

CURRICULUM VITAE

Personal Information

Name:	Kounosuke OISAKI (生長 幸之助)	
Date of Birth:	June 13, 1980, age 39	
Place of Birth:	Tokushima, Japan	
Gender:	Male	
Nationality:	Japanese	
Present Address:	Laboratory of Synthetic Organic Chemistry Graduate School of Pharmaceutical Sciences, The University of Tokyo 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, JAPAN	
Tel:	+81-(0)3-5841-4835 (ext. 24835)	
Fax:	+81-(0)3-5684-5206	
E-mail:	oisaki@mol.f.u-tokyo.ac.jp	
Language:	English and Japanese	
ORCID:	0000-0002-0499-8168	
ResearcherID/Publons:	A-6117-2009	
Other Web Profiles:	Researchmap , Mendeley , Google Scholar , LinkedIn , ResearchGate , Scopus Profile , Microsoft Academic	

Education

2003.3	B.Sc. , Department of Pharmaceutical Sciences, The University of Tokyo, Japan (Prof. Masakatsu Shibasaki)
2005.3	M.Sc. Graduate School of Pharmaceutical Sciences, The University of Tokyo, Japan (Prof. Masakatsu Shibasaki)
2008.3	Ph.D. (Pharmaceutical Sciences) , Graduate School of Pharmaceutical Sciences, The University of Tokyo, Japan (Prof. Masakatsu Shibasaki)

Academic Career

2008.4-2008.5	Postdoctoral Scholar , Graduate School of Pharmaceutical Sciences, The University of Tokyo, Japan (Prof. Masakatsu Shibasaki)
2008.5-2010.3	Postdoctoral Scholar (JSPS fellow for research abroad) , Department of Chemistry & Biochemistry, University of California, Los Angeles, USA (Prof. Omar M. Yaghi)
2010.4-2016.9	Assistant Professor , Graduate School of Pharmaceutical Sciences, The University of Tokyo, Japan (Prof. Motomu Kanai)
2016.10-present	Lecturer , Graduate School of Pharmaceutical Sciences, The University of Tokyo, Japan (Prof. Motomu Kanai)

Synergistic Activity

2002-present	Deputy Director , Chem-Station
2015.4-2017.3	Project Coordinator , JST ERATO Kanai Life Science Catalysis Project
2017.6-2018.3	Committee Member , Second subcommittee in The Society of Synthetic Organic Chemistry Japan
2018.4-2020.3	Investigator , The S&T Experts Network, National Institute of Science and Technology Policy (NISTEP)
2019.1-present	Scientific Advisory Board , ChemRxiv
2020.1-2021.12	Committee Member , Committee on Publications and Cheminformatics Data Standards (CPCDS) , International Union of Pure and Applied Chemistry (IUPAC)
2020.1- present	Project Member , ARchemisT

Fellowship & Grant (* Principal Investigator)

*2005.4-2008.3	Research Fellow of the Japan Society for the Promotion of Sciences (DC1) [fellowship]
*2008.5-2010.3	JSPS Postdoctoral Fellowships for Research Abroad [fellowship]
*2009.7	JSPS Fellowship for the attendance of 59 th Lindau Nobel Laureate Meeting [fellowship & travel expenses grant]
*2011.4-2013.3	JSPS Grant-in-Aid for Young Scientists (B) # 23790007 [research grant]
*2013.4-2017.3	JSPS Scientific Research (C, General) # 25460008 [research grant]
*2013.8	The Naito Foundation Subsidy for Scientific Symposia and Lecture Meetings [travel expenses grant]
2014.11-2016.3	Project for Development of Innovative Research on Cancer Therapeutics [project member]
2015.11-2020.3	AMED Leading Advanced Projects for Medical Innovation (LEAP) [project member]
*2015.12	薬学振興会 海外派遣研究者等旅費助成 [travel expenses grant]
*2015.12-2017.11	The Tokyo Biochemical Research Foundation Research Grant I [research grant]
*2016.1-2016.12	The Research Foundation for Pharmaceutical Sciences Research Grant I [research grant]
*2016.4-2018.3	MEXT Grant-in-Aid for Scientific Research on Innovative Area “Precisely Designed Catalysts with Customized Scaffolding” #JP16H01007 [research grant]
*2017.12-2018.11	Grant-in-Aid of The Fugaku Trust for Medical Research [research grant]
*2018.4-2021.3	JSPS Scientific Research (C, General) #JP18K06545 [research grant]
*2018.4-2020.3	MEXT Grant-in-Aid for Scientific Research on Innovative Area “Precisely Designed Catalysts with Customized Scaffolding” #JP18H04239 [research grant]
*2018.12-2019.11	Astellas Foundation for Research on Metabolic Disorders Research Fellowship [research grant]
*2019.4-2020.3	Research Grant from Noguchi Institute [research grant]
*2019.4	薬学振興会 研究助成 [research grant]
*2019.4-2020.3	Research Grant from Kobayashi Foundation for Cancer Research [research grant]
2019.8-2022.3	AMED Practical Research for Innovative Cancer Control [project member]
2019.8-2021.3	AMED Project for Cancer Research and Therapeutic Evolution (P-CREATE) [project member]
2019.10-2025.3	AMED Leading Advanced Research & Development Programs for Medical Innovation (AMED-CREST) [project member]

Award

- 2007 Poster Presentation Award (ESOC2007, Ireland)
- 2008 SYNStars Award (Thieme Chemistry, Germany)
- 2012 Best Poster Presentation Award (ICCOS-2012, Russia)
- 2013 [Fuji Film Award in Synthetic Organic Chemistry](#) (SSOCJ, Japan)
- 2014 The Chemical Society of Japan Presentation Award [Academic] (CSJ, Japan)
- 2018 [The Chemical Society of Japan Lecture Award for Young Chemists](#) (CSJ, Japan)
- 2018 [The Pharmaceutical Society of Japan Award for Young Scientists](#) (PSJ, Japan)
- 2018 [Mitsui Chemicals Catalysis Science Award of Encouragement](#) (Mitsui Chemical, Japan)
- 2018 [Chemist Award BCA](#) (MSD Life Science Foundation, Japan)
- 2019 [Thieme Chemistry Journals Award](#) (Thieme Chemistry, Germany)
- 2019 Lectureship Award (MEXT Grant-in-Aid for Scientific Research on Innovative Area, Japan)

Membership

[Pharmaceutical Society of Japan \(PSJ\)](#), [Chemical Society of Japan \(CSJ\)](#), [Society of Synthetic Organic Chemistry of Japan \(SSOCJ\)](#), [American Chemical Society \(ACS\)](#), [Japan Society for Science Visualization \(JSSV\)](#), [Japan Society for Chemical Biology](#), [American MENSA](#), [HELLIQ Society](#), [ISI Society \(US/Japan\)](#)

Research Interest

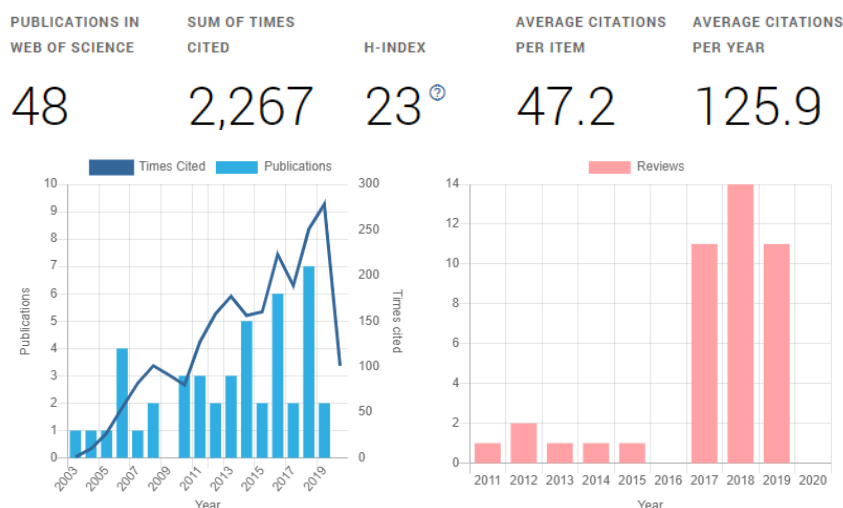
1. Catalytic methodologies for complex organic molecule syntheses
2. Mechanistic analysis of organic/organometallic reactions
3. Ordered materials oriented to catalytic application
4. Bioorthogonal transformations
5. Peptide and protein chemistry
6. Medicinal chemistry of small organic molecules and chemically modified biologics

Experience & Skill

- ✓ Expertised research experience in the field of synthetic organic chemistry, especially development of new (asymmetric) homogeneous catalysis: design, synthesis, development of (chiral) ligand, catalytic (asymmetric) reactions, photoredox catalysis, electrolysis mediator, mechanistic elucidation, handling of air-/moisture sensitive materials (transition metal complexes and phosphine compounds).
- ✓ Well-versed in the synthesis, purification and characterization of various kinds of complex organic compounds, including air- and moisture-sensitive metal complexes, phosphorous compounds, and water-soluble peptides, proteins, and antibody-conjugates.
 - Solution Fourier-Transfer NMR Spectroscopy: 1D, 2D and multinuclear NMR.
 - Mass Spectrometry: EI, FAB, MALDI-TOF-MS, LC/GC-MS, ESI-MS and LC-MS/MS.
 - Fourier-Transfer Infrared (FT-IR)
 - High Performance Liquid Chromatography (including chiral and reverse-phase HPLC)
 - Size Exclusion Chromatography (SEC)
 - Gas Chromatography (GC)

- Electron Spin Resonance Spectroscopy (ESR)
- Handling and maintenance of glove box
- Sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE)
- Circular Dichroism (CD)
- Single Crystal X-ray Diffractometer (SXRD)
- Cyclic Voltammetry (CV)
- ✓ Handling, synthesis and characterization of self-organized porous materials, especially Metal-Organic Frameworks (MOFs)
- ✓ Analysis of solid-state materials / inorganics by following methods.
 - Powder X-ray Diffractometer (PXRD)
 - Single Crystal X-ray Diffractometer (SXRD)
 - Solid State Cross-Polarized Magic Angle Spinning (CP/MAS) NMR spectroscopy
 - Fourier-Transfer Infrared (FT-IR)
 - Thermogravimetric Analysis (TGA)
 - Elemental microanalysis (EA)
 - Differential scanning calorimetry (DSC)
- ✓ Teaching experience in laboratory classes for undergraduate/graduate students
- ✓ Annual lectures for undergraduate students related to basic organic chemistry
- ✓ Reviewer for scientific papers submitted to *J. Am. Chem. Soc.*; *ACS Catal.*; *Org. Lett.*; *J. Org. Chem.*; *Synlett*; *Synthesis*; *Adv. Synth. Catal.*; *Chem. Commun.*; *Catal. Sci. Technol.*; *Org. Biomol. Chem.*; *MedChemComm*; *RSC Adv.*; *Chem. Pharm. Bull.*; *Heterocycles*; *Chem. Lett.*; *Chin. J. Chem.*; *Bioorg. Med. Chem. Lett.*; *Tetrahedron*; *Tetrahedron Lett.*
- ✓ Outreach activity
 - Development and management of Japanese chemistry portal website, Chem-Station (<http://www.chem-station.com/>) as a deputy head
 - 3D-printable molecular modeling

Citation Metrics (Publons, 2020/5/28)



Reference

Masakatsu Shibasaki, Ph.D., Representative Director of MCRF and Director

Institute of Microbial Chemistry

3-14-23 Kamiosaki, Shinagawa-ku, Tokyo 141-0021, JAPAN

Tel: +81-(0)3-3447-7779

E-mail: mshibasa@bikaken.or.jp

Operations Manager: Yuko Suya (y-suya@bikaken.or.jp)

Motomu Kanai, Ph.D., Professor

Graduate School of Pharmaceutical Sciences, The University of Tokyo

7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, JAPAN

Tel: +81-(0)3-5841-4830

Fax: +81-(0)3-5684-5206

E-mail: kanai@mol.f.u-tokyo.ac.jp

Operations Manager: Sayuri Moroo (sayuri-m@mol.f.u-tokyo.ac.jp)

Omar M. Yaghi, Ph.D., James and Neeltje Tretter Chair Professor of Chemistry

Department of Chemistry, University of California, Berkeley

602 Latimer Hall, Berkeley, CA 94720-1460, USA

Tel: +1-510-643-5507

Fax: +1-510-486-5846

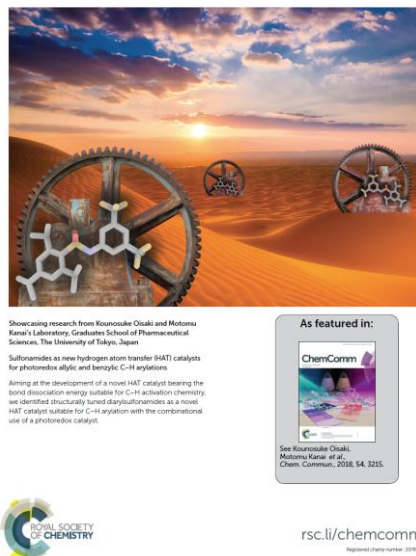
E-mail: yaghi@berkeley.edu

Publication List (*corresponding author)

Gallery of Cover Pictures



Chem. Asian J. **2012**, *7*, 2600.
(Front Cover)



Chem. Commun. **2018**, *54*, 3215.
(Back Cover)



Chem. Eur. J. **2018**, *24*, 8051.
(Inside Cover)



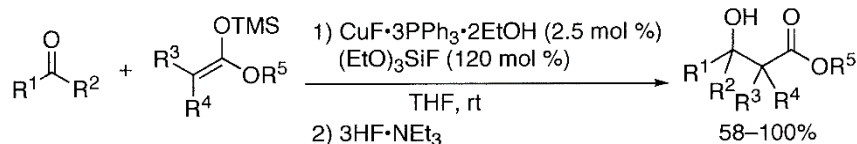
Chem. Pharm. Bull. **2018**, *66*(10), 907.
(Front Cover)

Research during PhD course (The University of Tokyo, Shibasaki & Kanai group)

- 1) Kounosuke Oisaki, Yutaka Suto, Motomu Kanai, Masakatsu Shibasaki*

“A new method for the catalytic aldol reaction to ketones”

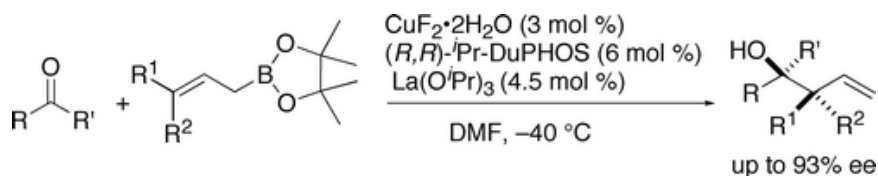
J. Am. Chem. Soc. **2003**, *125*(19), 5644-5645. doi: [10.1021/ja034993n](https://doi.org/10.1021/ja034993n)



- 2) Reiko Wada, Kounosuke Oisaki, Motomu Kanai*, Masakatsu Shibasaki*

“Catalytic enantioselective allylboration of ketones”

