

## CURRICULUM VITAE

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### EDUCATION

2006.3 Ph.D., Graduate School of Pharmaceutical Sciences, The University of Tokyo  
(supervisor: Prof. Masakatsu Shibasaki)  
2001.3 B.Sc., The University of Tokyo

### CAREER

2022.7- Professor, School of Pharmaceutical Sciences,  
University of Shizuoka  
2018.4-2022.6 Associate Professor, Graduate School of Pharmaceutical Sciences,  
The University of Tokyo  
2014.2-2018.3 Deputy Team Leader, Advanced Elements Chemistry Research Team,  
RIKEN Center for Sustainable Resource Science  
2012.4-2014.1 Lecturer, Graduate School of Pharmaceutical Sciences,  
The University of Tokyo  
2010.8-2012.3 Assistant Professor, Graduate School of Pharmaceutical Sciences,  
The University of Tokyo  
2007.4-2010.7 Assistant Professor, Institute for Chemical Research,  
Kyoto University  
2006.4-2007.3 Postdoctoral Fellow (JSPS Fellowships for Research Abroad),  
Massachusetts Institute of Technology  
(working with Prof. Timothy M. Swager)

## ORIGINAL PAPERS

1. Controlled Tetradeuteration of Straight-Chain Fatty Acids: Synthesis, Application, and Insight into the Metabolism of Oxidized Linoleic Acid  
Ayako Watanabe,<sup>‡</sup> Kotaro Hama,<sup>\*‡</sup> Kohei Watanabe, Yuko Fujiwara, Kazuaki Yokoyama, Shigeo Murata, and Ryo Takita<sup>\*</sup> (<sup>‡</sup> co-first authors)  
*Angew. Chem. Int. Ed.* **2022**, *61*, e202202779. (DOI: 10.1002/anie.202202779)  
<Front Cover> (DOI: [10.1002/anie.202207054](https://doi.org/10.1002/anie.202207054))  
(Press release from UTokyo)
2. Synthesis of 3-Allylindoles via Annulation of *N*-Allyl-2-ethynylaniline Derivatives Using a P,Olefin Type Ligand/Pd(0) Catalyst  
Takashi Mino,<sup>\*</sup> Toshiki Yamaoka, Kohei Watanabe,<sup>\*</sup> Chihiro Masuda, Shohei Kasano, Yasushi Yoshida, Ryo Takita, Yoshio Kasashima, and Masami Sakamoto  
*J. Org. Chem.* **2022**, *87*, 7365-7377. (DOI: [10.1021/acs.joc.2c00588](https://doi.org/10.1021/acs.joc.2c00588))
3. Mechanistic Details of Asymmetric Bromocyclization with BINAP Monoxide: Identification of Chiral Proton-Bridged Bisphosphine Oxide Complex and Its Application to Parallel Kinetic Resolution  
Kenji Yamashita, Ryo Hirokawa, Mamoru Ichikawa, Tatsunari Hisanaga, Yoshihiro Nagao, Ryo Takita, Kohei Watanabe, Yuji Kawato, and Yoshitaka Hamashima  
*J. Am. Chem. Soc.* **2022**, *144*, 3913-3924. (DOI: [10.1021/jacs.1c11816](https://doi.org/10.1021/jacs.1c11816))
4. Hydroalkylation of styrenes with benzylamines by potassium hydride  
Jia Hao Pang, Bin Wang, Kohei Watanabe, Ryo Takita,<sup>\*</sup> and Shunsuke Chiba<sup>\*</sup>  
*Helv. Chim. Acta* **2021**, *104*, e2100120. (DOI: [10.1002/hlca.202100120](https://doi.org/10.1002/hlca.202100120))
5. Molecular basis for two stereoselective Diels-Alderases that produce decalin skeletons  
Keisuke Fujiyama, Naoki Kato, Suyong Re, Kiyomi Kinugasa, Kohei Watanabe, Ryo Takita, Toshihiko Nogawa, Tomoya Hino, Hiroyuki Osada, Yuji Sugita, Shunji Takahashi, and Shingo Nagano  
*Angew. Chem. Int. Ed.* **2021**, *60*, 22401-22410.  
(DOI: [10.1002/anie.202106186](https://doi.org/10.1002/anie.202106186))  
<Inside Cover Picture>: *Angew. Chem. Int. Ed.* **2021**, *60*, issue 41. (DOI: [10.1002/anie.202109381](https://doi.org/10.1002/anie.202109381))

