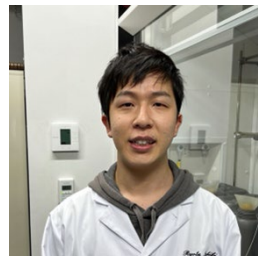


CV

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Date of Birth

September 7, 1994

Citizenship

Japanese

Education

2013–2017	B.S., Waseda University, Japan (Prof. Junichiro Yamaguchi), March 2017
2017–2019	M.S., Waseda University, Japan (Prof. Junichiro Yamaguchi), March 2019
2019–2022	Ph.D., Waseda University, Japan (Prof. Junichiro Yamaguchi)
2019–2022	JSPS Research Fellowship for Young Scientists (DC1)
2020	Visiting Student (January–March), Purdue University, US (Prof. Mingji Dai)

Academic Career

2022–present	Specially Appointed Assistance Professor, Institute for Chemical Reaction Design and Discover (WPI-ICReDD), Hokkaido University (with Prof. Hajime Ito)
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Awards and Fellowships

- 2019–2022 JSPS Research Fellowship for Young Scientists (DC1)
- 2020 The 10th Waseda Research Institute for Science and Engineering, Grant-in-Aid for Young Scientists (Early Bird).
- 2021 The 11th Otsu Conference Fellow (February 2021)
- 2018 Poster Award (The 114th Symposium on Organic Synthesis, November)
- 2019 The 1st Encouragement Award of Morimura Homei Kai
- 2019 Oral Presentation Award (The 54th Yuki Hanno Wakate no Kai, Japan, July)
- 2021 CSJ Student Presentation Award 2021 (The Chemical Society of Japan 2021, 101st Annual Meeting)
- 2021 Presentation Award (The 119th Symposium on Organic Synthesis, November)
- 2022 Mizuno Award (Waseda University, March)

Media

[Chem-Station Spotlight Research1](#)

[Chem-Station Spotlight Research2](#)

Publication

14. Catalysis-Enabled Concise and Stereoselective Total Synthesis of the Tricyclic Prostaglandin D₂ Metabolite Methyl Ester
Sims, H. S.; de Andrade Horn, P.; [Isshiki, R.](#); Lim, M.; Xu, Y.; Grubbs, R. H.; Dai, M.
Angew. Chem., Int. Ed., **2022**, *61*, e202115633.
DOI: [10.1002/anie.202115633](https://doi.org/10.1002/anie.202115633)
13. 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 newspaper and Website (Chemicadaily, [Chem-Station](#))
[Waseda University Press Release](#)
DOI: [10.1021/jacs.1c04215](https://doi.org/10.1021/jacs.1c04215)
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 **2021**, 32, 1555–1559.

DOI: [10.1055/s-0040-1705943](https://doi.org/10.1055/s-0040-1705943)

11. Site-selective Functionalization of Arenes by “Sulfonium Salt Formation/Coupling Reaction” (review)
[Isshiki, R.](#)
J. Synth. Org. Chem. Jpn. **2020**, 896–897.
DOI: [10.5059/yukigoseikyokaishi.78.896](https://doi.org/10.5059/yukigoseikyokaishi.78.896) (Japanese)
10. 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.
DOI: [10.1246/bcsj.20200045](https://doi.org/10.1246/bcsj.20200045)
9. 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.
DOI: [10.1021/jacs.0c02839](https://doi.org/10.1021/jacs.0c02839)
Most Read Article (May, 2020)
Highlighted in newspaper and Website (Chemicadaily, [Chem-Station](#))
[Waseda University Press Release](#)
8. Ester Transfer Reaction of Aromatic Esters with Haloarenes and Arenols by a Nickel Catalyst
[Isshiki, R.](#)[†]; Inayama, N.[†]; Muto, K.; Yamaguchi, J.
[†] These authors contributed equally.
ACS Catal. **2020**, 10, 3490–3494.
DOI: [10.1021/acscatal.0c00291](https://doi.org/10.1021/acscatal.0c00291)
Most Read Article (March and April, 2020)
Highlighted in newspaper and Website ([Nikkeisangyoshinbun](#), [Chemicadaily](#), [Chem-Station](#))
[Waseda University Press Release](#)
7. 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.
DOI: [10.1002/ajoc.201800207](https://doi.org/10.1002/ajoc.201800207)
6. 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.
DOI: [10.1002/asia.201800478](https://doi.org/10.1002/asia.201800478)
5. Decarbonylative Coupling Reaction of Aromatic Esters (review)
Issiki, R.; Okita, T.; Muto, K.; Yamaguchi, J.
J. Synth. Org. Chem. Jpn. **2018**, 300–314.
DOI: [10.5059/yukigoseikyokaishi.76.300](https://doi.org/10.5059/yukigoseikyokaishi.76.300) (Japanese)
4. Decarbonylative Aryl Thioether Synthesis by Ni Catalysis
Ishitobi, K.[†]; Isshiki, R.[†]; Asahara, K. K.; Lim, C.; Muto, K.; Yamaguchi, J.
[†] These authors contributed equally.
Chem. Lett. **2018**, *47*, 756–759.
DOI: [10.1246/cl.180226](https://doi.org/10.1246/cl.180226)
3. Decarbonylative C–P Bond Formation using Aromatic Esters and Organophosphorus Compounds
Isshiki, R.; Muto, K.; Yamaguchi, J.
Org. Lett. **2018**, *20*, 1150–1153.
DOI: [10.1021/acs.orglett.8b00080](https://doi.org/10.1021/acs.orglett.8b00080)
2. Catalytic α -Arylation of Ketones with Heteroaromatic Esters
Isshiki, R.; Takise, R.; Itami, K.; Muto, K.; Yamaguchi, J.
Synlett **2017**, *28*, 2599–2603.
DOI: [10.1055/s-0036-1589120](https://doi.org/10.1055/s-0036-1589120)
1. 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.
DOI: [10.1021/jacs.7b00049](https://doi.org/10.1021/jacs.7b00049)