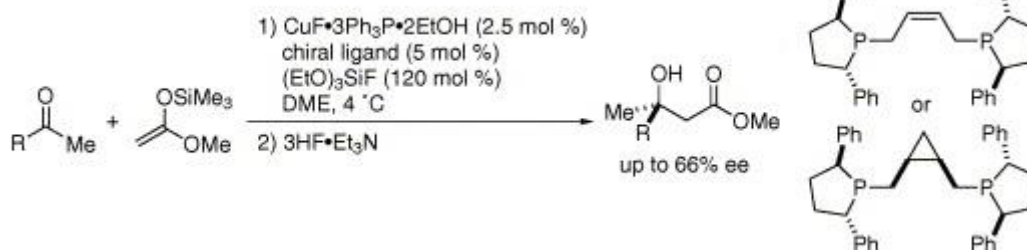
J. Am. Chem. Soc. **2004**, *126*(29), 8910-8911. DOI: [10.1021/ja047200l](https://doi.org/10.1021/ja047200l)



- 3) Kounosuke Oisaki, Dongbo Zhao, Yutaka Suto, Motomu Kanai*, Masakatsu Shibasaki*

“New chiral bis(diphenylphospholane) ligands: design, synthesis, and application to catalytic enantioselective aldol reaction to ketones”

Tetrahedron Lett. **2005**, *46*(25), 4325-4329. doi: [10.1016/j.tetlet.2005.04.084](https://doi.org/10.1016/j.tetlet.2005.04.084)



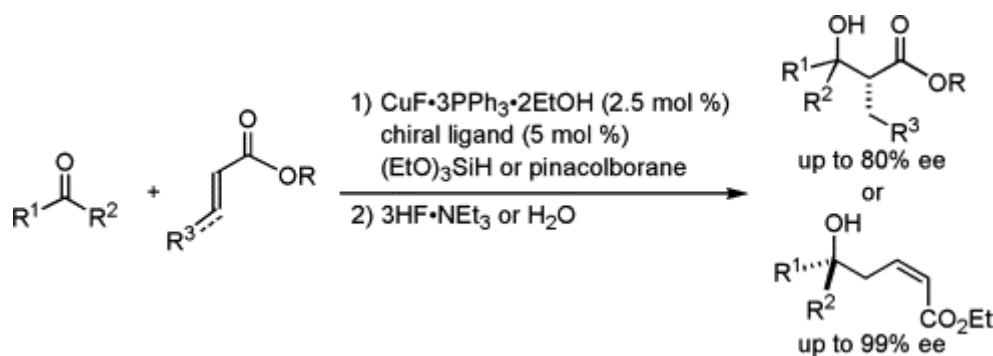
- 4) Dongbo Zhao, Kounosuke Oisaki, Motomu Kanai*, Masakatsu Shibasaki*

“Catalytic enantioselective intermolecular reductive aldol reaction to ketones”

Tetrahedron Lett. **2006**, *47*(9), 1403-1407. doi: [10.1016/j.tetlet.2005.12.097](https://doi.org/10.1016/j.tetlet.2005.12.097)

<This paper is featured in *SYNFACTS* **2006**, *5*, 472.>

<Ranked as No.15 in Top25 Hottest Articles (2006/Jan-Mar) of *Tetrahedron Lett.*>

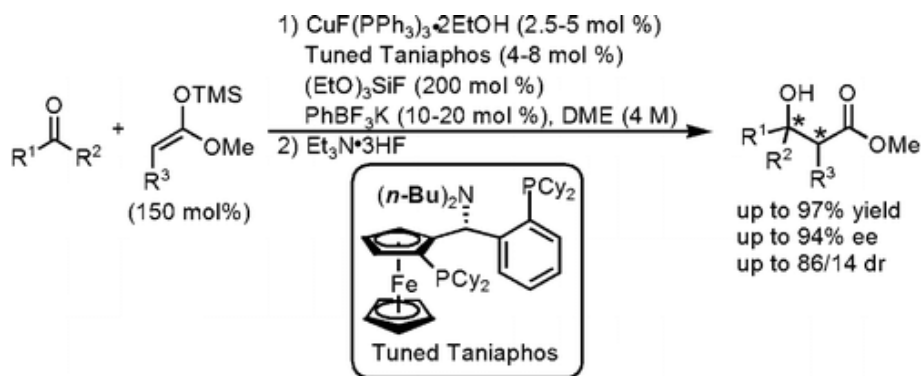


5) Kounosuke Oisaki, Dongbo Zhao, Motomu Kanai*, Masakatsu Shibasaki*

“Catalytic enantioselective aldol reaction to ketones”

J. Am. Chem. Soc. **2006**, 128(22), 7164-7165. DOI: [10.1021/ja061815w](https://doi.org/10.1021/ja061815w)

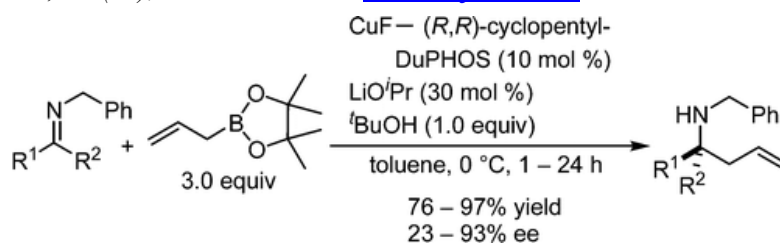
<This paper is featured in *SYNFACTS* **2006**, 9, 916.>



6) Reiko Wada, Tomoyuki Shibuguchi, Sae Makino, Kounosuke Oisaki, Motomu Kanai*, Masakatsu Shibasaki*

“Catalytic enantioselective allylation of ketoimines”

J. Am. Chem. Soc. **2006**, 128(23), 7687-7691. DOI: [10.1021/ja061510h](https://doi.org/10.1021/ja061510h)

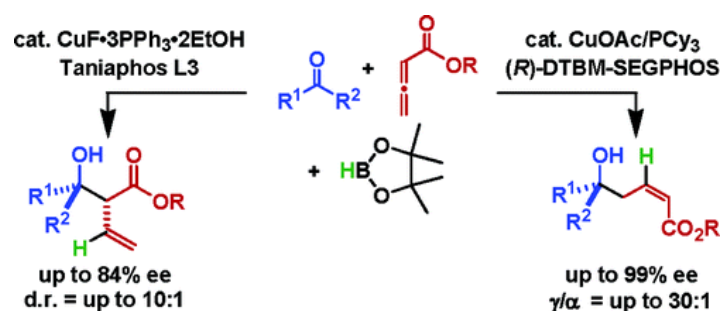


7) Dongbo Zhao, Kounosuke Oisaki, Motomu Kanai*, Masakatsu Shibasaki*

“Dramatic ligand effect on catalytic asymmetric reductive aldol reaction of allenic esters to ketones”

J. Am. Chem. Soc. **2006**, 128(45), 14440-14441. DOI: [10.1021/ja0652565](https://doi.org/10.1021/ja0652565)

<This paper is featured in *SYNFACTS* **2007**, 2, 171.>

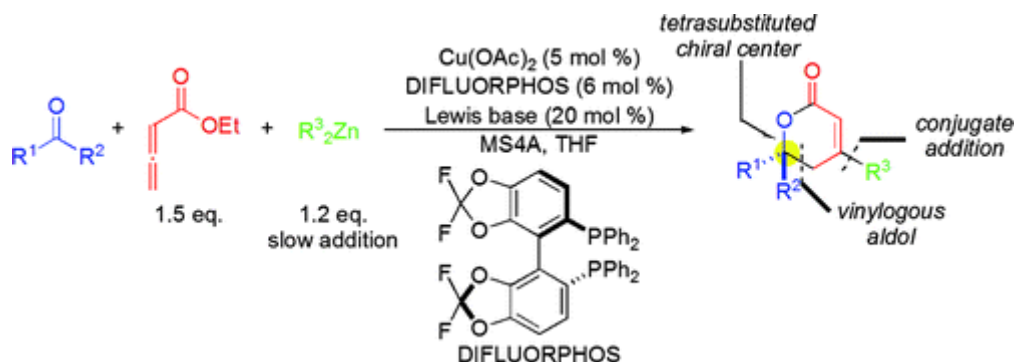


8) Kounosuke Oisaki, Dongbo Zhao, Motomu Kanai*, Masakatsu Shibasaki*

“Catalytic enantioselective alkylative aldol reaction: efficient multicomponent assembly of dialkylzincs, allenic esters, and ketones toward highly functionalized δ -lactones with tetrasubstituted chiral centers”

J. Am. Chem. Soc. **2007**, 129(23), 7439-7443. DOI: [10.1021/ja071512h](https://doi.org/10.1021/ja071512h)

<This paper is featured in *SYNFACTS* **2007**, 9, 967.>

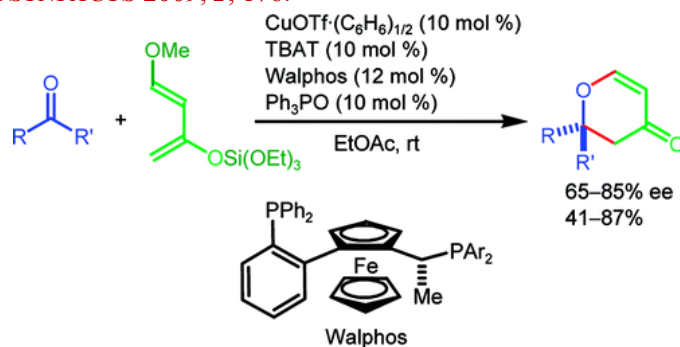


9) I-Hon Chen, Kounosuke Oisaki, Motomu Kanai*, Masakatsu Shibasaki*

“Cu(I)-catalyzed hetero-Diels-Alder reaction between Danishefsky-type siloxy dienes and ketones”

Org. Lett. **2008**, 10(22), 5151-5154. DOI: [10.1021/ol802134a](https://doi.org/10.1021/ol802134a)

<This paper is featured in *SYNFACTS* **2009**, 2, 176.>

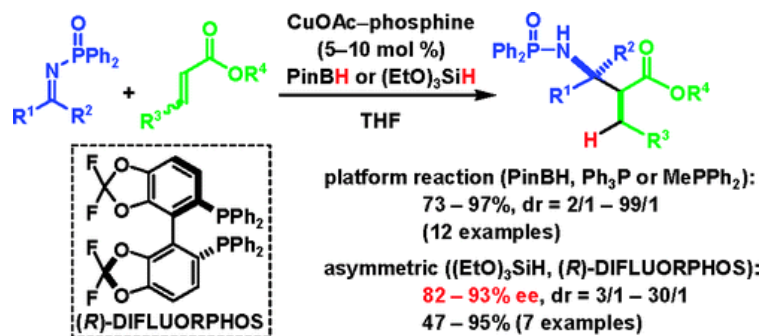


10) Yao Du, Li-Wen Xu, Youhei Shimizu, Kounosuke Oisaki, Motomu Kanai*, Masakatsu Shibasaki*

“Asymmetric reductive Mannich reaction to ketimines catalyzed by a Cu(I) complex”

J. Am. Chem. Soc. **2008**, 130(48), 16146-16147. DOI: [10.1021/ja8069727](https://doi.org/10.1021/ja8069727)

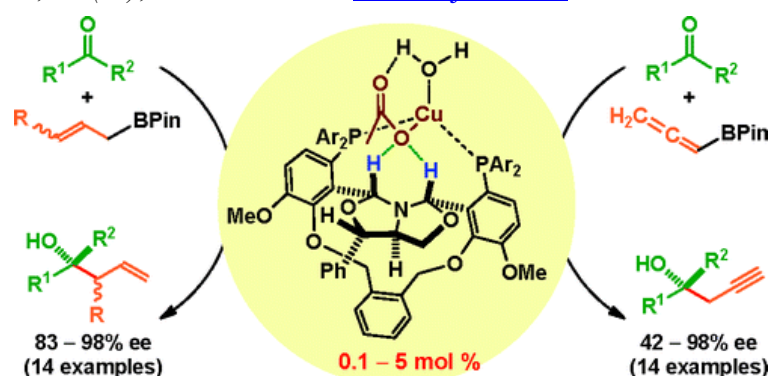
<This paper is featured in *SYNFACTS* **2009**, 2, 177.>



11) Shi-Liang Shi, Li-Wen Xu, Kounosuke Oisaki, Motomu Kanai*, Masakatsu Shibasaki*

“Identification of modular chiral bisphosphines effective for Cu(I)-catalyzed asymmetric allylation and propargylation of ketones”

J. Am. Chem. Soc. **2010**, 132(19), 6638-6639. DOI: [10.1021/ja101948s](https://doi.org/10.1021/ja101948s)

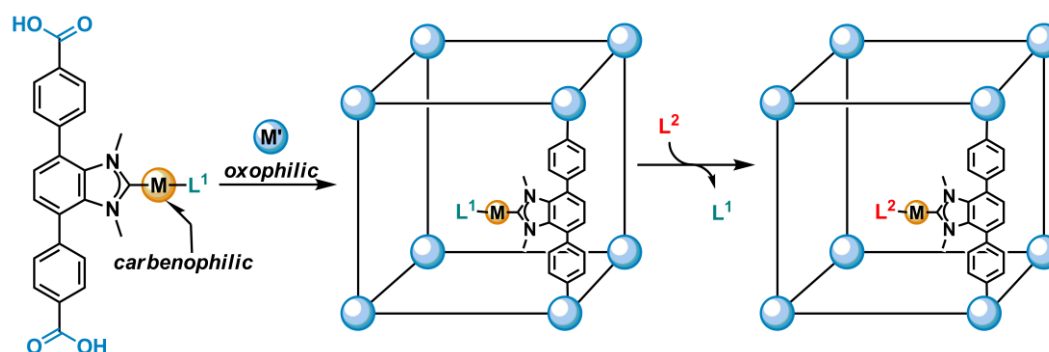


Research as a postdoctoral researcher (UCLA, Yaghi group)

12) Kounosuke Oisaki, Qiaowei Li, Hiroyasu Furukawa, Alexander U. Czaja, Omar M. Yaghi*

“A metal-organic framework with covalently bound organometallic complexes”

J. Am. Chem. Soc. **2010**, 132(27), 9262-9264. DOI: [10.1021/ja103016y](https://doi.org/10.1021/ja103016y)

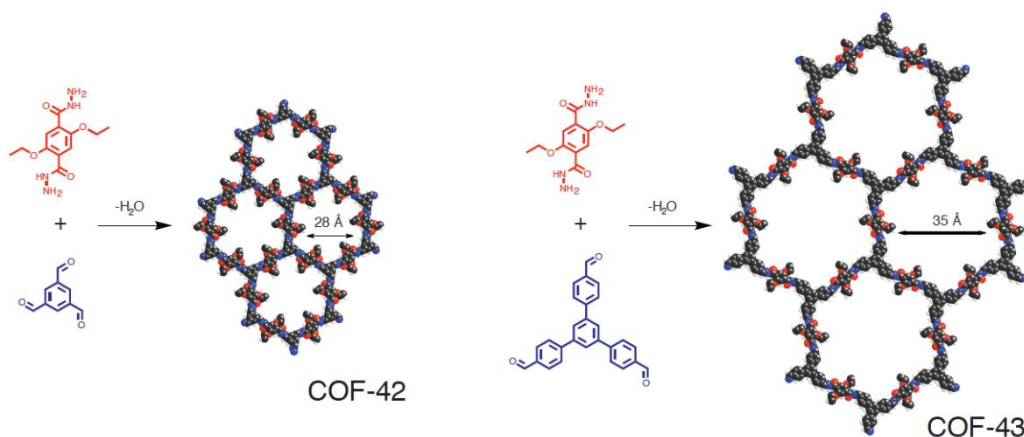


13) Fernando Javier Uribe-Romo, Christian J. Doonan, Hiroyasu Furukawa, Kounosuke Oisaki, Omar M. Yaghi*