6. Hydromagnesiation of 1,3-enynes by magnesium hydride for synthesis of tri- and tetra-substituted allenes  
Bin Wang, Yihang Li, Jia Hao Pang, Kohei Watanabe, Ryo Takita,\* and Shunsuke Chiba\*  
*Angew. Chem. Int. Ed.* **2021**, *60*, 217-221. (DOI: [10.1002/anie.202012027](https://doi.org/10.1002/anie.202012027))
7. Cu(I)/sucrose-catalyzed hydroxylation of arenes in water: the dual role of sucrose  
Kohei Watanabe,\* Mio Takagi, Ayakao Watanabe, Shigeo Murata, and Ryo Takita\*  
*Org. Biomol. Chem.* **2020**, *18*, 7827-7831. (DOI: [10.1039/D0OB01683G](https://doi.org/10.1039/D0OB01683G))
8. Stereo-controlled *anti*-hydromagnesiation of aryl alkynes by magnesium hydrides  
Bin Wang, Derek Yiren Ong, Yihang Li, Jia Hao Pang, Kohei Watanabe, Ryo Takita,\* and Shunsuke Chiba\*  
*Chem. Sci.* **2020**, *11*, 5267-5272. (DOI: [10.1039/D0SC01773F](https://doi.org/10.1039/D0SC01773F))
9. Zn(II) 2,9-dimethyl-1,10-phenanthroline stimulates cultured bovine aortic endothelial cell proliferation  
Takehiro Nakamura, Eiko Yoshida, Takato Hara, Tomoya Fujie, Chika Yamamoto, Yasuyuki Fujiwara, Fumihiko Ogata, Naohito Kawasaki, Ryo Takita, Masanobu Uchiyama, and Toshiyuki Kaji  
*RSC Adv.* **2020**, *10*, 42327-42337. (DOI: [10.1039/d0ra06731h](https://doi.org/10.1039/d0ra06731h))
10. Biaryl cross-coupling enabled by photo-induced electron transfer  
Hirohito Hayashi, Bin Wang, Xiangyang Wu, Shi Jie Teo, Atsushi Kaga, Kohei Watanabe, Ryo Takita, Edwin K. L. Yeow, and Shunsuke Chiba  
*Adv. Synth. Catal.*, **2020**, *362*, 2223-2231. (DOI: [10.1002/adsc.201901601](https://doi.org/10.1002/adsc.201901601))
11. Leaving Group Ability in Nucleophilic Aromatic Amination by Sodium Hydride-Iodide Composite  
Jia Hao Pang, Derek Yiren Ong, Kohei Watanabe, Ryo Takita,\* and Shunsuke Chiba\*  
*Synthesis* **2020**, *52*, 393-398. (DOI: [10.1055/s-0039-1690010](https://doi.org/10.1055/s-0039-1690010))

