canivet, J.; Yamaguchi, J.; Itami, K.*
Chem. Eur. J. **2011**, *17*, 10113–10122.
Highlighted in SYNFACTS
103. "Synthesis of Bioactive Compounds through C–H Bond Functionalization"
Yamaguchi, J.*; Itami, K.*
Catalysts and Catalysis **2011**, *53*, 293–298 (Review).
104. "Oxidative C–H/C–H Coupling of Azine and Indole/Pyrrole Nuclei: Palladium Catalysis and Synthesis of Eudistomin U"
Yamaguchi, A. D.; Mandal, D.; Yamaguchi, J.*; Itami, K.*
Chem. Lett. **2011**, *40*, 555–557.
Selected as "Editor's Choice". Most-Accessed Articles.
Highlighted in *Angew. Chem., Int. Ed.*
105. "Oxidative Biaryl Coupling of Thiophenes and Thiazoles with Arylboronic Acids through Palladium Catalysis: Otherwise Difficult C4-Selective C–H Arylation Enabled by Boronic Acids"
Kirchberg, S.; Tani, S.; Ueda, K.; Yamaguchi, J.; Studer, A.*; Itami, K.*
Angew. Chem., Int. Ed. **2011**, *50*, 2387–2391.
Highlighted in SYNFACTS
106. "A General Catalyst for the β -Selective C–H Bond Arylation of Thiophenes with Iodoarenes"
Ueda, K.; Yanagisawa, S.; Yamaguchi, J.; Itami, K.*
Angew. Chem., Int. Ed. **2010**, *49*, 8946–8949.
Highlighted in SYNFACTS
107. "Total Synthesis of Palau'amine"
Seiple, I. B.; Su, S.; Young, I. S.; Lewis, C. A.; Yamaguchi, J.; Baran, P. S.*
Angew. Chem., Int. Ed. **2010**, *49*, 1095–1098.
Selected as VIP paper and Cover Picture in *Angew. Chem. Int. Ed.*
Highlighted in *Nature*, C&EN, and Gendai-Kagaku.
Most-Accessed Articles (Jan 2010, 6/2009~7/2010)
108. "Syntheses of Fumagillin and Ovalicin"
Yamaguchi, J.; Hayashi, Y.*
Chem. Eur. J. **2010**, *16*, 3884–3901 (Review).
109. "Asymmetric Total Synthesis of a Natural Product Using Catalytic Enantioselective Stereoblative Reactions"

Yamaguchi, J.*

J. Synth. Org. Chem. Jpn. **2009**, *67*, 166–167 (Review).

- 110.** “Fe-Catalyzed Oxidative Coupling of Heteroarenes and Methylamines”
Ohta, M.; Quick, M. P.; Yamaguchi, J.; Wunsch, B.*; Itami, K.*
Chem. Asian J. **2009**, *4*, 1416–1419.
[Most-Accessed Articles \(July 2009\)](#)
- 111.** “Nickel-Catalyzed Biaryl Coupling of Heteroarenes and Aryl Halides/Triflates”
Canivet, J.; Yamaguchi, J.; Ban, I.; Itami, K.*
Org. Lett. **2009**, *11*, 1733–1736.
[Highlighted in SYNFACTS, Top 20 Most Cited Articles 2009–2011](#)
- 112.** “The Asymmetric Total Synthesis of (+)-Cytotrienin A, an Ansamycin-Type Anticancer Drug”
Hayashi, Y.*; Shoji, M.; Ishikawa, H.; Yamaguchi, J.; Tamura, T.; Imai, H.; Nishigaya, Y.; Takabe, K.; Kakeya, H.; Osada, H.
Angew. Chem., Int. Ed. **2008**, *47*, 6657–6660.
[Highlighted in SYNFACTS](#)
- 113.** “Total Synthesis of (±)-Axinellamines A and B”
O’Malley, D. P.; Yamaguchi, J.; Young, I. S.; Seiple, I. B.; Baran, P. S.*
Angew. Chem. Int., Ed. **2008**, *47*, 3581–3583.
[Selected as VIP paper](#)
[Inside Cover in *Angew. Chem., Int. Ed.*](#)
- 114.** “Synthesis of 1,9-Dideoxy-pre-axinellamine”
Yamaguchi, J.; Seiple, I. B.; Young, I. S.; O’Malley, D. P.; Maue, M.; Baran, P. S.*
Angew. Chem., Int. Ed. **2008**, *47*, 3578–3580.
- 115.** “Direct Asymmetric α -Amination of Cyclic Ketones Catalyzed by Siloxyproline”
Hayashi, Y.*; Aratake, S.; Imai, Y.; Hibino, K.; Chen, Q. -Y.; Yamaguchi, J.; Uchimarui, T.
Chem. Asian J. **2008**, *3*, 225–232.
- 116.** “Organocatalyst-Mediated Enantioselective Intramolecular Aldol Reaction Featuring the Rare Combination of Aldehyde as Nucleophile and Ketone as Electrophile”
Hayashi, Y.*; Sekizawa, H.; Yamaguchi, J.; Gotoh, H.
J. Org. Chem. **2007**, *72*, 6493–6499.
- 117.** “Total Synthesis of Marinomycins A-C and of Their Monomeric Counterparts Monomarinomycin A and iso-Monomarinomycin A”
Nicolaou, K. C.*; Nold, A. L.; Milburn, R. R.; Schindler, C. S.; Cole, K. P.; Yamaguchi, J.
J. Am. Chem. Soc. **2007**, *129*, 1760–1768.
- 118.** “Enantio- and Diastereoselective Total Synthesis of (+)-Panepophenanthrin”
Matsuzawa, M.; Kakeya, H.; Yamaguchi, J.; Shoji, M.; Onose, R.; Osada, H.; Hayashi, Y.*
Chem. Asian J. **2006**, *1*, 845–851.
- 119.** “Large Nonlinear Effect Observed in the Enantiomeric Excess of Proline in Solution and That in the Solid State”
Hayashi, Y.*; Matsuzawa, M.; Yamaguchi, J.; Yonehara, S.; Matsumoto, Y.; Shoji, M.; Hashizume, D.; Koshino, H.
Angew. Chem., Int. Ed. **2006**, *45*, 4593–4597.
- 120.** “Concise Enantio- and Diastereoselective Total Syntheses of Fumagillol, RK-805, FR65814, Ovalicin, and 5-Demethylovalicin”
Yamaguchi, J.; Toyoshima, M.; Shoji, M.; Kakeya, H.; Osada, H.; Hayashi, Y.*
Angew. Chem., Int. Ed. **2006**, *45*, 789–793.
- 121.** “Determination by Asymmetric Total Synthesis of The Absolute Configuration of Lucilactaene, a Cell Cycle Inhibitor in p53-Transfected Cells”
Yamaguchi, J.; Kakeya, H.; Uno, T.; Shoji, M.; Osada, H.; Hayashi, Y.*
Angew. Chem., Int. Ed. **2005**, *44*, 3110–3115.
- 122.** “A Highly Active 4-Siloxyproline Catalyst for Asymmetric Synthesis”
Hayashi, Y.*; Yamaguchi, J.; Hibino, K.; Sumiya, T.; Urushima, T.; Shoji, M.; Hashizume, D.; Koshino, H.
Adv. Synth. Catal. **2004**, *12*, 1435–1439.
[Highlighted in *Letters in Organic Chemistry*, 2005, 2, 5, 392-397 \(News and Views\)](#)
- 123.** “Structure-Activity Relationships of Epolactaene Derivatives”