“Crystalline covalent organic frameworks with hydrazone linkages”

J. Am. Chem. Soc. **2011**, 133(30), 11478-11481. DOI: [10.1021/ja204728y](https://doi.org/10.1021/ja204728y)

<Ranked in Most Read Articles (2011/July) of *J. Am. Chem. Soc.*>

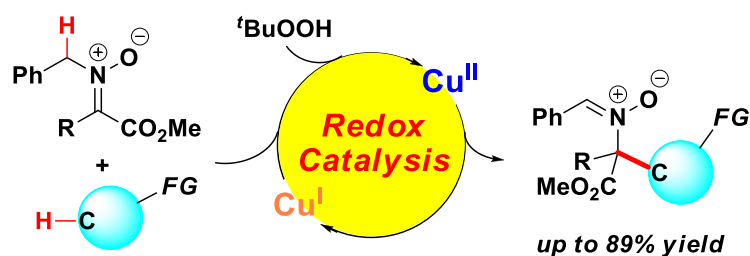


Research as a non-independent faculty (The University of Tokyo, Kanai group)

14) Shogo Hashizume, Kounosuke Oisaki, Motomu Kanai*

“Catalytic migratory oxidative coupling of nitrones”

Org. Lett. **2011**, 13(16), 4288-4291. DOI: [10.1021/ol201629n](https://doi.org/10.1021/ol201629n)

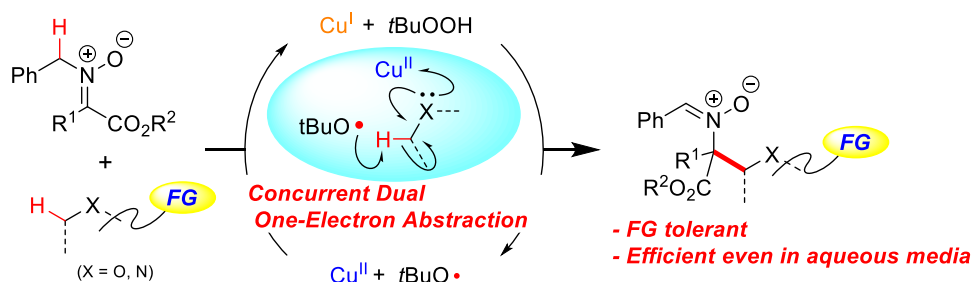


15) Shogo Hashizume, Kounosuke Oisaki, Motomu Kanai*

“Functional group-tolerant catalytic migratory oxidative coupling of nitrones”

Chem. Asian J. **2012**, 7(11), 2600–2606. DOI: [10.1002/asia.201200359](https://doi.org/10.1002/asia.201200359)

<Selected as the Cover Picture>



16) Toshiaki Sonobe, Kounosuke Oisaki, Motomu Kanai*

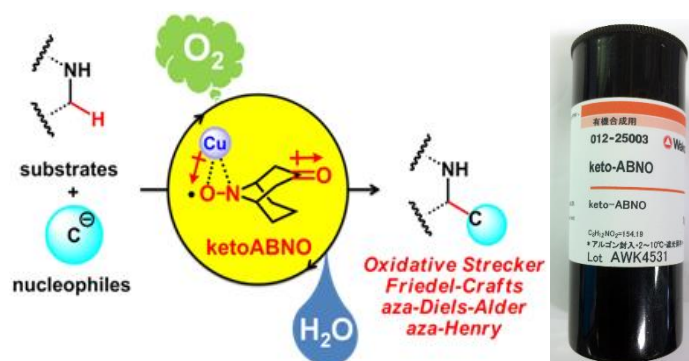
“Catalytic aerobic production of imines *en route* to mild, green, and concise derivatization of amines”

Chem. Sci. **2012**, 3, 3249-3255. DOI: [10.1039/C2SC20699D](https://doi.org/10.1039/C2SC20699D)

<Ranked in Top-Ten Most Accessed Articles (2012/August) of *Chem. Sci.*>

<Featured in *Yakuji Nippo* (3/22/2013)>

<keto-ABNO is commercialized by Wako Pure Chemical Industries, Ltd.: 016-25001 (100 mg) / 012-25003 (1 g); Sigma-Aldrich: 791815-250MG / 1G; featured in Wako Chemicals' leaflet>



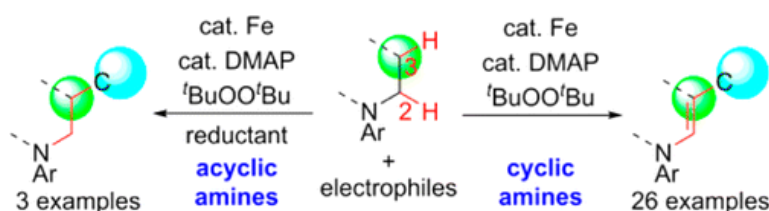
17) Noriaki Takasu, Kounosuke Oisaki, Motomu Kanai*

“Iron-catalyzed oxidative C(3)-H functionalization of amines”

Org. Lett. **2013**, 15(8), 1918–1921. doi: [10.1021/ol400568u](https://doi.org/10.1021/ol400568u)

<Ranked in Monthly Most Read Articles (2013/April) of *Org. Lett.*>

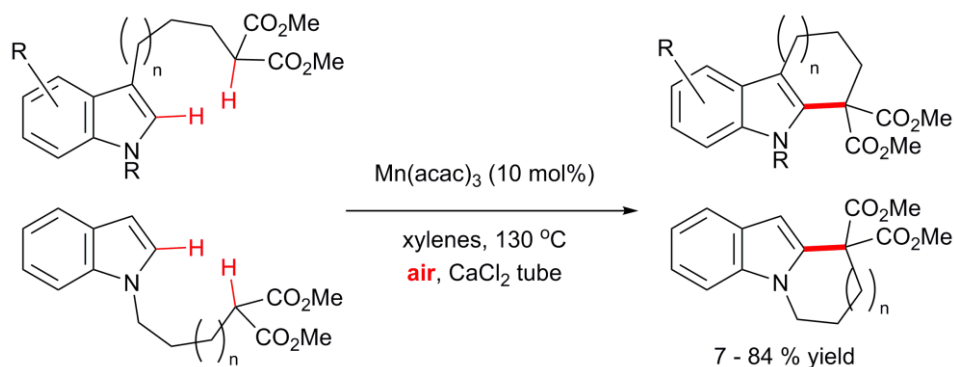
<Featured in *Org. Chem. Highlights* **2014**, March 24, *ChemInform* **2013**, 44(35)>



18) Kounosuke Oisaki, Junpei Abe, Motomu Kanai*

“Manganese-catalyzed aerobic dehydrogenative cyclization toward ring-fused indole skeletons”

Org. Biomol. Chem. **2013**, 11(28), 4569–4572. DOI: [10.1039/C3OB40855H](https://doi.org/10.1039/C3OB40855H) (invited article)

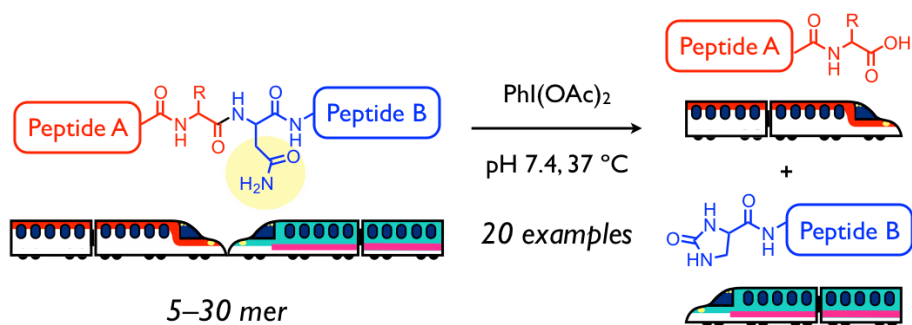


19) Kana Tanabe, Atsuhiko Taniguchi, Takuya Matsumoto, Kounosuke Oisaki, Youhei Sohma*, Motomu Kanai*

“Asparagine-selective cleavage of peptide bonds through hypervalent iodine-mediated Hofmann rearrangement in neutral aqueous solution”

Chem. Sci. **2014**, 5, 2747–2753. DOI: [10.1039/C3SC53037J](https://doi.org/10.1039/C3SC53037J)

<Ranked in Top-Ten Most Downloaded Articles (2014/March) of *Chem. Sci.*>

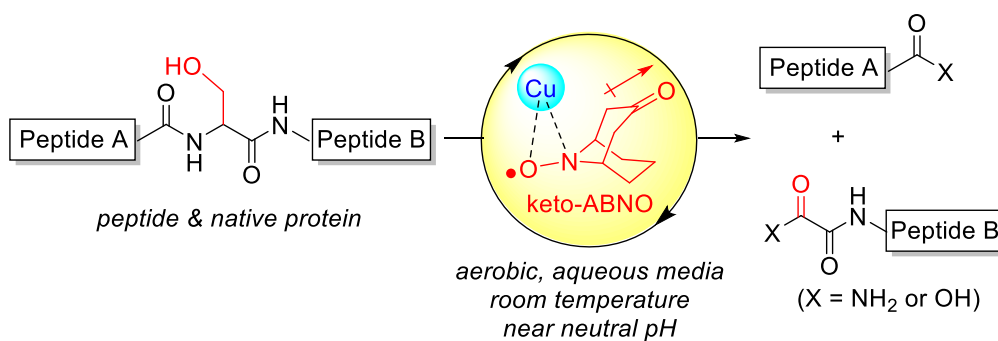


20) Yohei Seki, Kana Tanabe, Daisuke Sasaki, Youhei Sohma, Kounosuke Oisaki, Motomu Kanai*

“Serine-selective aerobic cleavage of peptides and a protein using water-soluble copper-organoradical conjugate”

Angew. Chem. Int. Ed. **2014**, 53(25), 6501-6505. DOI: [10.1002/anie.201402618](https://doi.org/10.1002/anie.201402618)

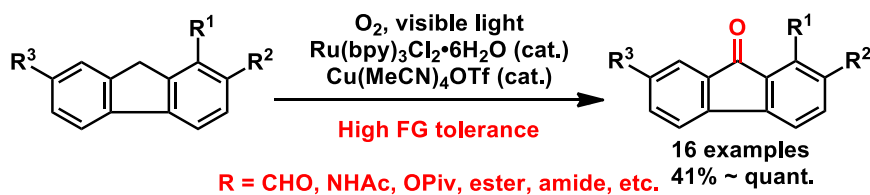
<Highlighted in *Chem-Station Int. Ed.*, *Org. Chem. Highlights* **2015**, March 9.>



21) Masahiro Kojima, Kounosuke Oisaki, Motomu Kanai*

“Chemoselective aerobic photo-oxidation of 9H-fluorenes for the synthesis of 9-fluorenones”

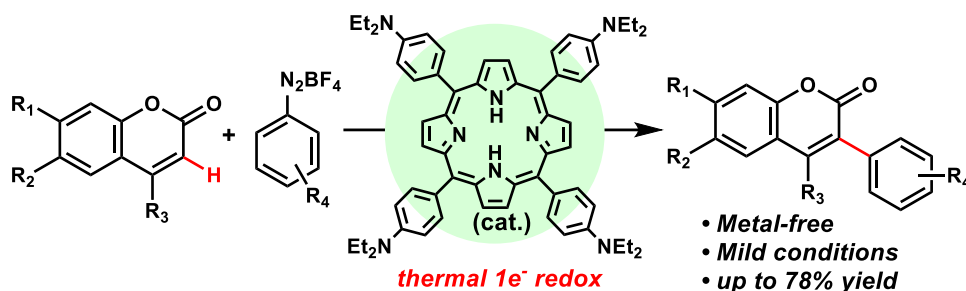
Tetrahedron Lett. **2014**, 55(34), 4736-4738. DOI: [10.1016/j.tetlet.2014.06.038](https://doi.org/10.1016/j.tetlet.2014.06.038)



22) Masahiro Kojima, Kounosuke Oisaki, Motomu Kanai*

“Metal-free C(3)-H arylation of coumarins promoted by catalytic amounts of 5,10,15,20-tetrakis(4-diethylaminophenyl)porphyrin”

Chem. Commun. **2015**, 51, 9718-9721. DOI: [10.1039/C5CC02349A](https://doi.org/10.1039/C5CC02349A)



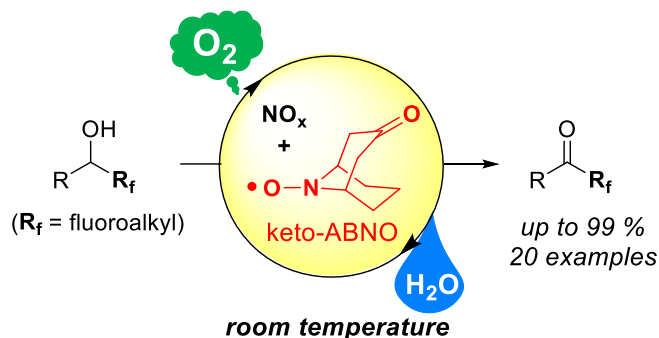
23) Yoichi Kadoh, Masayuki Tashiro, Kounosuke Oisaki, Motomu Kanai*

"Organocatalytic aerobic oxidation of α -fluoroalkyl alcohols to fluoroalkyl ketones at room temperature"

Adv. Synth. Catal. **2015**, 357(10), 2193-2198. DOI: [10.1002/adsc.201500131](https://doi.org/10.1002/adsc.201500131)

<Invited contribution in honor of Stephen L. Buchwald's 60th birthday.>

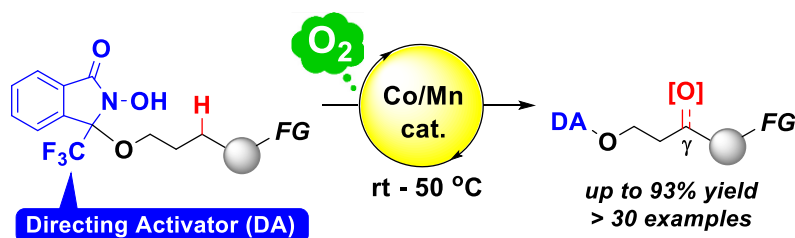
<Ranked in Most Read Articles (2015/July) of *Adv. Synth. Catal.*>



24) Jun Ozawa[†], Masayuki Tashiro[†], Jizhi Ni[†], Kounosuke Oisaki, Motomu Kanai* [[†]equally contributed]

"Chemo- and Regioselective Oxygenation of C(sp^3)-H Bonds in Aliphatic Alcohols Using a Covalently Bound Directing Activator and Atmospheric Oxygen"

