

Curriculum Vitae

Personal Information

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Education

2012. 03 **B. Sc.** Department of Pharmaceutical Sciences, Kyoto University,
Japan (Prof. Yoshiji Takemoto)
2014. 03 **M. Sc.** Graduate School of Pharmaceutical Science, Kyoto University,
Japan (Prof. Yoshiji Takemoto)
2018. 09 **Ph. D.** Max-Planck-Institut für Kohlenforschung, Germany (Prof.
Benjamin List)

Academic Career

2018. 10 – 2019. 02 **Postdoc** (interim), Max-Planck-Institut für Kohlenforschung, Germany
(Prof. Benjamin List)
2019. 03 – 2019. 12 **Postdoc**, Department of Chemistry, University of California, Berkeley
(Prof. Omar M. Yaghi)
2020. 01 – 2023. 03 **Specially Appointed Assistant Professor (Co-PI)**, Institute for
Chemical Reaction Design and Discovery (WPI-ICReDD), Hokkaido
University (Prof. Benjamin List)
2023. 04 – present **Specially Appointed Associate Professor (Co-PI)**, Institute for
Chemical Reaction Design and Discovery (WPI-ICReDD), Hokkaido
University (Prof. Benjamin List)

Fellowships & Grants

2020. 09 – 2022. 03 JSPS Grant-in-Aid for Research Activity Start-up (20K22515)
2022. 04 – present JSPS Grant-in-Aid for Young Scientists (22K14672)

Awards

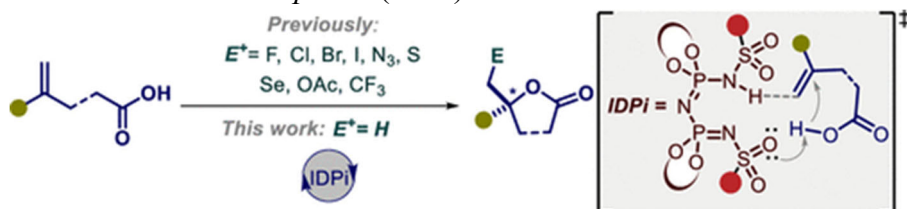
2023 Thieme Chemistry Journals Award

Publications

1. Rajat Maji, Santanu Ghosh, Oleg Grossmann, Pinglu Zhang, Markus Leutzsch, Nobuya Tsuji, Benjamin List*

“A Catalytic Asymmetric Hydroxylactonization”

J. Am. Chem. Soc. in press. (2023)

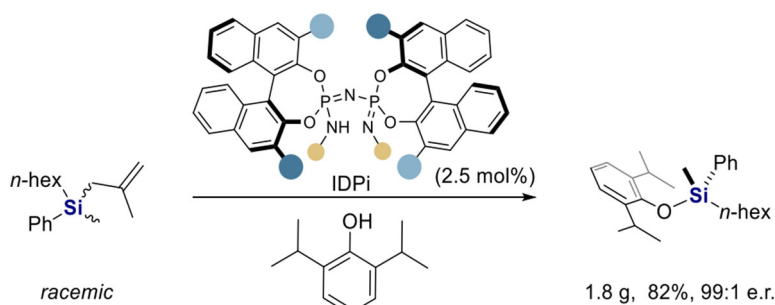


◆ Up to 98:2 e.r. ◆ Up to 98% yield ◆ Scalable ◆ Natural Product synthesis
 ◆ In-depth physical organic and DFT analyses

2. Hui Zhou, Roberta Properzi, Markus Leutzsch, Paola Belanzoni, Giovanni Bistoni, **Nobuya Tsuji**, Jung Tae Han, Chendan Zhu, Benjamin List*

“Organocatalytic DYKAT of *Si*-Stereogenic Silanes”