12. Mechanistic Insights on Reduction of Carboxamides by Diisobutylaluminum Hydride and Sodium Hydride-Iodide Composite  
Derek Yiren Ong, Kohei Watanabe, Ryo Takita,\* and Shunsuke Chiba\*  
*Helv. Chim. Acta* **2019**, *102*, e1900166. (DOI: [10.1002/hlca.201900166](https://doi.org/10.1002/hlca.201900166))
13. Organocopper Cross-coupling Reaction for C–C Bond Formation on Highly Sterically Hindered Structures  
Miku Oi, Ryo Takita,\* Junichiro Kanazawa, Atsuya Muranaka, Chao Wang, and Masanobu Uchiyama\*  
*Chem. Sci.* **2019**, *10*, 6107-6112. (DOI: [10.1039/c9sc00891h](https://doi.org/10.1039/c9sc00891h))  
(Highlighted by SYNFACTS, *SYNFACTS* **2019**, *15*, 873.)
14. Controlled Reduction of Carboxamides to Alcohols or Amines by Zinc Hydrides  
Derek Yiren Ong, Zhihao Yen, Asami Yoshii, Julia Reville Imbernon, Ryo Takita,\* and Shunsuke Chiba\*  
*Angew. Chem. Int. Ed.* **2019**, *58*, 4992-4997. (DOI: [10.1002/anie.201900233](https://doi.org/10.1002/anie.201900233))
15. Copper-catalyzed Arene Amination in Pure Aqueous Ammonia  
Mio Takagi,‡ Ayakao Watanabe,‡ Shigeo Murata, and Ryo Takita\* (‡ co-first authors)  
*Org. Biomol. Chem. (New Talent Themed Issue)* **2019**, *17*, 1791-1795. (DOI: [10.1039/C8OB02708K](https://doi.org/10.1039/C8OB02708K))
16. A Simple and Easy Method of Monitoring Doxorubicin Release from a Liposomal Drug Formulation in the Serum Using Fluorescence Spectroscopy  
Ayako Watanabe, Shuhei Murayama, Koji Karasawa, Eiichi Yamamoto, Satoru Morikawa, Ryo Takita, Shigeo Murata, and Masaru Kato  
*Chem. Pharm. Bull.* **2019**, *67*, 367-371. (DOI: [10.1248/cpb.c18-00868](https://doi.org/10.1248/cpb.c18-00868))  
(Highlighted Paper selected by Editor-in-Chief)
17. Deprotonative Metalation of Methoxy-Substituted Arenes using Lithium 2,2,6,6-Tetramethylpiperidide: Experimental and Computational Study  
Gaku Akimoto, Mai Otsuka, Ryo Takita, Masanobu Uchiyama, Madani Hedidi, Ghenia Bentabed-Ababsa, Frédéric Lassagne, William Erb, and Florence Mongin  
*J. Org. Chem.* **2018**, *83*, 13498-13506. (DOI: [10.1021/acs.joc.8b02397](https://doi.org/10.1021/acs.joc.8b02397))

18. Control of the Stereochemical Course of [4+2] Cycloaddition during *trans*-Decalin Formation by Fsa2-Family Enzymes  
Naoki Kato, Toshihiko Nogawa, Ryo Takita, Kiyomi Kinugasa, Misae Kanai, Masanobu Uchiyama, Hiroyuki Osada, and Shunji Takahashi  
*Angew. Chem. Int. Ed.* **2018**, *57*, 9754-9758. (DOI: 10.1002/anie.201805050)  
(Highlighted by SYNFACTS, SYNFACTS **2018**, *14*,1093.)
19. Cross-Coupling Polycondensation via C–O or C–N Bond Cleavage  
Ze-Kun Yang, Ning-Xin Xu, Ryo Takita, Atsuya Muranaka, Chao Wang, and Masanobu Uchiyama  
*Nature Commun.* **2018**, *9*, article number 1587. (DOI: 10.1038/s41467-018-03928-z)
20. One-pot Annulation for Biaryl-fused Monocarba-*closo*-dodecaborate through Aromatic B–H Bond Disconnection  
Gaku Akimoto, Mai Otsuka, Kazunori Miyamoto, Atsuya Muranaka, Daisuke Hashizume, Ryo Takita,\* and Masanobu Uchiyama\*  
*Chem. Asian J.* **2018**, *13*, 913-917. (DOI: 10.1002/asia.201800053)  
(Highlighted by ChemistryViews by WILEY-VCH & ChemPubSoc Europe, on www.chemistryviews.org./)
21. Arylation Reactions of Monocarba-*closo*-Dodecaborate at the Boron Vertices  
Mai Otsuka, Gaku Akimoto, Atsuya Muranaka, Ryo Takita,\* and Masanobu Uchiyama\*  
*Heterocycles (special issue)* **2018**, *97*, 931-945. (DOI: 10.3987/COM-18-S(T)72)
22. Dearylation of Arylphosphine Oxides by a Sodium Hydride-Iodide Composite  
Ciputra Tejo, Jia Hao Pang, Derek Yiren Ong, Miku Oi, Masanobu Uchiyama, Ryo Takita,\* and Shunsuke Chiba\*  
*Chem. Commun.* **2018**, *54*, 1782-1785. (DOI: 10.1039/c8cc00289d)
23. “Dumbbell”- and “Clackers”-Shaped Dimeric Derivatives of Monocarba-*closo*-dodecaborate  
Yu Kitazawa, Mamoru Watanabe, Yui Masumoto, Mai Otsuka, Kazunori Miyamoto, Atsuya Muranaka, Daisuke Hashizume, Ryo Takita, and Masanobu Uchiyama  
*Angew. Chem. Int. Ed.* **2018**, *57*, 1501-1504. (DOI: 10.1002/anie.201710122)