Chem. Sci. **2016**, 7, 1904-1909. DOI: [10.1039/C5SC04476F](https://doi.org/10.1039/C5SC04476F) (Open Access)

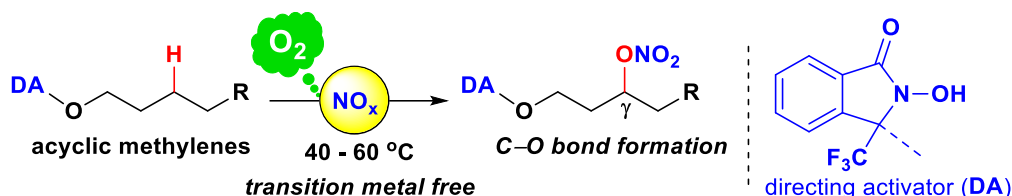


25) Jizhi Ni, Jun Ozawa, Kounosuke Oisaki, Motomu Kanai*

"Directing activator-assisted regio- and oxidation state-selective aerobic oxidation of secondary C(sp^3)-H bonds in aliphatic alcohols"

Org. Biomol. Chem. **2016**, 14, 4378-4381. DOI: [10.1039/c6ob00678g](https://doi.org/10.1039/c6ob00678g)

<Selected as 'Hot Articles' in *Org. Biomol. Chem.*>

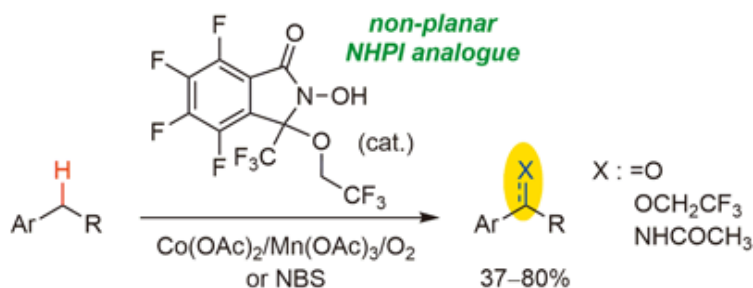


26) Yoichi Kadoh, Kounosuke Oisaki, Motomu Kanai*

“Enhanced structural variety of nonplanar *N*-oxyl radical catalysts and their application to the aerobic oxidation of benzylic C-H bonds”

Chem. Pharm. Bull. **2016**, 64, 737-753. DOI: [10.1248/cpb.c16-00083](https://doi.org/10.1248/cpb.c16-00083)

<Invited contribution in honor of Nobel Prize laureate, Prof. Satoshi Ōmura>

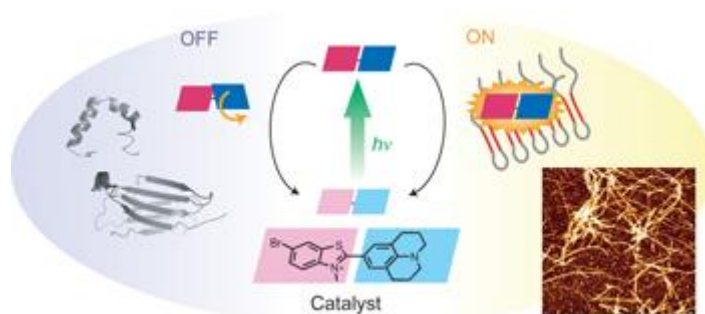


27) Atsuhiko Taniguchi, Yusuke Shimizu, Kounosuke Oisaki, Youhei Sohma*, Motomu Kanai*

“Switchable photooxygenation catalysts that sense higher-order amyloid structures”

Nat. Chem. **2016**, 8, 974-982. doi:[10.1038/nchem.2550](https://doi.org/10.1038/nchem.2550)

<Highlighted by JST press release, 認知症ねっと, 薬事日報(2016/7/11), Chem-Station>

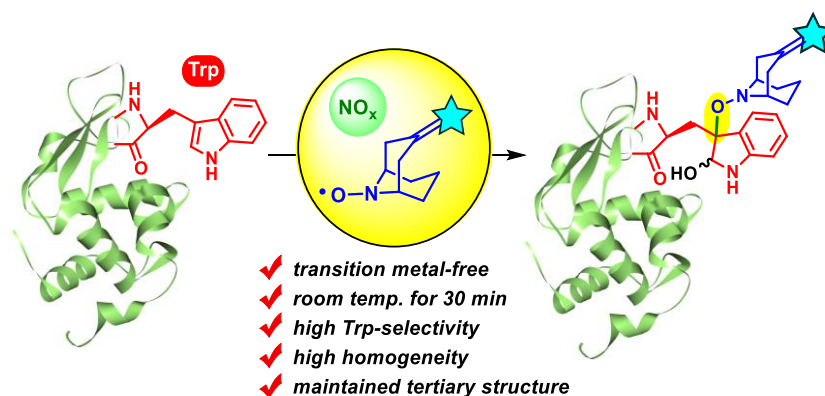


28) Yohei Seki, Takashi Ishiyama, Daisuke Sasaki, Junpei Abe, Youhei Sohma, Kounosuke Oisaki, Motomu Kanai*

“Transition metal-free tryptophan-selective bioconjugation of proteins”

J. Am. Chem. Soc. **2016**, 138(34), 10798-10801. doi:[10.1021/jacs.6b06692](https://doi.org/10.1021/jacs.6b06692)

<Highlighted by UT press release, Department News, QLifePro, Chem-Station, 科学新聞(2016/8/26), UCR Proposal>

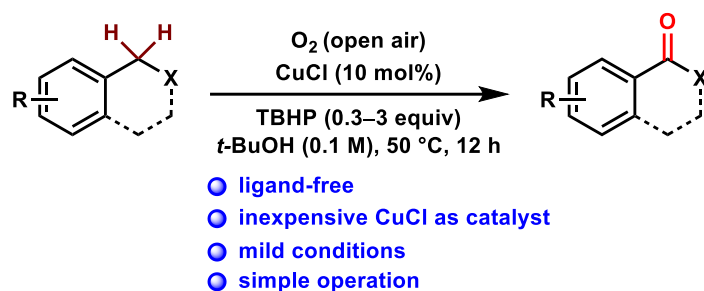


29) Hirotaka Tanaka, Kounosuke Oisaki, Motomu Kanai*

“Ligand-free, copper-catalyzed aerobic benzylic sp^3 C-H oxygenation”

Synlett **2017**, 28, 1576-1580. DOI: [10.1055/s-0036-1588969](https://doi.org/10.1055/s-0036-1588969)

<Invited contribution to “Aerobic Oxidation” cluster>

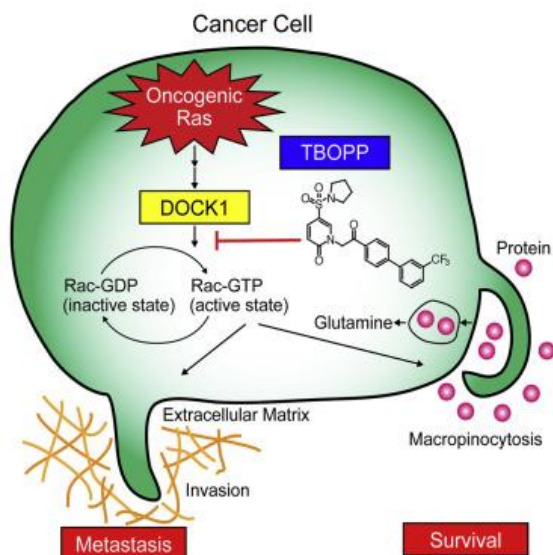


30) Hirotaka Tajiri[†], Takehito Uruno[†], Takahiro Shirai, Daisuke Takaya, Shigeki Matsunaga, Daiki Setoyama, Mayuki Watanabe, Mutsuko Kukimoto-Niino, Kounosuke Oisaki, Miho Ushijima, Fumiyuki Sanematsu, Teruki Honma, Takaho Terada, Eiji Oki, Senji Shiarasawa, Yoshihiko Maehara, Dongchon Kang, Jean-François Côté, Shigeyuki Yokoyama, Motomu Kanai, Yoshinori Fukui* [[†]equally contributed]

“Targeting Ras-Driven Cancer Cell Survival and Invasion through Selective Inhibition of DOCK1”

Cell Reports **2017**, 19(5), 969-980. doi: [10.1016/j.celrep.2017.04.016](https://doi.org/10.1016/j.celrep.2017.04.016) (Open Access)

<Highlighted by [press release](#), [西日本新聞](#)>



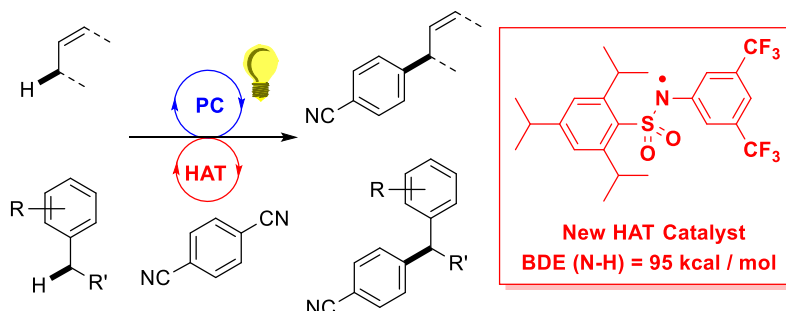
31) Hirotaka Tanaka, Kentaro Sakai, Atsushi Kawamura, Kounosuke Oisaki, Motomu Kanai*

“Sulfonamides as new hydrogen atom transfer (HAT) catalysts for photoredox allylic and benzylic C–H arylations”

Chem. Commun. **2018**, 54, 3215–3218. DOI: [10.1039/C7CC09457D](https://doi.org/10.1039/C7CC09457D)

<Selected as [Back Cover](#)>

<Highlighted by [Organic Chemistry Portal](#)>



32) Takahiro Tomino, Hirotada Tajiri, Takaaki Tatsuguchi, Takahiro Shirai, Kounosuke Oisaki, Shigeki Matsunaga, Fumiyuki Sanematsu, Daiji Sakata, Tomoharu Yoshizumi, Yoshihiko Maehara, Motomu Kanai, Jean-François Cote, Yoshinori Fukui, Takehito Uruno*

“DOCK1 inhibition suppresses cancer cell invasion and macropinocytosis induced by self-activating Rac1^{P29S} mutation”

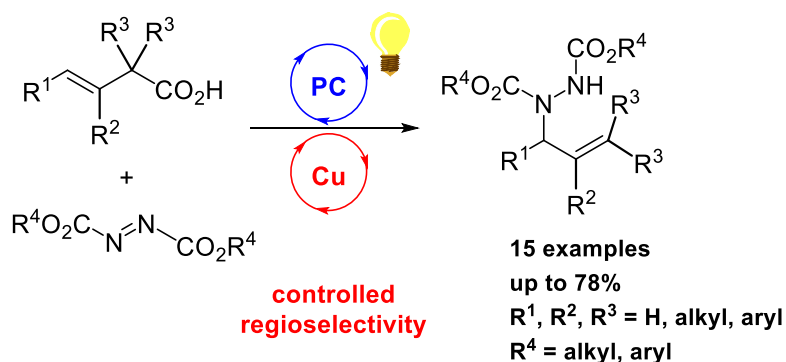
Biochem. Biophys. Res. Commun. **2018**, 497(1), 298–304. DOI: [10.1016/j.bbrc.2018.02.073](https://doi.org/10.1016/j.bbrc.2018.02.073) (Open Access)

33) Anne-Doriane Manick, Hirotaka Tanaka, Kounosuke Oisaki, Motomu Kanai*

“Organophotoredox/Copper Hybrid Catalysis for Regioselective Allylic Aminodecarboxylation of β,γ -Unsaturated Carboxylic Acids”

Synthesis **2018**, 50(15), 2936–2947. DOI: [10.1055/s-0036-1591983](https://doi.org/10.1055/s-0036-1591983)

<Invited contribution to Special Issue “Modern Radical Methods and their Strategic Applications in Synthesis” >



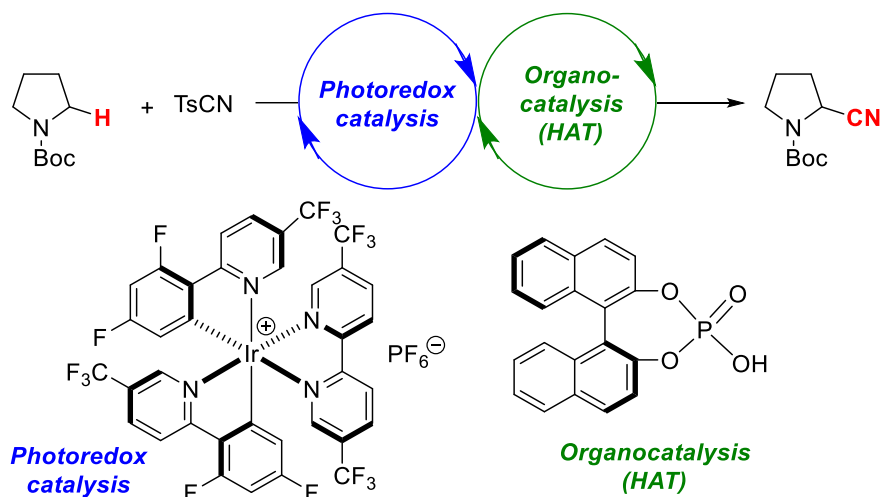
34) Takayuki Wakaki, Kentaro Sakai, Takafumi Enomoto, Mio Kondo, Shigeyuki Masaoka, Kounosuke Oisaki, Motomu Kanai*

“C(*sp*³)–H Cyanation Promoted by Visible-Light Photoredox/Phosphate Hybrid Catalysis”

Chem. Eur. J. **2018**, 24(32), 8051–8055. doi: [10.1002/chem.201801746](https://doi.org/10.1002/chem.201801746)

<Highlighted by [Hot Topic: C-H Activation, Inside Cover](#)>

<Ranked in Most Accessed Articles (11/2017 to 10/2018) of *Chem. Eur. J.*>

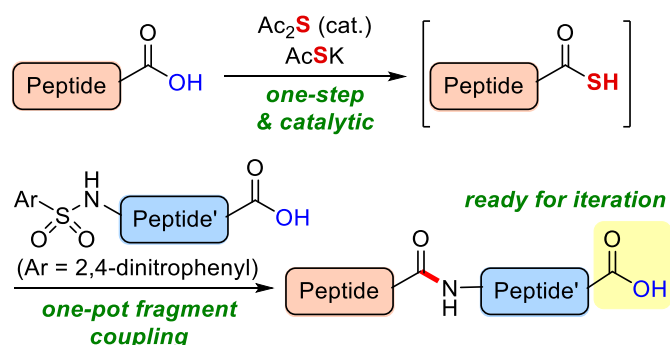


35) Takuya Matsumoto, Koki Sasamoto, Ryo Hirano, Kounosuke Oisaki, Motomu Kanai*

“A Catalytic One-step Synthesis of Peptide Thioacids: The Synthesis of Leuporelin via Iterative Peptide-fragment Coupling Reactions”

