

研究業績目録

田口 純平

1. 原著論文

- (1) Inoue, S.; Shirakura, K.; Shirono, A.; Taguchi, J.; Ikeda, Y.; Tomita, S.; Funatsu, R.; Muraoka, K.; Hashimoto, Y.; Tachibana, K.; Hino, N.; Doi, T.; Ikemi, Y.; Nunomura, K.; Lin, B.; Nakagawa, S.; Tsujikawa, K.; Tanaka, S.; Obana, M.; Fujio, Y.; Hosoya, T.; Takeda, H.; Kondoh, M.; Okada, Y.
“Claudin 5-binding small molecule transiently opens the blood-brain barrier and safely enhances brain drug delivery”
J. Control. Release **2025**, 388, 114314.
- (2) Toyomoto, M.; Kurihara, T.; Nakagawa, T.; Inoue, A.; Kimura, R.; Kii, I.; Sawada, T.; Ogihara, T.; Nagayasu, K.; Kishi, T.; Onogi, H.; Im, D.; Asada, H.; Iwata, S.; Taguchi, J.; Sumida, Y.; Yoshida, S.; Aoki, J.; Hosoya, T.; Hagiwara, M.
“Discovery and development of an oral analgesic targeting the $\alpha 2B$ adrenoceptor”
PNAS **2025**, 122, e2500006122.
- (3) *Taguchi, J.; Ohata, Y.; Akimoto, H.; Tabuchi, H.; Igawa, K.; Tomooka, K.; Niwa, T.; *Hosoya, T.
“Boronate Formation-triggered Azide–Alkyne Cycloaddition”
Org. Lett. **2025**, 17, 4428.
- (4) Taguchi, J.; Omoto, Y.; Uto, K.; Tabuchi, H.; Uekusa, H.; Niwa, T.; *Hosoya, T.
“Revisiting the Synthetic Utility of 4,5-Dehydro[2.2]paracyclophane”
Adv. Synth. Catal. **2025**, 367, e202400986.
- (5) Taguchi, J.; Tokunaga, K.; Tabuchi, H.; Nishiyama, T.; Kii, I.; *Hosoya, T.
“1,3-Butadiynyl sulfide-based compact trialkyne platform molecule for sequential assembly of three azides”
Chem. Commun. **2024**, 60, 14581–14584. 【Selected as Outside back cover in Issue 98, 2024】
- (6) Taguchi, J.; Okuyama, T.; Tomita, S.; Niwa, T.; *Hosoya, T.
“Synthesis of Multisubstituted Aromatics via 3-Triazenylarynes”
Org. Lett. **2023**, 25, 7030–7034.
- (7) Taguchi, J.; Kimura, K.; Igawa, K.; Tomooka, K.; Hosoya, T.*
“3-Azidoarynes: Generation and Regioselective Reactions”
Chem. Lett. **2022**, 51, 94–98.
- (8) Inouye, S.*; Sumida, Y.; Tomabeche, Y.; Taguchi, J.; Shirouzu, M.; Hosoya, T.*

“Chiral deaza-coelenterazine analogs for probing a substrate-binding site in the Ca²⁺-binding photoprotein aequorin”

PLOS ONE **2021**, *16* (6), e0251743.

- (9) Matsuura, S.; Taguchi, J.; Seki, T.; Ito, H.*

“Synthesis and Optical Properties of C,N-Swapped Boranils Derived from Potassium Acyltrifluoroborates”

Bull. Chem. Soc. Jpn. **2021**, *94*, 1547–1552.

【Selected as Cover Picture in Issue 5, 2021】 【Selected as BCSJ Award Article】

- (10) Inouye, S.*, Nakamura, M.; Taguchi, J.; Hosoya, T.

“Identification of a novel oxidation product from yellow fluorophore in the complex of apoPholasin and dehydrocoelenterazine”

Bioorg. Med. Chem. Lett. **2020**, *30*, 127435.