24. One-step Conversion of Levulinic Acid to Succinic Acid Using I<sub>2</sub>/t-BuOK System: The Iodoform Reaction Revisited  
Ryosuke Kawasumi, Shodai Narita, Kazunori Miyamoto, Ken-ichi Tominaga, Ryo Takita, and Masanobu Uchiyama  
*Sci. Rep.* **2017**, 7, article number 17967. (DOI:10.1038/s41598-017-17116-4)
25. Nucleophilic Amination of Methoxy Arenes by a Sodium Hydride/Iodide Composite  
Atsushi Kaga, Hirohito Hayashi, Hiroyuki Hakamata, Miku Oi, Masanobu Uchiyama, Ryo Takita,\* and Shunsuke Chiba\*  
*Angew. Chem. Int. Ed.* **2017**, 56, 11807-11811.  
(DOI: 10.1002/anie.201705916)  
(Highlighted by SYNFACTS, SYNFACTS **2017**, 13, 1248.)
26. Catalyst-Dependent Intrinsic Ring-Walking Behavior on  $\pi$ -Face of Conjugated Polymers  
Koichiro Mikami, Masataka Nojima, Yui Masumoto, Yoshihide Mizukoshi, Ryo Takita, Tsutomu Yokozawa, and Masanobu Uchiyama  
*Polym. Chem.* **2017**, 8, 1708-1713. (DOI: 10.1039/c6py01934j)
27. "Naked" Lithium Cation: Strongly Activated Metal Cations Facilitated by Carborane Anions  
Yu Kitazawa, Ryo Takita,\* Kengo Yoshida, Atsuya Muranaka, Seijiro Matsubara, and Masanobu Uchiyama\*  
*J. Org. Chem.* **2017**, 82, 1931-1935. (DOI: 10.1021/acs.joc.6b02677)
28. Catalytic Aromatic Borylation *via* in situ-Generated Borenium Species  
Fumiya Kitani, Ryo Takita,\* Tatsushi Imahori and Masanobu Uchiyama\*  
*Heterocycles (special issue)*, **2017**, 95, 158-166. (DOI: 10.3987/COM-16-S(S)43)
29. Direct Hydroxylation and Amination of Arenes *via* Deprotonative Cupration  
Noriyuki Tezuka, Kohei Shimojo, Keiichi Hirano, Shinsuke Komagawa, Kengo Yoshida, Chao Wang, Kazunori Miyamoto, Tatsuo Saito, Ryo Takita, and Masanobu Uchiyama  
*J. Am. Chem. Soc.* **2016**, 138, 9166-9171. (DOI: 10.1021/jacs.6b03855)  
(Highlighted by SYNFACTS, SYNFACTS **2016**, 12, 1071.)