Chem. Commun. **2018**, 54, 12222-12225. doi: [10.1039/C8CC07935H](https://doi.org/10.1039/C8CC07935H)

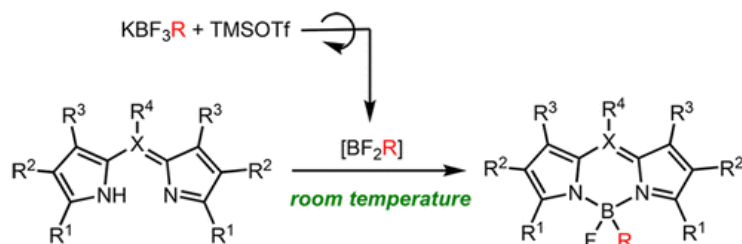
<Highlighted by *Synfacts* **2019**, 15, 201; *Org. Chem. Highlights*, **2019**, May 13th>



36) Taka Sawazaki, Yusuke Shimizu, Kounosuke Oisaki, Youhei Sohma*, Motomu Kanai*

“Convergent and Functional-Group Tolerant Synthesis of B-Organic BODIPYs”

Org. Lett. **2018**, 20(24), 7767-7770. DOI: [10.1021/acs.orglett.8b03138](https://doi.org/10.1021/acs.orglett.8b03138)



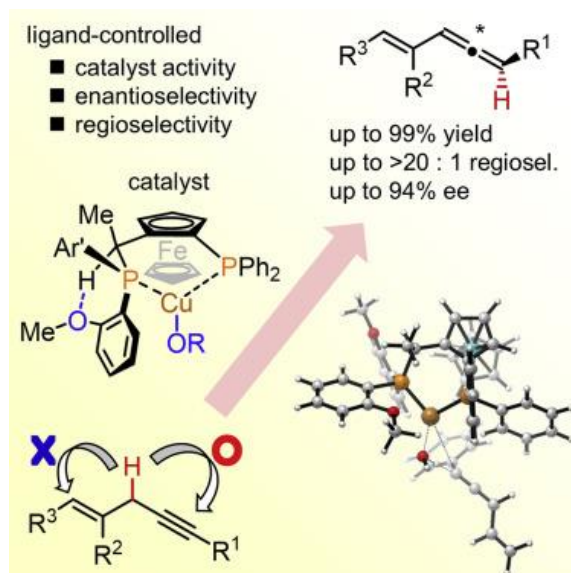
- Convergent synthesis
- High functional group tolerance on R moiety
- Broad substrate scope of dipyrromethene ligand

37) Xiao-Feng Wei, Takayuki Wakaki, Taisuke Itoh, Hong-Liang Li, Takayshi Yoshimura, Aya Miyazaki, Kounosuke Oisaki, Miho Hatanaka*, Youhei Shimizu*, Motomu Kanai*

“Catalytic, Regio- and Enantio-Selective Proton Migration from Skipped Enynes to Allenes”

Chem **2019**, 5(3), 585-599. DOI: [10.1016/j.chempr.2018.11.022](https://doi.org/10.1016/j.chempr.2018.11.022)

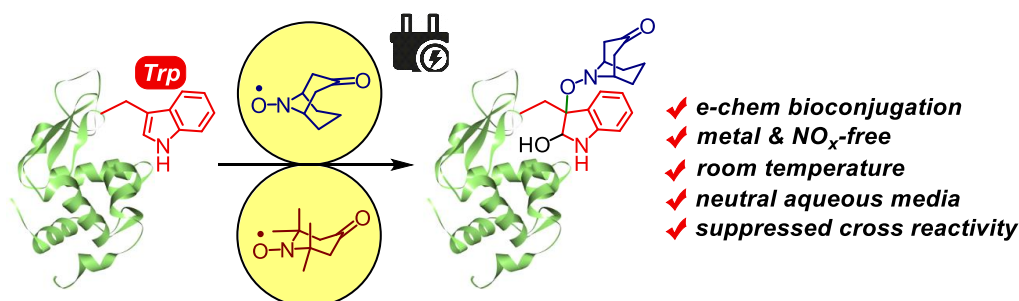
<Press release from [UT](#)>



38) Eisho Toyama, Katsuya Maruyama, Tomoya Sugai, Mio Kondo, Shigeyuki Masaoka, Tsuyoshi Saitoh, Kounosuke Oisaki, Motomu Kanai*

“Electrochemical Tryptophan-Selective Bioconjugation”

ChemRxiv, DOI: [10.26434/chemrxiv.7795484.v1](https://doi.org/10.26434/chemrxiv.7795484.v1)

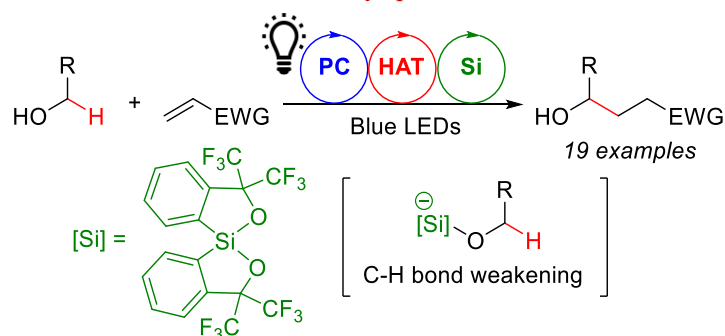


39) Kentaro Sakai, Kounosuke Oisaki, Motomu Kanai*

“Identification of Bond-Weakening Spirosilane Catalyst for Photoredox α -C-H Alkylation of Alcohols”

Adv. Synth. Catal. **2020**, 362(2), 337-343. doi: [10.1002/adsc.201901253](https://doi.org/10.1002/adsc.201901253)

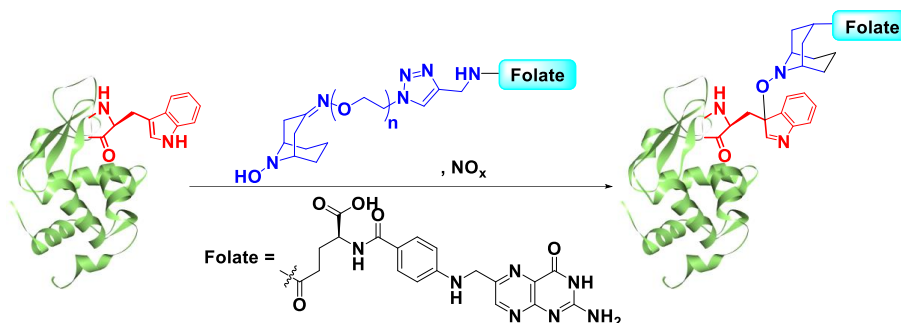
<Invited contribution to Eric N. Jacobsen’s 60th birthday special issue>



40) Katsuya Maruyama, Katarzyna Joanna Malawska, Natsuki Konoue, Kounosuke Oisaki, Motomu Kanai*

“Synthesis of Tryptophan-Folate Conjugates”

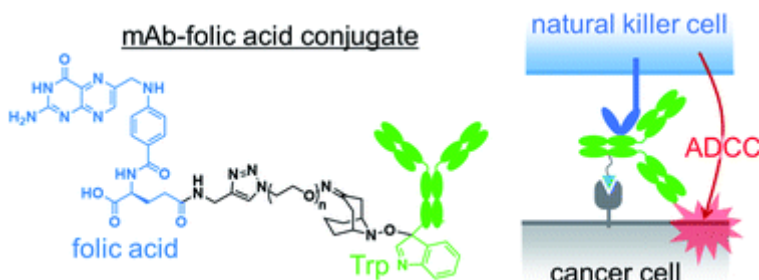
Synlett **2020**, 31 (08), 784-787. DOI: [10.1055/s-0039-1691735](https://doi.org/10.1055/s-0039-1691735)



41) Hiroshi Tagawa[†], Katsuya Maruyama[†], Koichi Sasaki, Natsuki Konoue, Motomu Kanai, Takeshi Mori, Kounosuke Oisaki*, Yoshiki Katayama* [[†] equally contributed]

“Induction of ADCC by folic acid-mAb conjugate prepared by tryptophan-selective reaction toward folate-receptor-positive cancer”

RSC Adv. **2020**, 10, 16727-16731. DOI: [10.1039/D0RA03291C](https://doi.org/10.1039/D0RA03291C)

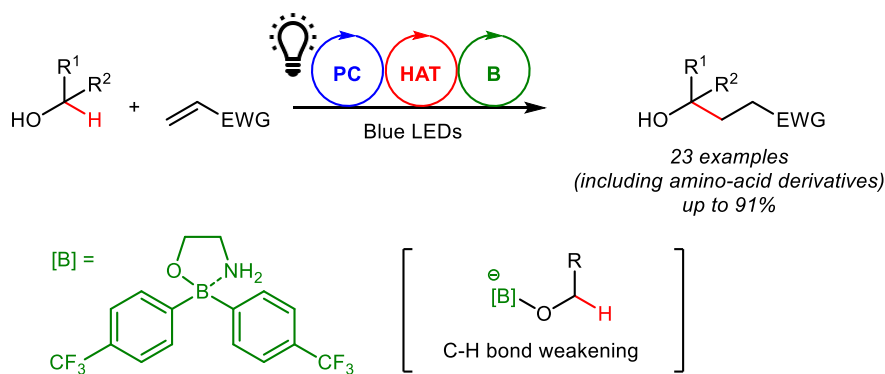


42) Kentaro Sakai, Kounosuke Oisaki, Motomu Kanai*

"A Bond-weakening Borinate Catalyst that Improves the Scope in the Photoredox α -C–H Alkylation of Alcohols"

Synthesis **2020**, DOI: [10.1055/s-0040-1707114](https://doi.org/10.1055/s-0040-1707114)

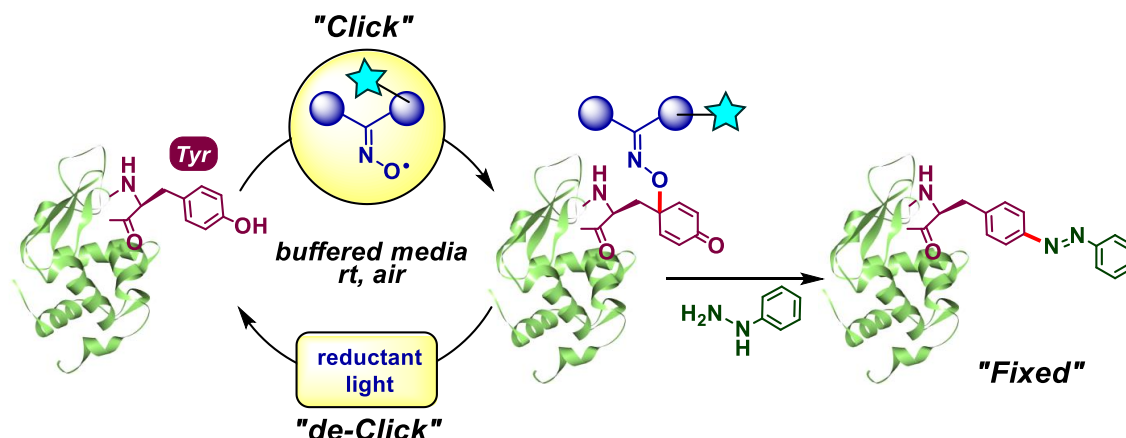
<Invited contribution honoring Thieme Chemistry Journals Award>



43) Katsuya Maruyama, Takashi Ishiyama, Yohei Seki, Kounosuke Oisaki, Motomu Kanai*

“Tyrosine-Selective Bioconjugation with Iminoxyl Radicals”

ChemRxiv DOI: [10.26434/chemrxiv.12278717.v1](https://doi.org/10.26434/chemrxiv.12278717.v1)



Account, Review, Book, Essay

1) 柴崎正勝*, 金井求, 生長幸之助

「四置換炭素の触媒的不斉構築法の開発と展開」

科学と工業、2007 年 7 月号、314-321 頁 (Japanese Account)

2) 生長幸之助

「異質で多様な研究環境で過ごす意義—米国 UCLA Yaghi 研究室」

現代化学、2010 年 8 月号、57-61 頁 (Japanese Essay)

4) 生長幸之助

「硫黄イリドの新しい調製法」

ファルマシア、2011 年 5 月号、437-438 頁 (Japanese Account)

5) Shogo Hashizume, Kounosuke Oisaki, Motomu Kanai*

“Catalytic Migratory Oxidative Coupling of Nitrones through an Outer-Sphere C(*sp*³)-H Activation Process”

The Chemical Record, **2011**, 11(5), 236-241. DOI: [10.1002/tcr.201100024](https://doi.org/10.1002/tcr.201100024) (Research Account for MBLA Special Issue)

6) 生長幸之助

「二酸化炭素をメタノールに！カスケード触媒戦略が可能にした高難度反応」

化学、2012 年 9 月号、63-64 頁 (Japanese Account)

7) 金井求*, 松永茂樹, 生長幸之助, 清水洋平

「金属触媒固有の特性を活かした炭素-炭素結合形成反応を目指して：塩基触媒からレドックス活性触媒へ」

有機合成化学協会誌, **2013**, 71(5), 433-442. DOI: [10.5059/yukigoseikyokaishi.71.433](https://doi.org/10.5059/yukigoseikyokaishi.71.433) (Japanese Account)

8) 生長幸之助

「「ブログ」は合成化学研究をどう変えるか」

有機合成化学協会誌, **2014**, 72(1), 74-78. DOI: [10.5059/yukigoseikyokaishi.72.74](https://doi.org/10.5059/yukigoseikyokaishi.72.74) (Japanese Essay)

9) 生長幸之助, 園部敏亮, 金井求*

「アミンの穏和な酸素酸化反応および環境調和型酸化カップリングを進行させる銅/keto-ABNO 触媒系」

和光純薬時報, **2014**, 82(2), 2-5. (Japanese Account) [\[PDF\]](#)

10) Yohei Seki, Kounosuke Oisaki, Motomu Kanai*

“Chemoselective Aerobic Oxidation Catalyzed by a Metal/Stable Organoradical Redox Conjugate”

Tetrahedron Lett. **2014**, 55(28), 3738-3746. DOI: [10.1016/j.tetlet.2014.05.085](https://doi.org/10.1016/j.tetlet.2014.05.085) (Review, **Open Access**)

11) Atsuhiko Taniguchi, Yusuke Shimizu, Kounosuke Oisaki, Youhei Sohma*, Motomu Kanai*

“Amyloid-selective oxygenation by photo-catalyst”

Peptide Science **2014**, 51, 69-70.

12) Atsuhiko Taniguchi, Yusuke Shimizu, Jizhi Ni, Kounosuke Oisaki, Yoichiro Kuninobu, Youhei Sohma*, Motomu Kanai*

“Development of selective photooxygenation catalyst targeting Amyloid-β”

Peptide Science **2015**, 52, 215-216.