J. Am. Chem. Soc. 145, 4994–5000 (2023)



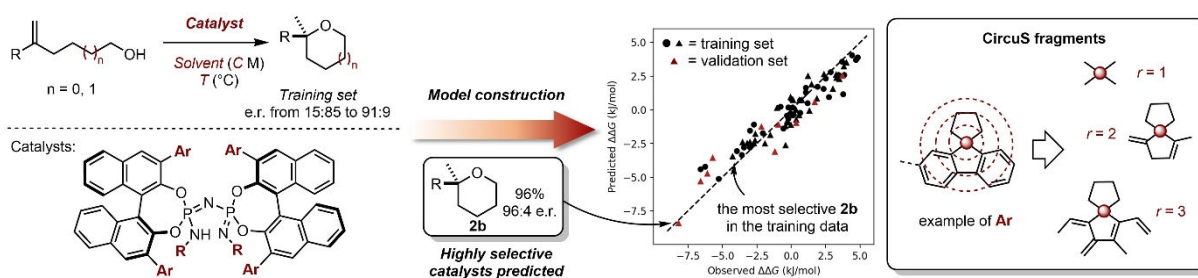
3. **Nobuya Tsuji**^{†*}, Pavel Sidorov^{†*}, Chendan Zhu, Yuuya Nagata, Timur Gimadiev, Alexandre Varnek*, Benjamin List*

“Predicting Highly Enantioselective Catalysts Using Tunable Fragment Descriptors”

Angew. Chem. Int. Ed. 62, e202218659 (2023).

preprint: *ChemRxiv*, (2022) DOI: 10.26434/chemrxiv-2022-bsmdl

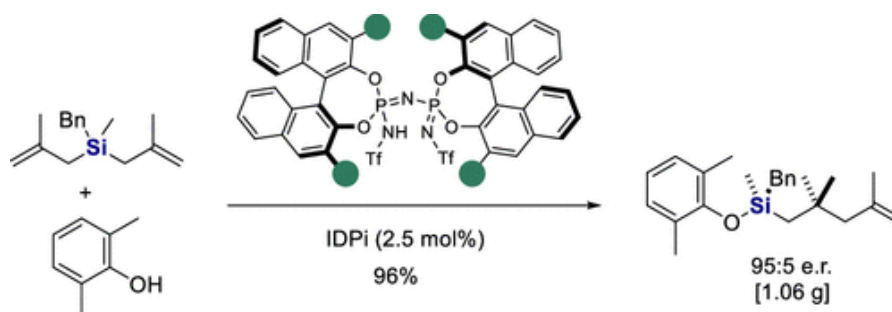
[†] Equal contributions.



4. Hui Zhou, Jung Tae Han, Nils Nöthling, Monika M. Lindner, Judith Jenniches, Clemens Kühn, **Nobuya Tsuji**, Li Zhang, and Benjamin List*

“Organocatalytic Asymmetric Synthesis of *Si*-Stereogenic Silyl Ethers”

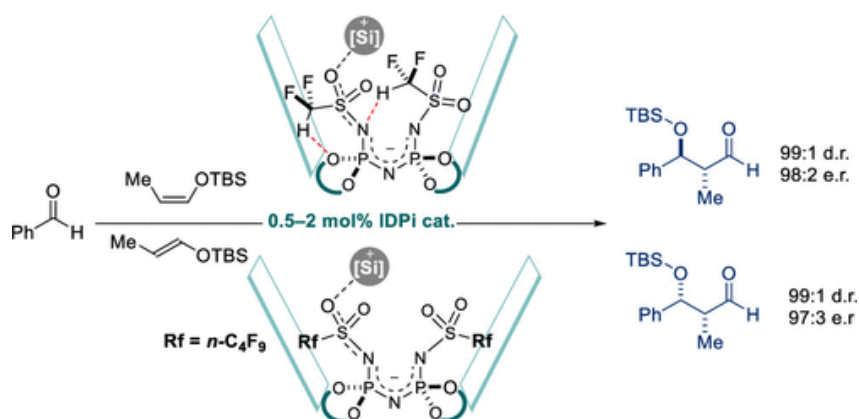
J. Am. Chem. Soc. 144, 10156–10161 (2022).