30. Conjugation between  $\sigma$ - and  $\pi$ -Aromaticity in 1-C-Arylated Monocarba-*closo*-dodecaborate Anions  
Mai Otsuka, Ryo Takita,\* Junichiro Kanazawa, Kazunori Miyamoto, Atsuya Muranaka, and Masanobu Uchiyama\*  
*J. Am. Chem. Soc.* **2015**, *137*, 15082-15085. (DOI: 10.1021/jacs.5b10321)
31. Perfluoroalkyl and -aryl Zinc Ate Complexes: Generation, Reactivity, and Synthetic Application  
Xuan Wang, Keiichi Hirano, Daisuke Kurauchi, Hisano Kato, Naoyuki Toriumi,  
Ryo Takita, and Masanobu Uchiyama  
*Chem. Eur. J.* **2015**, *21*, 10993-10996. (DOI: 10.1002/chem.201501811)
32. Pd-catalyzed Cross-coupling Reaction of Lithiated Monocarba-*closo*-dodecaborate at the Carbon Vertex  
Yu Kitazawa, Mai Otsuka, Junichiro Kanazawa, Ryo Takita,\* and Masanobu Uchiyama\*  
*Synlett* **2015**, *26*, 2403-2407. (DOI: 10.1055/s-0034-1378833)
33. *Trans*-Diborylation of Alkynes: *Pseudo*-Intramolecular Strategy Utilizing a Propargylic Alcohol Unit  
Yuki Nagashima, Keiichi Hirano, Ryo Takita, and Masanobu Uchiyama  
*J. Am. Chem. Soc.* **2014**, *136*, 8532-8535. (DOI: 10.1021/ja5036754)  
(Highlighted by SYNFACTS, SYNFACTS **2014**, *10*, 967.)
34. Diastereoselective deprotonative metalation of chiral ferrocene derived acetals and esters using mixed lithium–cadmium and lithium–zinc combinations  
Gandrath Dayaker, Aare Sreeshailam, D. Venkata Ramana, Floris Chevallier, Thierry Roisnel, Shinsuke Komagawa, Ryo Takita, Masanobu Uchiyama, Palakodety Radha Krishna, and Florence Mongin  
*Tetrahedron* **2014**, *70*, 2102-2117. (DOI: 10.1016/j.tet.2014.02.010)
35. Design, Generation, and Synthetic Application of Borylzincate: Borylation of Aryl Halides and Borylzincation of Benzynes/Terminal Alkyne  
Yuki Nagashima, Ryo Takita,\* Kengo Yoshida, Keiichi Hirano, and Masanobu Uchiyama\*  
*J. Am. Chem. Soc.* **2013**, *135*, 18730-18733. (DOI: 10.1021/ja409748m)  
(Highlighted by SYNFACTS, SYNFACTS **2014**, *10*, 306.)

36. [*closo*-1-CB<sub>11</sub>H<sub>11</sub>-1-Ph]<sup>-</sup> as a Structural Element for Ionic Liquid Crystals  
Aleksandra Jankowiak, Junichiro Kanazawa, Piotr Kaszyński, Ryo Takita, and Masanobu Uchiyama  
*J. Organomet. Chem.* **2013**, 747, 195-200.  
(DOI: 10.1016/j.jorganchem.2013.05.034)
37. Copper-Mediated C–C Cross-Coupling Reaction of Monocarba-*closo*-dodecaborate Anion for the Synthesis of Functional Molecules  
Junichiro Kanazawa, Ryo Takita,\* Aleksandra Jankowiak, Shinya Fujii, Hiroyuki Kagechika, Daisuke Hashizume, Koichi Shudo, Piotr Kaszyński, and Masanobu Uchiyama\*  
*Angew. Chem. Int. Ed.* **2013**, 52, 8017-8021. (DOI: 10.1002/anie.201302448)  
(Highlighted by SYNFACTS, SYNFACTS **2013**, 9, 1169.)
38. Modified McFadyen-Stevens Reaction for a Versatile Synthesis of Aliphatic/Aromatic Aldehydes: Design, Optimization, and Mechanistic Investigations  
Yuri Iwai, Takashi Ozaki, Ryo Takita, Masanobu Uchiyama, Jun Shimokawa, and Tohru Fukuyama  
*Chem. Sci.* **2013**, 4, 1111-1119. (DOI: 10.1039/c2sc22045h)
39. Amidocuprates for Directed *ortho* Cupration: Structural Study, Mechanistic Investigation, and Chemical Requirements  
Shinsuke Komagawa, Shinya Usui, Joanna Haywood, Philip J. Harford, Andrew E. H. Wheatley, Yotaro Matsumoto, Keiichi Hirano, Ryo Takita, and Masanobu Uchiyama  
*Angew. Chem. Int. Ed.* **2012**, 51, 12081-12085.  
(DOI: 10.1002/anie.201204923)
40. Synthesis of both enantiomers of ferrocene[1,2-*c*]1H-quinolin-2-one by diastereoselective deproto-zincation of sugar-derived ferrocene esters  
Aare Sreeshailam, Gandrath Dayaker, D. Venkata Ramana, Floris Chevallier, Thierry Roisnel, Shinsuke Komagawa, Ryo Takita, Masanobu Uchiyama, Palakodety Radha Krishna, and Florence Mongin  
*RSC Adv.* **2012**, 2, 7030-7032. (DOI: 10.1039/c2ra21045b)