13) Takayuki Wakaki, Kounosuke Oisaki, Motomu Kanai*

“Elementary and systemic views of the generation of toxic substances”

Green Chem. **2016**, 18, 3681-3683. doi:[10.1039/C6GC90058E](https://doi.org/10.1039/C6GC90058E) (Essay)

14) 関陽平、田辺佳奈、佐々木大輔、相馬洋平、生長幸之助, 金井求*

「セリン選択的ペプチド鎖切断法」

Chemistry & Biology, **2017**, 10(1), 6. (Japanese Account)

*15) 生長幸之助

「均質な抗体—薬物複合体とその製造法」

化学と教育, **2018**, 66(5), 236-237. (Japanese Account)

*16) 生長幸之助

「有機ラジカルを用いたタンパク質変換法の開発—実験的観察とコラボが紡ぎ出す開発ストーリー」

化学と工業, **2018**, 71(7), 605-606. (Japanese Account)

17) Kentaro Sakai, Kounosuke Oisaki, Motomu Kanai*

“9-Azabicyclo[3.3.1]nonan-3-one *N*-oxyl (keto-ABNO)”

Electronic Encyclopedia of Reagents for Organic Synthesis (e-EROS), doi: [10.1002/047084289X.rn02235](https://doi.org/10.1002/047084289X.rn02235)

(Research Account)

18) Kounosuke Oisaki

“Development of Highly Chemoselective Oxidative Transformations by Designing Organoradicals”

Chem. Pharm. Bull. **2018**, 66(10), 907-919. doi: [10.1248/cpb.c18-00501](https://doi.org/10.1248/cpb.c18-00501) (Invited Award Account)

<Highlighted by [Cover Picture](#), [Featured Article](#)>

19) 生長幸之助, 金井求*

「低反応性アミノ酸を標的とするタンパク質生体共役反応」

「ペプチド創薬の最前線」 監修: 木曾良明、シーエムシー出版、第3章, **2019** (Japanese Book Chapter)

Patent

1) Omar M. Yaghi, Alexander U. Czaja, Kounosuke Oisaki

“Organo-metallic frameworks derived from carbenophilic metals and method of making same”

Published patent applications: WO2011146155 (A2); WO2011146155 (A9); WO2011146155 (A3); US2013131344 (A1); MX2012008941 (A1); KR20120129905 (A); JP2013519687 (A); CA2788132 (A1); AU2011256793 (A1); EP2533898 (A2); CN102858455 (A); JP2014519687 (W); RU2012138958 (A); IN201206714 (P1)

2) 金井求、相馬洋平、清水裕介、谷口敦彦、生長幸之助、國信洋一郎

「ジピリンホウ素錯体及びこれを含有する医薬」

出願者 独立行政法人科学技術振興機構 特願 2015-044839 (出願日 2015/3/6)

Motomu Kanai, Yohei Soma, Yusuke Shimizu, Atsuhiko Taniguchi, Kounosuke Oisaki, Yoichiro Kuninobu

“Boron-dipyrin complex and medicament containing the same”

Published patent applications: EP3266765(A1); US20180042948 (A1); JPWO2016143699 (A1)

3) 金井求、生長幸之助、関陽平、佐々木大輔、石山隆史

「インドール構造選択的架橋剤およびそれを用いた複合体」

出願者 株式会社東京大学 TLO 出願番号 PCT/JP2017/9315 (出願日 2017/3/8)

Motomu Kanai, Kounosuke Oisaki, Yohei Seki, Daisuke Sasaki, Takashi Ishiyama

“Indole structure-selective crosslinking agent and composite in which same is used”

Published patent applications: WO2017154997(A1)

4) 金井求、生長幸之助、石山隆史、斎木邦子、関陽平、満田勝、井口恵太

「抗体薬物複合体およびそれを含む医薬組成物」

出願者 株式会社東京大学 TLO・株式会社カネカ 特願 2018-015404 (出願日 2018/1/31)

Motomu Kanai, Kounosuke Oisaki, Takashi Ishiyama, Kuniko Saiki, Yohei Seki, Masaru Mitsuda, Keita Iguchi

“Preparation of anti-cancer IgG1-drug conjugates using *N*-oxyradical or *N*-hydroxy group-containing crosslinkers for increased cytotoxic activities”

Published patent applications: WO2019150985 (A1)

5) 福井宜規、宇留野武人、金井求、生長幸之助、堤亮祐

「DOCK1 阻害化合物およびその用途」

出願者 国立大学法人九州大学 特願 2018-225753 (出願日 2018/11/30)

6) 金井求、生長幸之助、笹本晃生、平野遼、松本拓也

「ペプチド合成法」

出願者 株式会社東京大学 TLO 出願番号 特願 2020-024974 (出願日 2020/2/18)

7) 金井求、生長幸之助、丸山勝矢、石山隆史、関陽平

「アミノ酸残基選択的な不可逆／可逆生体分子修飾法」

出願者 株式会社東京大学 TLO 出願番号 米国 62/977730 (出願日 2020/2/18)

Lectures/Presentations

Invited or Awarded Lecture

- 1) "Development of Metal-Organic Frameworks with Transition Metal Complexes Oriented to Heterogeneous Catalysis"
東京大学 (金井求教授), 東京, 2010 年 7 月 23 日
- 2) "有機-無機の両面から触媒設計の合理を探る"
藤田研コロキウム, 東京大学 (藤田誠教授), 東京, 2010 年 9 月 10 日
- 3) "医薬合成の革新を目指して: sp^3 炭素を標的とした触媒的脱水素クロスカップリング反応の開発"
東京医科歯科大学 (細谷孝充教授・吉田優助教), 東京, 2012 年 11 月 2 日
- 4) "医薬合成の革新を目指して: sp^3 炭素を標的とした触媒的脱水素クロスカップリング反応の開発"
学習院大学 (秋山隆彦教授・森啓二助教), 東京, 2013 年 7 月 4 日
- 5) "Radical-Conjugated Redox Catalysis: the Powerful Chemoselectivity and Reactivity"
Stony Brook University (Prof. Iwao Ojima), New York, USA; July 2, 2014
- 6) "有機ラジカルの精密設計が拓く新規選択的酸化反応"
有機分子触媒若手セミナー, 玄海プリンスホテル, 福岡, 2014 年 9 月 6 日-7 日
- 7) "ラジカル共役型レドックス触媒が拓く新規選択的酸化反応"
南方研若手研究セミナー, 大阪大学 (南方聖司教授・武田洋平准教授), 大阪, 2015 年 6 月 6 日
- 8) "Chemoselective Oxidative Transformations by Novel Organoradicals"
Westfälische Wilhelm-Universität Münster (Profs. Ulrich Hennecke & Armido Studer), Münster, GERMANY;
July 19, 2016
- 9) "Chemoselective Oxidative Transformations by Novel Organoradicals"
Universität Freiburg (Prof. Bernhard Breit), Freiburg, GERMANY; July 22, 2016
- 10) "Development of Chemoselective Protein Modifications Using Organoradicals"
精密制御反応場 第 1 回国際若手セミナー, みのお山荘, 大阪, 2016 年 11 月 11 日-12 日
- 11) "有機ラジカルを用いた化学選択的タンパク質変換法の開発"
若手研究者のための有機化学札幌セミナー, 北海道大学, 札幌, 2016 年 11 月 29 日
- 12) "有機ラジカルを用いた化学選択的タンパク質変換法の開発"
第 9 回有機触媒シンポジウム, 名古屋大学, 名古屋, 2016 年 12 月 1 日-2 日
- 13) "有機ラジカルを用いた化学選択的タンパク質変換法の開発"
2nd Joint Workshop on Chirality in Chiba University and Soft Molecule Activation, 千葉大学, 千葉, 2016 年 12 月 19 日
- 14) "Development of Chemoselective Protein Modifications Using Organoradicals"
第 23 回ペプチドフォーラム, 東京大学, 東京, 2017 年 1 月 18 日
- 15) "ラジカル共役型レドックス触媒が拓く新規選択的酸化反応"
2016 年度 第 2 回 有機金属若手研究者の会, 東京理科大学, 東京, 2017 年 3 月 15 日
- 16) "有機ラジカルを用いた化学選択的タンパク質変換法の開発"
九州大学 (星野友准教授), 福岡, 2017 年 6 月 2 日
- 17) "Radical-conjugated redox catalysis: the powerful chemoselectivity and reactivity"

National University of Singapore (Prof. Shaozhong Ge), Singapore, SINGAPORE, June 5, 2017

18) “Chemoselective Protein Modifications Based on Organoradicals”

Nanyang Technological University (Prof. Rei Kinjo), Singapore, SINGAPORE, June 6, 2017

19) “有機ラジカルを用いた化学選択的タンパク質変換法の開発”

第 5 回柴崎研究セミナー, 微生物化学研究所, 東京, 2017 年 9 月 30 日

20) “不斉配位子開発から学んだ「オリジナリティの法則」”

ITbM/IGER Organic Chemistry Workshop, 名古屋大学, 名古屋, 2017 年 11 月 6 日-7 日

21) “有機ラジカルを用いた化学選択的タンパク質変換法の開発”

第 12 回プロセス化学ラウンジ, 和光純薬湯河原研修所, 湯河原, 2017 年 12 月 1 日-2 日

22) “有機ラジカルの精密設計が拓く新規選択的 C(sp^3)-H 変換法”

精密制御反応場 第 4 回公開シンポジウム, 東京大学, 東京, 2018 年 1 月 10 日-11 日

24) “A Medicinal Application of Tryptophan-Selective Protein Bioconjugation” **【若い世代の特別講演賞 受賞】**

日本化学会第 98 春季年会 若い世代の特別講演会、日本大学理工学部, 千葉, 2018 年 3 月 20 日-23 日

25) “Chemoselective Protein Modification Using Organoradicals”

The 98th CSJ Annual Meeting, Asian International Symposium -Medicinal Chemistry-, Nihon University, Chiba, JAPAN; March 22, 2018.

26) “有機ラジカルの設計に基づく高化学選択的な酸化変換法の開発” **【日本薬学会奨励賞 受賞】**

日本薬学会第 138 年会 (金沢), ANA ホテル, 金沢, 2018 年 3 月 26 日-28 日

27) “有機ラジカルの設計が実現する高化学選択的変換: 小分子から生体高分子へ”

九州大学(大嶋孝志 教授), 福岡, 2018 年 4 月 14 日

28) “Chemoselective Transformations by Designing Organoradicals: From Small Molecules to Biomacromolecules”

Boston University (Prof. Aaron B. Beeler), Boston, MA, USA; May 7, 2018

29) “Chemoselective Transformations by Designing Organoradicals: From Small Molecules to Biomacromolecules”

Boston College (Prof. Masayuki Wasa), Chestnut Hill, MA, USA; May 8, 2018

30) “有機ラジカルを用いた化学選択的タンパク質変換法の開発”

第 6 回慶應有機化学若手シンポジウム、慶應大学矢上キャンパス、神奈川、2018 年 5 月 12 日

31) “有機ラジカルの設計が実現する高化学選択的変換: 小分子から生体高分子へ”

京都大学 (高須清誠教授・瀧川紘講師), 京都, 2018 年 5 月 28 日

32) “有機ラジカルの設計が実現する高化学選択的変換: 小分子から生体高分子へ”

大阪大学 (赤井周司教授・井川貴詞准教授), 大阪, 2018 年 8 月 28 日

33) “C(sp^3)-H Functionalizations Promoted by Structurally Novel Hydrogen Atom Transfer Catalyst”

3rd International Symposium on Precisely Designed Catalysts with Customized Scaffolding

Congrès Convention Center, Osaka, Japan, August 29, 2018.

34) “1 電子レドックスを基盤とするタンパク質修飾法の開発と応用”

金井研究室コロキウム, 東京大学, 東京, 2018 年 9 月 29 日

35) “Chemoselective Transformations by Radical-Conjugated Redox Catalysis: From Functional Small Molecules to Biomacromolecules” **【三井化学触媒科学奨励賞 受賞】**

第 8 回 CSJ 化学フェスタ, タワーホール船堀, 東京, 2018 年 10 月 23 日

36) “有機ラジカルを用いる化学選択的タンパク質変換反応の開発と応用”

生命指向型化学シンポジウム「生体分子を標的とした有機化学反応の新展開」, 日本薬学会第 139 年会

- (千葉), 幕張メッセ, 千葉, 2019 年 3 月 20-23 日
- 37) “有機ラジカル設計に基づく C(sp³)-H 変換反応の開発”
ファインケミカルズ合成触媒研究会, 首都大学東京, 東京, 2019 年 5 月 25 日
- 38) “有機ラジカルを用いるタンパク質修飾法の開発と応用”
2019 年度前期 (春季) 有機合成化学講習会, 長井記念ホール, 東京, 2019 年 6 月 18-19 日
- 39) “有機ラジカルを用いるタンパク質修飾法の開発と応用”
生体機能関連化学若手の会・第 31 回サマースクール, 大学セミナーハウス, 東京, 2019 年 7 月 16-17 日
- 40) “Photoredox Hybrid Catalysis Promoting C(sp³)-H Functionalizations”
University of Athens (Prof. Christoforos G. Kokotos), Athens, GREECE; September 6, 2019
- 41) “有機ラジカルを用いるタンパク質修飾法の開発と応用”
第 2 回理研ケミカルバイオロジー合宿 Chemical Probe, 国立女性教育会館, 埼玉, 2019 年 10 月 8-9 日
- 42) “ELECTROCHEMICAL TRYPTOPHAN-SELECTIVE BIOCONJUGATION OF PROTEINS”
第 56 回ペプチド討論会, 東京医科歯科大学, 東京, 2019 年 10 月 23-25 日
- 43) “Chemoselective Transformations by Designing Organoradicals”
Imperial College London (Prof. Chris Braddock), London, UK; October 29, 2019
- 44) “Chemoselective Transformations by Designing Organoradicals”
University of Nottingham (Prof. Liam Ball), Nottingham, UK; October 30, 2019
- 45) “Chemoselective Transformations by Designing Organoradicals”
University of Bristol (Prof. Jonathan Clayden), Bristol, UK; November 1, 2019
- 46) “Chemoselective Transformations by Designing Organoradicals”
University of Glasgow (Prof. Andrew H. Thomson), Glasgow, UK; November 4, 2019
- 47) “Chemoselective Transformations by Designing Organoradicals”
University of Manchester (Prof. Daniele Leonori), Manchester, UK; November 5, 2019
- 48) “Chemoselective Protein Modification Using Organoradicals”
Okinawa Institute of Science and Technology Graduate University (Prof. Fujie Tanaka), Okinawa, JAPAN; December 17, 2019
- 49) “Chemoselective Protein Modification Using Organoradicals”
University of Alberta (Prof. Ratmir Derda), Edmonton, AB, CANADA; March 11th, 2020
- 50) “title”
第 2 回関東創農薬研究会, 日本曹達 小田原研究所, 神奈川, 2020 年 7 月 17 日

Presentation in International/Foreign Conference (○: Presenter)

- 1) ○Kounosuke Oisaki, Yutaka Suto, Motomu Kanai, Masakatsu Shibasaki
“Catalytic Asymmetric Aldol Reaction to Ketones”
The 4th International Forum on Chemistry of Functional Organic Chemicals (IFOC-4) [P-56: Poster presentation]
The University of Tokyo, Tokyo, JAPAN; November 16-17, 2003
- 2) ○Kounosuke Oisaki, Yutaka Suto, Motomu Kanai, Masakatsu Shibasaki

”Catalytic Asymmetric Aldol Reaction to Ketones”

15th International Conference of Organic Synthesis (ICOS-15) [5-C-23: Poster presentation with short talk]