5. Tynchtyk Amatov, **Nobuya Tsuji**, Rajat Maji, Lucas Schreyer, Hui Zhou, Markus Leutzsch, and Benjamin List*

“Confinement-Controlled, Either *syn*- or *anti*-Selective Catalytic Asymmetric Mukaiyama Aldolizations of Propionaldehyde Enolsilanes”

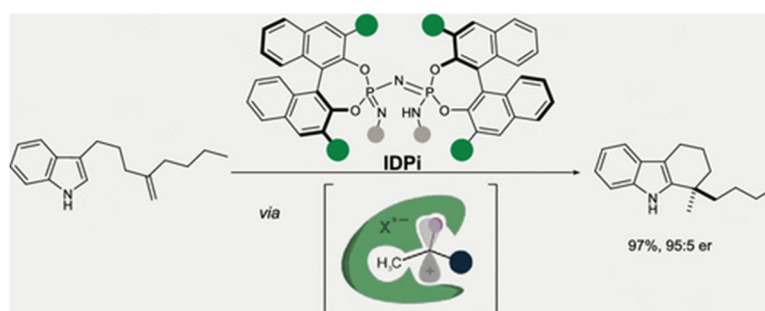
J. Am. Chem. Soc. 143, 14475–14481 (2021).



6. Pinglu Zhang, **Nobuya Tsuji**, Jie Ouyang, and Benjamin List*

“Strong and Confined Acids Catalyze Asymmetric Intramolecular Hydroarylations of Unactivated Olefins with Indoles”

J. Am. Chem. Soc. 143, 675–680 (2021).

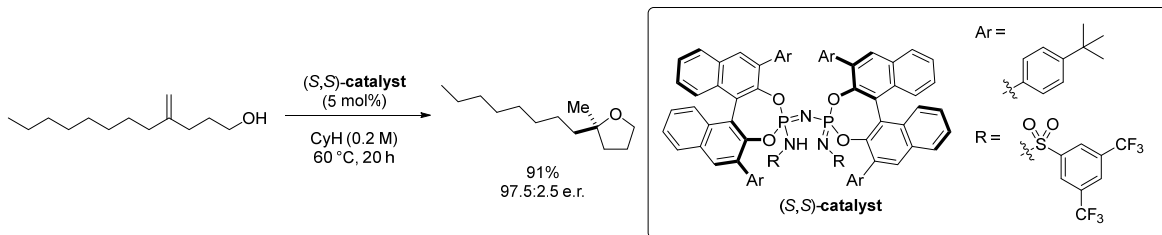


7. **Nobuya Tsuji**, Jennifer L. Kennemur, Thomas Buyck, Sunggi Lee, Sébastien Prévost, Philip S. J. Kaib, Dmytro Bykov, Christophe Farès and Benjamin List*

“Activation of olefins via asymmetric Brønsted acid catalysis”

Science 359, 1501–1505 (2018).

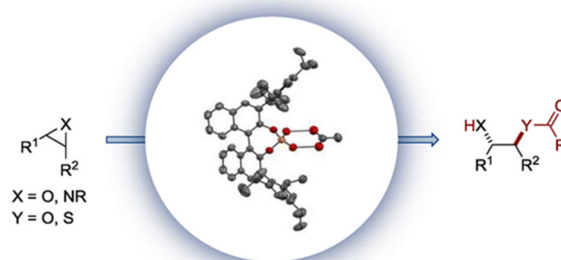
Highlighted on ACS Chemical & Engineering News



8. Mattia Riccardo Monaco, Daniele Fazzi, **Nobuya Tsuji**, Marcus Leutzsch, Saihu Liao, Walter Thiel and Benjamin List*

“Self-Assembly Asymmetric Organocatalysis: A Combined Experimental and Computational Investigation”

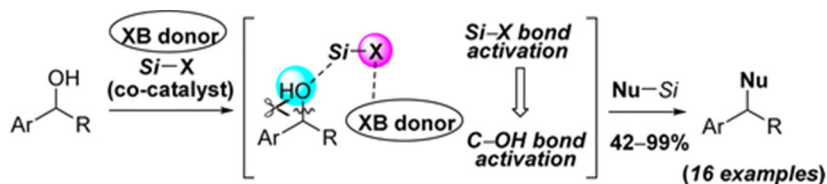
J. Am. Chem. Soc. 138, 14740–14749 (2016).