41. Aryl Ether as Negishi Coupling Partner: An Approach for Constructing C-C Bond under Mild Conditions  
Chao Wang, Takashi Ozaki, Ryo Takita, and Masanobu Uchiyama  
*Chem. Eur. J.* **2012**, *18*, 3482-3485. (DOI: 10.1002/chem.201103784)  
(Highlighted by *SYNFACTS*, *SYNFACTS* **2012**, *8*, 655; Selected as “Synfact of the month”)
42. Direct Arylation of Heteroarenes Catalyzed by a Palladium–1,10-Phenanthroline Complex  
Ryo Takita,\* Daichi Fujita, and Fumiyuki Ozawa\*  
*Synlett* **2011**, 959-963. (DOI: 10.1055/s-0030-1259727)
43. Palladium-Catalyzed Dehydrohalogenative Polycondensation of 2-Bromo-3-hexylthiophene: An Efficient Approach to Head-to-Tail Poly(3-hexylthiophene)  
Qifeng Wang, Ryo Takita,\* Yuuta Kikuzaki, and Fumiyuki Ozawa\*  
*J. Am. Chem. Soc.* **2010**, *132*, 11420-11421. (DOI: 10.1021/ja105767z)  
(Highlighted by *Angewandte Highlights*, *Angew. Chem. Int. Ed.* **2012**, *51*, 3520-3523.)
44. Synthesis and structures of platinum diphenylacetylene and dithiolate complexes bearing diphosphinidene-cyclobutene ligands (DPCB-Y)  
Yumiko Nakajima, Mitsuharu Nakatani, Kyohei Hayashi, Yu Shiraishi, Ryo Takita, Masaaki Okazaki, and Fumiyuki Ozawa  
*New J. Chem.* **2010**, *34*, 1713-1722. (DOI: 10.1039/c0nj00118)
45. The Effects of Primary Structures on Photo-induced Insolubilization of All-cis Poly(*p*-phenylenevinylene)s in Thin Films  
Yuichiro Mutoh, Yasutaka Yamamoto, Masayuki Wakioka, Ryo Takita, Jun-ichi Nakamura, Toshiya Iida, and Fumiyuki Ozawa  
*Bull. Chem. Soc. Jpn.* **2009**, *82*, 1533-1537. (DOI: 10.1246/bcsj.82.1533)
46. A Highly Selective Catalytic System for the Cross-Coupling of (*E*)-Styryl Bromide with Benzeneboronic Acid: Application to the Synthesis of All-trans Poly(arylenevinylene)s  
Masayuki Wakioka, Yuichiro Mutoh, Ryo Takita, and Fumiyuki Ozawa  
*Bull. Chem. Soc. Jpn.* **2009**, *82*, 1292-1298. (DOI: 10.1246/bcsj.82.1292)  
(Highlighted as “Selected Paper”)

47. Synthesis and Ligand Properties of 1-Phosphaethenyl-2-phosphanylferrocenes  
Ryo Takita, Yuko Takada, Rader S. Jensen, Masaaki Okazaki, and Fumiyuki Ozawa  
*Organometallics* **2008**, *27*, 6279-6285. (DOI: 10.1021/om8008316)
48.  $\pi$ -Dimer Formation in an Oligothiophene Tweezer Molecule  
Ryo Takita, Changsik Song, and Timothy M. Swager  
*Org. Lett.* **2008**, *10*, 5003-5005. (DOI: 10.1021/ol8020995)
49. CATALYTIC ENANTIOSELECTIVE ADDITION OF TERMINAL ALKYNES TO ALDEHYDES: PREPARATION OF (S)-(-)-1,3-DIPHENYL-2-PROPYN-1-OL AND (S)-(-)-4-METHYL-1-PHENYL-2-PENTYN-1,4-DIOL  
Ryo Takita, Shinji Harada, Takashi Ohshima, Shigeki Matsunaga, and Masakatsu Shibasaki  
*Org. Synth.* **2008**, *85*, 118-130. (DOI: 10.15227/orgsyn.085.0118)
50. Ligand Accelerated Indium(III)-Catalyzed Asymmetric Alkynylation of Aldehydes with 2-Methyl-3-butyn-2-ol as an Ethyne Equivalent Donor  
Shinji Harada, Ryo Takita, Takashi Ohshima, Shigeki Matsunaga, and Masakatsu Shibasaki  
*Chem. Commun.* **2007**, 948-950. (DOI: 10.1039/b614958h)
51. Asymmetric Alkynylation of Aldehydes Catalyzed by an In(III)/BINOL Complex  
Ryo Takita, Kenichiro Yakura, Takashi Ohshima, and Masakatsu Shibasaki  
*J. Am. Chem. Soc.* **2005**, *127*, 13760-13761. (DOI: 10.1021/ja053946n)  
(Highlighted by SYNFACTS, *SYNFACTS* **2006**, *1*, 41.)
52. A New Entry in Catalytic Alkynylation of Aldehydes and Ketones: Dual Activation of Soft Nucleophiles and Hard Electrophiles by an Indium(III) Catalyst  
Ryo Takita, Yuhei Fukuta, Riichiro Tsuji, Takashi Ohshima, and Masakatsu Shibasaki  
*Org. Lett.* **2005**, *7*, 1363-1366. (DOI: 10.1021/ol050069h)  
(Highlighted in Editor's Choice of Science, *Science* **2005**, *308*, 19.)