Nagoya Congress Center, Nagoya, JAPAN; August 1-6, 2004

- 3) ○Reiko Wada, Kounosuke Oisaki, Motomu Kanai, Masakatsu Shibasaki

“Catalytic Enantioselective Allylboration of Ketones”

12th International Conference on Boron Chemistry [P-01: Poster presentation with short talk]

Sendai International Center, Sendai, JAPAN; September 12, 2005

- 4) ○Kounosuke Oisaki, Dongbo Zhao, Yutaka Suto, Motomu Kanai, Masakatsu Shibasaki

“CuF-catalyzed Enantioselective Aldol Reaction to Ketones”

The 5th International Forum on Chemistry of Functional Organic Chemicals (IFOC-5) [P-93: Poster presentation]

The University of Tokyo, Tokyo, JAPAN; November 16-17, 2006

- 5) ○Motomu Kanai, Dongbo Zhao, Kounosuke Oisaki, Masakatsu Shibasaki,

“Catalytic Asymmetric Reductive Aldol Reaction of Allenic Esters to Ketones”

The 5th International Forum on Chemistry of Functional Organic Chemicals (IFOC-5) [P-41: Poster presentation]

The University of Tokyo, Tokyo, JAPAN; November 16-17, 2006

- 6) ○Tomoyuki Shibuguchi, Reiko Wada, Sae Makino, Kounosuke Oisaki, Motomu Kanai, Masakatsu Shibasaki

”Catalytic Asymmetric Allylation of Ketoimines”

International Molecular Chirality Conference in Toyama [PP-35: Poster presentation]

Toyama International Conference Center, Toyama, JAPAN; May 18-19, 2006

- 7) ○Dongbo Zhao, Kounosuke Oisaki, Motomu Kanai, Masakatsu Shibasaki

“Catalytic Enantioselective Intermolecular Aldol Reaction to Ketones”

7th Tetrahedron Symposium [P123: Poster presentation]

Kyoto Research Park, Kyoto, JAPAN; May 25-26, 2006

- 8) ○Kounosuke Oisaki, Dongbo Zhao, Motomu Kanai, Masakatsu Shibasaki

“Catalytic Asymmetric Multicomponent Reductive/Alkylative Aldol Reactions with Allenic Esters and Unactivated Ketones”

15^h European Symposium on Organic Chemistry (ESOC 2007) [P231: Poster presentation]

University of College Dublin, Dublin, IRELAND; July 8-13, 2007

<ESOC2007 Poster Presentation Award was received.>

- 9) Attendance to the 59th Lindau Meeting of Nobel Laureates, dedicated to Chemistry

Inselhalle in Lindau Island, Lindau, GERMANY; June 28 – July 3, 2009

- 10) ○Konosuke Oisaki, Bo Wang, Alexander U. Czaja, Zheng Lu, Omar M. Yaghi

“Unexpected carbon-carbon bond-forming reactions catalyzed by metal-organic frameworks”

239th ACS National Meeting [INOR-811: Poster presentation]

Moscone Center, San Francisco, CA, USA; March 21-25, 2010

- 11) ○Shogo Hashizume, Kounosuke Oisaki, Motomu Kanai

“Catalytic Migratory Oxidative Coupling of Nitrones”

The 2nd International Symposium on Process Chemistry (ISPC 2011) [1P-09: Poster presentation]

Kyoto International Conference Center, Kyoto, JAPAN; August 10-12, 2011

- 12) ○Shogo Hashizume, Kounosuke Oisaki, Motomu Kanai

“Catalytic Migratory Oxidative Coupling of Nitrones”

8th AFMC International Medicinal Chemistry Symposium (AIMECS11) [L-A10: Oral presentation]

Keio Plaza Hotel Tokyo, Tokyo, JAPAN; November 29 – December 2, 2011

- 13) ○Kounosuke Oisaki, Shogo Hashizume, Motomu Kanai

“Catalytic Migratory Oxidative Coupling of Nitrones”

The 6th International Conference on Cutting-Edge Organic Chemistry in Asia / The 2nd New Phase International Conference on Cutting-Edge Organic Chemistry in Asia (ICCEOCA-6/ NICCEOCA-2) [PA-44: Poster presentation]

The Chinese University of Hong Kong, Hong Kong, CHINA; December 11–15, 2011

- 14) ○Kounosuke Oisaki, Shogo Hashizume, Motomu Kanai

“Catalytic Migratory Oxidative Coupling of Nitrones”

13th Annual Florida Heterocyclic and Synthetic IUPAC-Sponsored Conference (FLOHET13) [P09: Poster presentation]

University of Florida, Gainesville, FL, USA; March 4–7, 2012

- 15) ○Kounosuke Oisaki, Toshiaki Sonobe, Motomu Kanai

“Catalytic Aerobic Production of Imines en Route to Mild, Green and Concise Derivatizations of Amines”

International Conference “Catalysis in Organic Synthesis” (ICCOS-2012) [P195: Poster presentation], Zelinsky Institute of Organic Chemistry, Moscow, RUSSIA; September 15-20, 2012

Post-Conference Symposium “Frontiers of Organometallic Chemistry” (FOC-2012) [P57: Poster presentation], St. Petersburg State University, St. Petersburg, RUSSIA; September 21–22, 2012

<ICCOS-2012 Best Poster Award was received.>

- 16) ○Toshiaki Sonobe, Yohei Seki, Kounosuke Oisaki, Motomu Kanai

“Catalytic Aerobic Production of Imines en Route to Mild, Green and Concise Derivatizations of Amines”

The 7th International Forum on Chemistry of Functional Organic Chemicals (IFOC-7) [P-25: Poster presentation]

The University of Tokyo, Tokyo, JAPAN; November 18-19, 2012.

- 17) ○Noriaki Takasu, Masahiro Kojima, Kounosuke Oisaki, Motomu Kanai

“Fe-Catalyzed Oxidative C(3)-Functionalization of Amines”

The 7th International Forum on Chemistry of Functional Organic Chemicals (IFOC-7) [P-28: Poster presentation]

The University of Tokyo, Tokyo, JAPAN; November 18-19, 2012.

- 18) ○Toshiaki Sonobe, Youhei Seki, Kounosuke Oisaki, Motomu Kanai

“Catalytic Aerobic Derivatization of Amines Oriented to Concise Synthesis of Medicinal Building Blocks”

The 5th Global COE Retreat in Oiso [Oral presentation]

Prince Hotel Oiso, Kanagawa, JAPAN; January 19-20, 2013.

- 19) ○Junpei Abe, Kounosuke Oisaki, Motomu Kanai

“Development of Catalytic Dehydrogenative Cyclization Reaction toward Rapid Construction of Ring-Fused Indole Skeleton”

The 23rd French-Japanese Symposium on Medicinal and Fine Chemistry [P-63: Poster presentation]

Crowne Plaza ANA Nagasaki Gloverhill, Nagasaki, JAPAN; May 12-15, 2013.

- 20) ○Kounosuke Oisaki, Noriaki Takasu, Motomu Kanai
“Fe-Catalyzed Oxidative C(3)-Functionalization of Amines”
Frontiers in Chemistry Armenia (ArmChemFront2013) [C12: Oral presentation]
Ani Plaza Hotel, Yerevan, ARMENIA; August 25-29, 2013.
- 21) ○Kana Tanabe, Atsuhiko Taniguchi, Takuya Matsumoto, Kounosuke Oisaki, Youhei Sohma, Motomu Kanai
“Aspartate-Selective Cleavage of Peptide Bonds by Hypervalent Iodine”
4th Asia-Pacific International Peptide Symposium (APIPS 2013)/50th Japanese Peptide Symposium [P-041: Poster presentation]
Hotel Hankyu Expo Park, Osaka, JAPAN; November 6-8, 2013.
- 22) ○Shogo Hashizume, Kounosuke Oisaki, Motomu Kanai
“A Catalytic Oxidation of Benzylic C(*sp*³)-H Bonds Utilizing Molecular Oxygen”
The French-American Chemical Society 15th Meeting (FACS XV) [Poster presentation]
Avignon Grand Hotel, Avignon, FRANCE; June 1-5, 2014.
- 23) ○Toshiaki Sonobe, Kounosuke Oisaki, Motomu Kanai
“Room Temperature-Catalytic β-C-H Functionalization of Amines”
The French-American Chemical Society 15th Meeting (FACS XV) [Poster presentation]
Avignon Grand Hotel, Avignon, FRANCE; June 1-5, 2014.
- 24) ○Jizhi Ni, Jun Ozawa, Masayuki Tashiro, Kounosuke Oisaki, Motomu Kanai
“O₂/NO_x-Promoted Site- and Oxidation State-Selective C(*sp*³)-H Oxidation”
The International Conference on Hydrogen Atom Transfer (iCHAT 2014) [Poster presentation]
Villa Mondragone, Monteporzio Catone, ITALY; June 22-26, 2014.
- 25) ○Kounosuke Oisaki, Yohei Seki, Kana Tanabe, Daisuke Sasaki, Youhei Sohma, Motomu Kanai
“Serine-Selective Aerobic Cleavage of Peptides and a Protein Using Water-Soluble Copper-Organoradical Conjugate”
19th International Symposium on Homogeneous Catalysis (ISHC-IXX) [110: Poster presentation]
Ottawa Convention Centre, Ottawa, CANADA; July 6-11, 2014.
- 26) Masahiro Kojima, Kounosuke Oisaki, ○Motomu Kanai
“Synthesis of 9-fluorenones via selective photo-oxidation of 9*H*-fluorenes”
XXVI International Conference on Organometallic Chemistry (ICOMC2014) [1P094: Poster presentation]
Royton Sapporo Hotel, Sapporo, JAPAN; July 13-18, 2014.
- 27) ○Masayuki Tashiro, Jun Ozawa, Jizhi Ni, Kounosuke Oisaki, Motomu Kanai
“Regioselective Aerobic Oxygenation of *sp*³ C-H Bonds of Alcohols Using *N*-Oxyl Radical Directing Activator”
2nd International Conference & 7th Symposium on Organocatalysis [PS8: Poster presentation]
The University of Tokyo, Tokyo, JAPAN; November 21-22, 2014.
- 28) ○Yusuke Shimizu, Atsuhiko Taniguchi, Kounosuke Oisaki, Youhei Sohma, Motomu Kanai
“Development of amyloid β-selective photooxygenation catalyst toward treatment of Alzheimer disease”
2nd International Conference & 7th Symposium on Organocatalysis [PS1: Poster presentation]
The University of Tokyo, Tokyo, JAPAN; November 21-22, 2014.
- 29) ○Kounosuke Oisaki, Yohei Seki, Kana Tanabe, Daisuke Sasaki, Youhei Sohma, Motomu Kanai
“Serine-Selective Aerobic Cleavage of Peptides and a Protein Using Water-Soluble Copper-Organoradical

Conjugate”

The 9th International Conference on Cutting-Edge Organic Chemistry in Asia / The 5th New Phase International Conference on Cutting-Edge Organic Chemistry in Asia (ICCEOCA-9/ NICCEOCA-5) [PD-20: Poster presentation]

Eastin Hotel Petaling Jaya, Selangor, MALAYSIA; December 1–4, 2014.

30) ○Masahiro Kojima, Kounosuke Oisaki, Motomu Kanai

“Metal-free C(3)-H arylation of coumarins promoted by catalytic amounts of 5,10,15,20-tetrakis(4-diethylaminophenyl)porphyrin”

The 3rd International Symposium on Process Chemistry (ISPC2015) [2P-17: Poster presentation]

Kyoto International Conference Center, Kyoto, JAPAN; July 13-15, 2015.

31) ○Youhei Sohma, Atsuhiko Taniguchi, Yusuke Shimizu, Jizhi Ni, Kounosuke Oisaki, Motomu Kanai

"Biocompatible Photooxygenation Catalyst that Targets Amyloid Aggregation"

The 7th International Peptide Symposium [Oral Presentation]

Singapore, SINGAPORE; December 9-11, 2015.

32) ○Kounosuke Oisaki, Jun Ozawa, Jizhi Ni, Masayuki Tashiro, Motomu Kanai

"Chemo- and Siteselective Aerobic Oxygenation of sp^3 C-H Bonds of Alcohols Using *N*-Oxyl Radical Directing Activator"

The International Chemical Congress of Pacific Basin Societies (Pacifichem2015) [ORGN 2480: Poster Presentation]

Hawaii Convention Center, Honolulu, HI, USA; December 15-20, 2015.

33) ○Yohei Seki, Kana Tanabe, Daisuke Sasaki, Youhei Sohma, Kounosuke Oisaki, Motomu Kanai

“Serine-Selective Aerobic Cleavage of Peptides and a Protein Using Water-Soluble Copper-Organoradical Conjugate”

17th Tetrahedron Symposium [Poster presentation]

Sitge, SPAIN; June 28-July 1, 2016.

<Best Student Poster Award was received.>

34) ○Kounosuke Oisaki, Jizhi Ni, Jun Ozawa, Masayuki Tashiro, Motomu Kanai

"Directing activator-assisted regio- and oxidation state-selective aerobic oxidation of secondary C(sp^3)-H bonds in aliphatic alcohols"

The 15th Belgian Organic Synthesis Symposium (BOSS XV) [P237: Poster Presentation]

University of Antwerp, Antwerp, BELGIUM; July 10-15, 2016.

35) ○Atsuhiko Taniguchi, Jizhi Ni, Yusuke Shimizu, Shuta Ozawa, Yukiko Hori, Taisuke Tomita, Kounosuke Oisaki, Yoichiro Kuninobu, Youhei Sohma, Motomu Kanai

“Amyloid-selective catalytic photooxygenation with long-wavelength light irradiation”

Peptide and Protein Society in Singapore Symposium [No.1: Oral Presentation]

Nanyang Technological University, Singapore, SINGAPORE, December 8-9, 2016.

36) ○Kounosuke Oisaki, Yohei Seki, Takashi Ishiyama, Daisuke Sasaki, Junpei Abe, Youhei Sohma, Motomu Kanai

“Transition Metal-Free, Tryptophan-Selective Bioconjugation of Proteins”

3rd International Symposium for Medicinal Sciences [26G-ISMS10: Invited Poster Presentation]

Sendai International Center, Sendai, JAPAN; March 26, 2017.