- Nagumo, Y.; Kakeya, H.; [Yamaguchi, J.](#); Uno, T.; Shoji, M.; Hayashi, Y.*; Osada, H.
***Bioorg. Med. Chem. Lett.* 2004, 14, 4425–4429.**
124. “Direct Proline-Catalyzed Asymmetric α -Aminooxylation of Aldehydes and Ketones”
Hayashi, Y.*; [Yamaguchi, J.](#); Sumiya, T.; Hibino, K.; Shoji, M.
***J. Org. Chem.* 2004, 69, 5966–5973.**
125. “Direct Proline-Catalyzed Asymmetric α -Aminooxylation of Ketones”
Hayashi, Y.*; [Yamaguchi, J.](#); Sumiya, T.; Shoji, M.
***Angew. Chem., Int. Ed.* 2004, 43, 1112–1115.**
Selected as VIP paper in *Angew. Chem., Int. Ed.*
126. “Direct Proline Catalyzed Asymmetric α -Aminooxylation of Aldehydes”
Hayashi, Y.*; [Yamaguchi, J.](#); Hibino, K.; Shoji, M.
***Tetrahedron Lett.* 2003, 44, 8293–8296.**
127. “Asymmetric Total Synthesis of Pseurotin A”
Hayashi, Y.*; Shoji, M.; Yamaguchi, S.; Mukaiyama, T.; [Yamaguchi, J.](#); Kakeya, H.; Osada, H.
***Org. Lett.* 2003, 5, 2287–2290.**
128. “Asymmetric Total Synthesis of (-)-Azaspirene, a Novel Angiogenesis Inhibitor”
Hayashi, Y.*; Shoji, M.; [Yamaguchi, J.](#); Sato, K.; Yamaguchi, S.; Mukaiyama, T.; Sakai, K.; Asami, Y.; Kakeya, H.; Osada, H.
***J. Am. Chem. Soc.* 2002, 124, 12078–12079.**
129. “The Diastereoselective Asymmetric Total Synthesis of NG-391, a Neuronal Cell-Protecting Molecule”
Hayashi, Y.*; [Yamaguchi, J.](#); Shoji, M.
***Tetrahedron* 2002, 58, 9839–9846.**
130. “Diastereoselective Total Synthesis of Both Enantiomers of Epolactaene”
Hayashi, Y.*; Kanayama, J.; [Yamaguchi, J.](#); Shoji, M.
***J. Org. Chem.* 2002, 67, 9443–9448.**
131. “Total Synthesis of (+)-Epoxyquinols A and B”
Shoji, M.; [Yamaguchi, J.](#); Kakeya, H.; Osada, H.; Hayashi, Y.*
***Angew. Chem., Int. Ed.* 2002, 41, 3192–3194.**
Selected as Hot paper in *Angew. Chem., Int. Ed.*