9. Masato Saito, **Nobuya Tsuji**, Yusuke Kobayashi and Yoshiji Takemoto*

“Direct Dehydroxylative Coupling Reaction of Alcohols with Organosilanes through Si–X Bond Activation by Halogen Bonding”

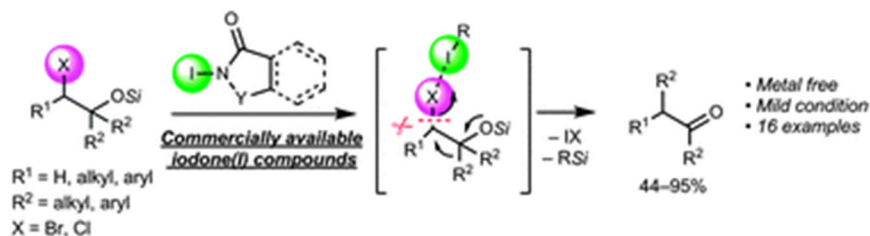
Org. Lett. 17, 3000–3003 (2015).



10. **Nobuya Tsuji**, Yusuke Kobayashi and Yoshiji Takemoto*

“Electrophilic iodine(I) compounds induced semipinacol rearrangement via C–X bond cleavage”

Chem. Commun. 50, 13691–13694 (2014).

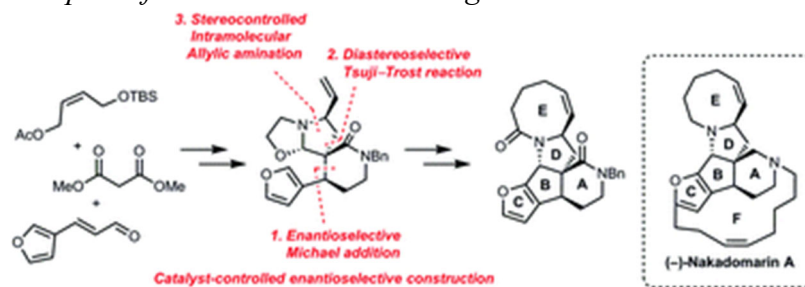


11. **Nobuya Tsuji**, Yusuke Kobayashi and Yoshiji Takemoto*

“Catalytic asymmetric synthesis of the pentacyclic core of (–)-Nakadomarin A via oxazolidine as an iminium cation equivalent”

Org. Biomol. Chem. 12, 7919–7922 (2014).

This article is a part of 2014 Hot Articles in Organic and Biomolecular Chemistry.



Presentations

1. “Predicting Highly Enantioselective Catalysts Using Tunable Fragment Descriptors”
Nobuya Tsuji^{†*}, Pavel Sidorov^{†*}, Chendan Zhu, Yuuya Nagata, Timur Gimadiev, Alexandre Varnek*, Benjamin List*
Winter In-Person Organic Symposium 2022 (December 2022; Waikiki, USA, poster)
2. “Predicting Highly Enantioselective Catalysts Using Tunable Fragment Descriptors”
Nobuya Tsuji^{†*}, Pavel Sidorov^{†*}, Chendan Zhu, Yuuya Nagata, Timur Gimadiev, Alexandre Varnek*, Benjamin List*
Joint Symposium of the Faculty of Pharmaceutical Sciences & WPI-ICReDD in Hokkaido University (September 2022; online, oral)
3. “Activation of Olefins via Asymmetric Brønsted Acid Catalysis”
Nobuya Tsuji, Jennifer L. Kennemur, Thomas Buyck, Sunggi Lee, Sébastien Prévost, Philip S. J. Kaib, Dmytro Bykov, Christophe Farès and Benjamin List
16th Belgian Organic Synthesis Symposium (July 2018; Brussels, Belgium, poster)
4. “Activation of Olefins via Asymmetric Brønsted Acid Catalysis”
Nobuya Tsuji, Jennifer L. Kennemur, Thomas Buyck, Sunggi Lee, Sébastien Prévost, Philip S. J. Kaib, Dmytro Bykov, Christophe Farès and Benjamin List
The 9th Münster Symposium on Cooperative Effects in Chemistry (March 2018; Münster, Germany, poster)

References

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