- 37) ○Kounosuke Oisaki, Masayuki Tashiro, Kentaro Sakai, Motomu Kanai
“Development of a Catalytic Regioselective C(*sp*³)-H Functionalization through Alcohol Reversible Recognition”
2nd International Symposium on Precisely Designed Catalysts with Customized Scaffolding [P-24: Poster Presentation]
Osaka University, Osaka, JAPAN; May 12-13, 2017.
- 38) ○Kounosuke Oisaki, Yohei Seki, Takashi Ishiyama, Daisuke Sasaki, Junpei Abe, Youhei Sohma, Motomu Kanai
“Transition Metal-Free, Tryptophan-Selective Bioconjugation of Proteins”
International Symposium on Pure & Applied Chemistry 2017 (ISPAC2017) [ORG27: Oral Presentation]
Ho Chi Minh City, VIETNAM; June 8-10, 2017.
- 39) ○Kounosuke Oisaki, Yohei Seki, Takashi Ishiyama, Daisuke Sasaki, Junpei Abe, Youhei Sohma, Motomu Kanai
“Transition Metal-Free, Tryptophan-Selective Bioconjugation of Proteins”
Shimadzu Global Innovation Summit 2017 [P20: Poster Presentation]
Shimadzu Corporation Head Office, Kyoto, JAPAN; July 4-5, 2017.
- 39) ○Takayuki Wakaki, Kounosuke Oisaki, Motomu Kanai
“A Visible-light Promoted Catalytic C(*sp*³)-H Cyanation Inspired by Natural Phosphate Hydrogen Atom Transfer (HAT) Process”
University of Tokyo GPLLI Student Symposium in America [Oral Presentation]
Jackson laboratory (Bar Harbor), Abbvie (Boston), Brown University (Providence), USA, November 5-7, 2017
- 40) ○Kounosuke Oisaki
“Chemoselective Protein Modification Using Organoradicals”
The 98th CSJ Annual Meeting, Asian International Symposium -Medicinal Chemistry- [Oral Presentation]
Nihon University, Chiba, JAPAN; March 20-23, 2018.
- 41) ○Kounosuke Oisaki, Takashi Ishiyama, Kuniko Saiki, Yohei Seki, Keita Iguchi, Masaru Mitsuda, Motomu Kanai
“Concisely Produced Homogeneous Antibody-Drug Conjugates by A Tryptophan-Selective Protein Bioconjugation”
14th Annual PEGS Boston [B126: Short Oral & Poster Presentation]
Seaport World Trade Center, Boston, MA, USA; April 30-May 4, 2018.
<Highlighted as “Selected Poster Presentation”>
- 42) ○Kounosuke Oisaki
“C(*sp*³)-H Functionalizations Promoted by Structurally Novel Hydrogen Atom Transfer Catalyst”
3rd International Symposium on Precisely Designed Catalysts with Customized Scaffolding [O-2: Oral Presentation]
Congrès Convention Center, Osaka, JAPAN; August 29, 2018.
- 43) ○Kounosuke Oisaki, Takayuki Wakaki, Kentaro Sakai, Takafumi Enomoto, Mio Kondo, Shigeyuki Masaoka, Motomu Kanai
“C(*sp*³)-H Cyanation Promoted by Visible-Light Photoredox/Phosphate Hybrid Catalysis”
The 4th International Symposium on C-H Activation (ISCHA-4) [P2-39: Poster Presentation]
Keio University, Kanagawa, JAPAN; August 30-September 2, 2018.
- 44) ○Takayuki Wakaki, Kentaro Sakai, Takafumi Enomoto, Mio Kondo, Shigeyuki Masaoka, Kounosuke Oisaki,

Motomu Kanai

“C(*sp*³)-H Cyanation Promoted by Visible-Light Photoredox/Phosphate Hybrid Catalysis”

Frontiers in Chemistry, Armenia (ArmChemFront2018) [Poster Presentation]

Yerevan State University, Yerevan, ARMENIA; October 21-25, 2018.

45) Kounosuke Oisaki, Takashi Ishiyama, Kuniko Saiki, Yohei Seki, Keita Iguchi, Masaru Mitsuda, Motomu Kanai

“Concisely Produced Homogeneous Antibody-Drug Conjugates by A Tryptophan-Selective Protein Bioconjugation”

9th World ADC San Diego 2018 [Poster Presentation]

Marriott Marquis & Marina, San Diego, CA, USA; November 12-15, 2018

46) Keita Sasamoto, Takuya Matsumoto, Ryo Hirano, Kounosuke Oisaki, Motomu Kanai

“Catalytic One-step Synthesis of Peptide Thioacids”

The 9th International Forum on Chemistry of Functional Organic Chemicals (IFOC-9) [P-19: Poster Presentation]

Ichijo Hall, The University of Tokyo, Tokyo, JAPAN; November 18-19, 2018

47) Keita Maruyama, Takashi Ishiyama, Atsushi Kawamura, Kuniko Saiki, Yuki Kobayashi, Yohei Seki, Keita Iguchi, Masaru Mitsuda, Kounosuke Oisaki, Motomu Kanai

“Tryptophan-Targeted Homogeneous Antibody-Drug Conjugates”

The 9th International Forum on Chemistry of Functional Organic Chemicals (IFOC-9) [P-41: Poster Presentation]

Ichijo Hall, The University of Tokyo, Tokyo, JAPAN; November 18-19, 2018

48) Kounosuke Oisaki, Takashi Ishiyama, Atsushi Kawamura, Kuniko Saiki, Yuki Kobayashi, Keita Maruyama, Yohei Seki, Keita Iguchi, Masaru Mitsuda, Motomu Kanai

“Homogeneous Antibody-Drug Conjugates (ADCs) by a Tryptophan-Selective Protein Bioconjugation”

10th International Peptide Symposium [O-78: Oral Presentation]

ROHM Theatre Kyoto and Miyakomesse, Kyoto, JAPAN; December 3-7, 2018.

49) Keisho Toyama, Keita Maruyama, Tomoya Sugai, Mio Kondo, Shigeyuki Masaoka, Tsuyoshi Saitoh, Kounosuke Oisaki, Motomu Kanai

“Electrochemical Tryptophan-Selective Bioconjugation”

The 1st International Symposium on Hybrid Catalysis for Enabling Molecular Synthesis on Demand [P-6: Poster Presentation]

Ito Hall, The University of Tokyo, Tokyo, JAPAN; May 30-31, 2019

50) Keita Maruyama, Takashi Ishiyama, Atsushi Kawamura, Kuniko Saiki, Yuki Kobayashi, Yohei Seki, Keita Iguchi, Masaru Mitsuda, Kounosuke Oisaki, Motomu Kanai

“Tryptophan-Targeted Homogeneous Antibody-Drug Conjugates”

The 1st International Symposium on Hybrid Catalysis for Enabling Molecular Synthesis on Demand [P-50: Poster Presentation]

Ito Hall, The University of Tokyo, Tokyo, JAPAN; May 30-31, 2019

51) Keihideharu Shichi, Shuichi Nakaya, Keita Maruyama, Kosuke Hosoi, Takashi Nishikaze, Koichi Kojima, Kei Kodaera, Sadanori Sekiya, Shinichi Iwamoto, Kounosuke Oisaki, Motomu Kanai, Koichi Tanaka

“MSⁿ Analyses for Tryptophan-Conjugated ADC Mimic by Miniature MALDI Digital Ion Trap Mass Spectrometer (MALDI-DIT-MS)”

The 67th ASMS Conference on Mass Spectrometry and Allied Topics [Poster presentation]

Georgia World Congress Center, Atlanta, GA, USA; June 2-6, 2019.

52) author

“Title”

11th Annual the Bioprocessing Summit [Poster Presentation]

Seaport World Trade Center, Boston, MA, USA; August 12-16, 2019

53) ○Kounosuke Oisaki, Eisho Toyama, Katsuya Maruyama, Tomoya Sugai, Mio Kondo, Shigeyuki Masaoka, Tsuyoshi Saitoh, Motomu Kanai

“Electrochemical Tryptophan-Selective Bioconjugation”

European Federation for Medicinal Chemistry International Symposium on Advances in Synthetic and Medicinal Chemistry (EFMC-ASMC’19) [P211: Poster presentation]

Zappeion Conference & Exhibition Center, Athens, GREECE; September 1-5, 2019.

54) ○Kounosuke Oisaki, Eisho Toyama, Katsuya Maruyama, Tomoya Sugai, Mio Kondo, Shigeyuki Masaoka, Tsuyoshi Saitoh, Motomu Kanai

“Electrochemical Tryptophan-Selective Bioconjugation”

19th Tateshina Conference on Organic Chemistry [P-48: Poster presentation]

Skypark Hotel in Kurumayama Kogen, Nagano, JAPAN; November 8-10, 2019.

55) ○Kentaro Sakai, Kounosuke Oisaki, Motomu Kanai

“Identification of Bond-Weakening Spirosilane Catalyst for Photoredox α -C–H Alkylation of Alcohols”

4th International Symposium on Precisely Designed Catalysts with Customized Scaffolding [PB-30: Poster presentation]

Todaiji Culture Center, Nara, JAPAN; December 3-5, 2019.

56) Kentaro Sakai, ○Kounosuke Oisaki, Motomu Kanai

“A Bond-Weakening Borinate Complex for Improved Scope of Photoredox α -C–H Alkylation of Alcohols”

4th International Symposium on Precisely Designed Catalysts with Customized Scaffolding [PA-23: Poster presentation]

Todaiji Culture Center, Nara, JAPAN; December 3-5, 2019.

57) Kounosuke Oisaki, Takashi Ishiyama, Kuniko Saiki, Yohei Seki, Keita Iguchi, Masaru Mitsuda, Motomu Kanai, ○Harkewal Singh

“A novel method to produce site selective Antibody-Drug Conjugates using inherent tryptophans”

10th Annual World ADC London 2020 [submitted]

London Novotel West, London, UK; March 2-5, 2020.

58) Kentaro Sakai, ○Kounosuke Oisaki, Motomu Kanai

“A Bond-Weakening Borinate Complex that Improves the Scope of Photoredox α -C–H Alkylation of Alcohols”

The International Chemical Congress of Pacific Basin Societies (Pacifichem2020) [submitted: Poster Presentation]

Hawaii Convention Center, Honolulu, HI, USA; December 15-20, 2020.

59) Kentaro Sakai, ○Kounosuke Oisaki, Motomu Kanai

“Identification of Bond-Weakening Spirosilane Catalyst for Photoredox α -C–H Alkylation of Alcohols”

The International Chemical Congress of Pacific Basin Societies (Pacifichem2020) [submitted: Poster

Presentation]

Hawaii Convention Center, Honolulu, HI, USA; December 15-20, 2020.

60) Katsuya Maruyama, Takashi Ishiyama, Yohei Seki, ○Kounosuke Oisaki, Motomu Kanai

“Tunable Traceless Reversibility in a Tyrosine-Selective Iminoxyl Bioconjugation”

The International Chemical Congress of Pacific Basin Societies (Pacifichem2020) [submitted: Oral Presentation]

Hawaii Convention Center, Honolulu, HI, USA; December 15-20, 2020.

61) ○Kounosuke Oisaki, Koki Sasamoto, Toshifumi Tatsumi, Ryo Hirano, Takuya Matsumoto, Motomu Kanai

“Protecting Group-Minimized Peptide Synthesis Using Peptide Thioacid”

36th European Peptide Symposium (EPS 2020) / 12th International Peptide Symposium [submitted]

Hotel Meliá Sitges, Sitges, SPAIN; postponed.

Organized Conference, Symposium, Seminar, Workshop, Outreach

- 1) 東京大学薬学部見学会（徳島市立高等学校），東京大学薬学部, 2019 年 7 月 31 日
- 2) 東京大学薬学部見学会（都立調布北高校），東京大学薬学部, 2019 年 12 月 26 日
- 3) 光学活性化合物シンポジウム（第 28~30 回、2018-2020), 東京大学薬学部
- 4) Chemical Hackers~領域を超えて化学の将来を語り合う~(第 1~3 回、2019/5/19, 2019/10/19, 2020/2/2),
Beyond Next Ventures

Synergistic Activity

[As a Chem-Station Staff]

Chem-Station is the largest chemical portal site in Japan that organizes and provides chemical information in the world wide web. We provide unique chemistry contents and various research-oriented information such as interpreted research articles, databases, books, reagents, equipments, and softwares.



General Information (May 2020)

URLs: <https://www.chem-station.com/> (JP), <https://en.chem-station.com/> (EN)
<https://cn.chem-station.com/> (CN), <https://chem-station.slack.com> (Slack, JP)

Manager: Junichiro Yamaguchi (Director)
Kounosuke Oisaki (Deputy-Director)

Founded: May 11th, 2000

Published Articles: > 8,000

Page Visits: 1,000,000 – 2,400,000 PV/month

Registered Staffs: 128 (>80% of staffs are PhD or PhD candidates)

Facebook ([@ChemStationJP](#)): > 5,200 likes

Twitter ([@chemstation](#)): > 19,600 followers

Slack (chem-station.slack.com) > 1,600 users

YouTube Channel ([URL](#)) > 650 users

Award for Website

2001 Microsoft FrontPage ホームページ大賞
2012 化学コミュニケーション賞 (日本化学連合)
2017 化学教育賞 (日本化学会)
2019 文部科学大臣表彰 科学技術賞[理解増進部門] (文部科学省)

Publication, Lecture, Activity (by K. Oisaki)

1) 山口潤一郎, 生長幸之助*

「院試で学ぶ有機化学の基礎—重要化合物、最新研究にリンク」

現代化学、2011 年 4 月～2012 年 3 月 (全 12 回/隔月交互連載、Japanese Essay)

2) 生長幸之助、"Chemistry on the Web—Chem-Station と歩んだ 10 年"

有機化学美術館交流会 (佐藤健太郎), 東京, 2013 年 9 月 21 日

3) サイエンスアゴラ出展 "ケムステ出張版! 広がる化学の世界" (2013-2015)

4) 日本化学会春季年会 ケムステイブニングミキサー (2014-2018)

5) 生長幸之助

「2016 年ノーベル化学賞『分子機械の設計と合成』」

じっきょう理科資料 81 号 (2017 年 4 月 1 日発行)(Japanese Account) [\[PDF\]](#)

6) ケムステバーチャルシンポジウム 第 1 回「最先端有機化学」, オンライン (YouTube), 2020 年 5

月 1 日, 参加登録数 2724 名

7) ケムステバーチャルシンポジウム 第 2 回「光化学へようこそ!」, オンライン (YouTube) , 2020 年 5 月 15 日, 参加登録数 2495 名

8) ケムステバーチャルシンポジウム 第 3 回「若手化学者、海外経験を語る」, オンライン (YouTube) , 2020 年 5 月 23 日, 参加登録数 1056 名

[As a ChemRxiv Scientific Advisory Board]

ChemRxiv (pronounced 'chem-archive', <https://chemrxiv.org/>) is a free submission,

ChemRxiv™

distribution and archive service for unpublished preprints in chemistry and related areas. It gives researchers across a broad range of chemistry fields the opportunity to share early results with colleagues and respond to comments and recommendations for improvement, ahead of formal peer review and publication.

Publication, Lecture, Activity (by K. Oisaki)

1) 生長幸之助、“化学分野におけるプレプリントの位置付け・課題等について”

第 2 回 SPARC Japan セミナー2017, 国立情報学研究所, 東京, 2017 年 10 月 30 日 [\[log\]](#)

2) 生長幸之助、“化学系プレプリント(ChemRxiv)の活用法を考える”

日本化学会 第 99 春季年会「ジャーナルフォーラム」, 甲南大学, 神戸, 2019 年 3 月 18 日

[As an ARchemist Project Member]

ARchemist is a community aiming at the fusion of art and chemistry. With the motto of "make chemistry more interesting", serious learning "Chemistry", artists, bartenders, and other members collaborate to create surprising fun like alchemy.

ARchemist

General Information (April 2020)

URLs: <https://archemist.org/>; Twitter ([@ARchemist2020](#)); Instagram ([@archemist2020](#))
Director: Shunsuke Furukawa
Founded: January 14th, 2020
Members: 22

Activity

coming soon.

Update: May 28th, 2020