Most Read Article (March, 2017),

Highlighted in Newspapers and Websites ([Chemicadaily](#)

[Nikkeisyangyoshinbun](#) [Phys.org](#) [c2W](#) [ScienceDaily](#) [Chem-Station](#))

[Waseda University Press Release](#)

Presentation

International

5. “Ni-Catalyzed Aryl Transfer Reaction between Two Different Aromatic Compounds”
Ryota Isshiki, Miki B. Kurosawa, Naomi Inayama, Kei Muto, Junichiro Yamaguchi
13th AFMC International Medicinal Chemistry Symposium (AIMECS2021), online, November 29th–December 2nd, 2021. (poster)
4. “Ni-Catalyzed Aryl Transfer Reaction between Two Different Aromatic Compounds”
Ryota Isshiki, Miki B. Kurosawa, Naomi Inayama, Kei Muto, Junichiro Yamaguchi.
13th AFMC International Medicinal Chemistry Symposium (AIMECS2021) (PO-91Online), November 29th–December 2nd, 2021. (poster)
3. “Decarbonylative C–Heteroatom Bond Formation of Aromatic Esters”
Ryota Isshiki, Naomi Inayama, Kei Muto, Junichiro Yamaguchi
Japan XR Science Forum 2020, online, July 12th, 2020. (poster)
2. “Novel Transformation of Aromatic Esters: Ester Transfer and Deoxygenative Coupling”
Ryota Isshiki, Miki Kurosawa, Naomi Inayama, Kei Muto, Junichiro Yamaguchi
The 18th ACC, Taiwan, December 10th, 2019. (poster)
1. “Decarbonylative C–Heteroatom Bond Formation of Carboxylic Acid Derivatives”
Ryota Isshiki, Kota Ishitobi, Kotaro Asahara, Kei Muto, Junichiro Yamaguchi
ISHC XXI 2018 (P107), Beurs van Berlage, Amsterdam, Netherlands, July 11th and 12th, 2018. (poster)

Domestic

16. “Deacylative Coupling Reaction through Claisen-Retro-Claisen Condensation”
Ryota Isshiki, Hikaru Nakahara, Keiichi Iizumi, Masayuki Kubo, Kei Muto, Junichiro Yamaguchi
The Chemical Society of Japan 2021, 102nd Annual Meeting, online, March 23rd, 2022. (oral)
15. “Ni-Catalyzed Aryl Transfer Reaction between Two Different Aromatic Compounds”
Ryota Isshiki, Miki Kurosawa, Naomi Inayama, Kei Muto, Junichiro