- (11) Taguchi, J.; Matsuura, S.; Seki, T.; Ito, H.*

“Synthesis and Tunable Optical Properties of C,N-Chelated Borate Luminophores Derived from Potassium Acyltrifluoroborates”

Chem. Eur. J. **2020**, *26*, 2450–2455.

- (12) Taguchi, J.; Takeuchi, T.; Takahashi, R.; Masero, F.; Ito, H.*

“Concise Synthesis of Potassium Acyltrifluoroborates from Aldehydes through Cu(I)-catalyzed Borylation/Oxidation”

Angew. Chem., Int. Ed. **2019**, *58*, 7299–7303.

【Top 10% Downloaded Paper 2018–2019】 【Selected as Insidecover in Issue 22, 2019】

- (13) Taguchi, J.; Ikeda, T.; Takahashi, R.; Sasaki, I.; Ogasawara, Y.; Dairi, T.; Kato, N.; Yamamoto, Y.; Bode, J. W.*; Ito, H.*

“Synthesis of Acylborons by Ozonolysis of Alkenylboronates: Preparation of an Enantioenriched Amino Acid Acylboronate”

Angew. Chem., Int. Ed. **2017**, *56*, 13847–13851.

- (14) Sasaki, I.; Taguchi, J.; Doi, H.; Ito, H.*; Ishiyama, T.*

“Iridium(I)-catalyzed C–H Borylation of α , β -Unsaturated Esters with Bis(pinacolato)diboron”

Chem. Asian J. **2016**, *11*, 1400–1405.

- (15) Sasaki, I.; Ikeda, T.; Amou, T.; Taguchi, J.; Ito, H.*; Ishiyama, T.*

“Regioselective C–H Borylation of Heteroaromatic Aldimines with Iridium Complexes”

Synlett **2016**, *27*, 1582–1586.

- (16) Sasaki, I.; Taguchi, J.; Hiraki, S.; Ito, H.*; Ishiyama, T.*
“Catalyst-Controlled Regiodivergent C–H Borylation of Multifunctionalized Heteroarenes Using Iridium Complexes”
Chem. Eur. J. **2015**, *21*, 9236–9241.

2. 総説

- (1) Wu, D.; Taguchi, J.; Tanriver, M; Bode, J. W.* “Synthesis of Acylboron Compounds”
Angew. Chem., Int. Ed. **2020**, *59* (39), 16847–16858.

3. 国際学会発表

- (1) Taguchi, J.; Kimura, K.; Okuyama, T.; Igawa, K.; Tomooka, K.; Hosoya, T.
“Synthesis of multisubstituted aromatics via 3-azidoaryne and 3-triazenylaryne species”
The 15th International Kyoto Conference on New Aspects of Organic Chemistry (IKCOC-15)
Kyoto, 2023 年 11 月.
- (2) Taguchi, J.; Takeuchi, T.; Takahashi, R.; Bode, J. W.; Ito, H.
“Oxidative Synthesis of α -Amino Acylborons and their Application to Peptide Ligation”
The 8th Junior International Conference on Cutting-Edge Organic Chemistry in Asia
(Junior ICCEOCA-8), Singapore, 2018 年 10 月.
- (3) Taguchi, J.; Ikeda, T.; Rina, Takahashi, Sasaki, I.; Bode, J. W.; Ito, H.
“Concise synthesis of acylboronates by ozonolysis and their application to oligopeptide synthesis”
256th ACS National Meeting and Exposition, Boston (Massachusetts), 2018 年 8 月.
- (4) Taguchi, J.; Ikeda, T.; Sasaki, I.; Bode, J. W.; Ito, H.
“Concise Synthesis of Acylboronates by Ozonolysis of Alkenylboronates”
16th International Meeting on Boron Chemistry (IMEBORON XVI), Hong Kong, 2017 年 7 月.
- (5) Taguchi, J.; Sasaki, I.; Hiraki, S.; Ito, H.; Ishiyama, T.
“Iridium-Catalyzed Regiodivergent C–H Borylation of Multifunctionalized Heteroarenes”
Organometallic Chemistry Directed Towards Organic Synthesis (OMCOS 18)
Sitges (Barcelona), 2015 年 6 月.

以上