53. Enantioselective total synthesis of (–)-strychnine: development of a highly practical catalytic asymmetric carbon-carbon bond formation and domino cyclization  
Takashi Ohshima, Youjun Xu, Ryo Takita, and Masakatsu Shibasaki  
*Tetrahedron* **2004**, *60*, 9569-9588. (DOI: 10.1016/j.tet.2004.06.141)
54. Catalytic Asymmetric Michael Reaction of  $\beta$ -Keto Esters: Effects of the Linker Heteroatom in Linked-BINOL  
Keisuke Majima, Ryo Takita, Akihiro Okada, Takashi Ohshima, and Masakatsu Shibasaki  
*J. Am. Chem. Soc.* **2003**, *125*, 15837-15845. (DOI: 10.1021/ja037635t)
55. Enantioselective Total Synthesis of (–)-Strychnine Using the Catalytic Asymmetric Michael Reaction and Tandem Cyclization  
Takashi Ohshima, Youjun Xu, Ryo Takita, Satoshi Shimizu, Dafang Zhong, and Masakatsu Shibasaki  
*J. Am. Chem. Soc.* **2002**, *124*, 14546-14547. (DOI: 10.1021/ja028457r)
56. Highly enantioselective catalytic Michael reaction of  $\alpha$ -substituted malonates using La-linked-BINOL complex in the presence of HFIP (1,1,1,3,3,3-hexafluoroisopropanol)  
Ryo Takita, Takashi Ohshima, and Masakatsu Shibasaki  
*Tetrahedron Lett.* **2002**, *43*, 4661-4665. (DOI: 10.1016/S0040-4039(02)00882-1)

## REVIEWS & PERSPECTIVES

1. Generation of organo-alkaline earth metal complexes from non-polar unsaturated molecules and their synthetic applications  
Kohei Watanabe<sup>‡</sup>, Jia Hao Pang<sup>‡</sup>, Ryo Takita,\* and Shunsuke Chiba\*  
(<sup>‡</sup> co-first authors)  
*Chem. Sci.* **2022**, *13*, 27-38. (perspective) (DOI: 10.1039/D1SC05724C)
2. New avenues in the directed deprotonation of aromatics: recent advances in directed cupration  
Philip J. Harford, Andrew J. Peel, Floris Chevallier, Ryo Takita, Florence Mongin, Masanobu Uchiyama, and Andrew E. H. Wheatley  
*Dalton Trans.* **2014**, *43*, 14181-14203. (perspective)  
(DOI: 10.1039/c4dt01130a)

## BOOKS

1. Deprotonative Metalation Using Alkali Metal-Non Alkali Metal Combination  
Floris Chevallier, Florence Mongin, Ryo Takita, and Masanobu Uchiyama  
*Arene Chemistry: Reaction Mechanisms and Methods for Aromatic Compounds* (BOOK), Jacques Mortier (Ed.), WILEY, **2015**. 777-812. (book chapter)

## AWARDS

- |      |  |
|------|--|
| 2018 | Thieme Chemistry Journal Award 2018                            |
| 2017 | Chemist Award BCA (Banyu Chemist Award) 2017                   |
| 2015 | Asian Core Program Lectureship Award (Singapore)               |
| 2015 | The Pharmaceutical Society of Japan Award for Young Scientists |
| 2015 | RIKEN Research Incentive Award                                 |