- Yamaguchi
The 119th Symposium on Organic Synthesis, online, November 9th, 2021.
(oral)
14. “Ni-Catalyzed Aryl Transfer Reaction between Two Different Aromatic Compounds”
Ryota Isshiki, Miki Kurosawa, Naomi Inayama, Kei Muto, Junichiro Yamaguchi
The Chemical Society of Japan 2021, 101st Annual Meeting, online, March 22nd, 2021. (oral)
13. “Ni-Catalyzed Aryl Transfer Reaction between Two Different Aromatic Compounds”
Ryota Isshiki, Miki Kurosawa, Naomi Inayama, Kei Muto, Junichiro Yamaguchi
The 11th Otsu Conference, online, February 22nd, 2021. (oral)
12. “Novel Transformation of Aromatic Esters: Ester Transfer and Deoxygenative Coupling”
Ryota Isshiki, Naomi Inayama, Miki Kurosawa, Kei Muto, Junichiro Yamaguchi
59th Symposium on Organometallic Chemistry, Tokyo Metropolitan University, Tokyo, Japan, September 16th, 2019. (poster)
11. “Ni-catalyzed Ester Transfer Reaction”
Ryota Isshiki, Naomi Inayama, Kei Muto, Junichiro Yamaguchi
The 54th Yuki Hanno Wakate no Kai, Kai-Hu-Kan, Osaka, Japan, July 1st, 2019.
(oral)
10. “Ni-Catalyzed Ester Transfer of Aromatic Esters to Arenols”
Ryota Isshiki, Naomi Inayama, Kei Muto, Junichiro Yamaguchi
The Chemical Society of Japan 2019, 99th Annual Meeting, Konan University, Hyogo, Japan, March 17th, 2019. (oral)
9. “Decarbonylative C–Heteroatom Bond Formation of Carboxylic Acid Derivatives”
Ryota Isshiki, Kota Ishitobi, Kotaro Asahara, Kei Muto, Junichiro Yamaguchi
The 114th Symposium on Organic Synthesis, Waseda University, Tokyo, Japan, November 7th, 2018. (poster)
8. “Decarbonylative C–Heteroatom Bond Formation of Carboxylic Acid Derivatives”
Ryota Isshiki, Kota Ishitobi, Kotaro Asahara, Kei Muto, Junichiro Yamaguchi

- The 9th Subway Seminar, Waseda University, Tokyo, Japan, August 20th, 2018.
(poster)
7. “Decarbonylative C–Heteroatom Bond Formation of Carboxylic Acid Derivatives”
Ryota Isshiki, Kota Ishitobi, Kotaro Asahara, Kei Muto, Junichiro Yamaguchi
2018 Summer Symposium on the Japanese Society for Process Chemistry,
Tower Hall Hunabori, Tokyo, Japan, July 27th, 2018. (poster)
 6. “Decarbonylative C–P Bond Formation by Ni Catalysis”
Ryota Isshiki, Kei Muto, Junichiro Yamaguchi
The Chemical Society of Japan 2018, 98th Annual Meeting, Nihon University,
Chiba, Japan, March 23th, 2018. (oral)
 5. “Decarbonylative C–Heteroatom Bond Formation of Aromatic Esters”
Ryota Isshiki, Ryosuke Takise, Kei Muto, Junichiro Yamaguchi
The 7th CSJ Chemistry Festa 2017, Tower Hall Hunabori, Tokyo, Japan,
October 18th, 2017. (poster)
 4. “Catalytic Heterofunctionalization of Aromatic Esters”
Ryota Isshiki, Ryosuke Takise, Kei Muto, Junichiro Yamaguchi
The 34th Seminar on Synthetic Organic Chemistry, Kanazawa Bunka Hall,
Ishikawa, Japan, September 13th, 2017. (poster)
 3. “Decarbonylative C–Heteroatom Bond Formation of Aromatic Esters”
Ryota Isshiki, Ryosuke Takise, Kei Muto, Junichiro Yamaguchi
57th Symposium on Organometallic Chemistry, Tohoku University, Miyazaki,
Japan, September 8th, 2017. (poster)
 2. “Decarbonylative C–Heteroatom Bond Formation of Aromatic Esters”
Ryota Isshiki, Ryosuke Takise, Kei Muto, Junichiro Yamaguchi
The 8th Subway Seminar, Tokyo University of Science, Tokyo, Japan, August
26th, 2017. (poster)
 1. “Decarbonylative Diaryl ether Synthesis by Pd and Ni Catalysis”
Ryota Isshiki, Ryosuke Takise, Kenichiro Itami, Kei Muto, Junichiro
Yamaguchi
The Chemical Society of Japan 2017, 97th Annual Meeting, Keio University,
Kanagawa, Japan, March 16th, 2017. (poster)