

Curriculum Vitae

Kenichiro Itami

*Molecule Creation Laboratory, Pioneering Research Institute (PRI), RIKEN,
Expanded Chemical Space Research Team, Center for Sustainable Resource Science (CSRS),
RIKEN, Wako, Saitama 351-0198, Japan
E-mail: kenichiro.itami@riken.jp
Website (Itami Lab): <https://itami-lab.com/>*

Current appointments

Chief Scientist, Molecule Creation Laboratory, Pioneering Research Institute, RIKEN
Team Director, Expanded Chemical Space Research Team,
Center for Sustainable Resource Science, RIKEN
Principal Investigator, Institute of Transformative Bio-Molecules (ITbM), Nagoya University
Joint Appointment Research Fellow, Institute of Chemistry, Academia Sinica, Taiwan

Date of birth

April 4, 1971

Citizenship

Japanese

Education

1990~1994	B.S. in Chemistry, Kyoto University, Japan Advisor: Prof. Hisanobu Ogoshi
1994~1996	M.S. Graduate Student in Chemistry, Kyoto University, Japan Advisor: Prof. Yoshihiko Ito
1996~1998	Ph.D. Graduate Student in Chemistry, Kyoto University, Japan Advisor: Prof. Yoshihiko Ito
1996~1998	JSPS Research Fellowship for Young Scientists
1997~1998	Exchange Student, Uppsala University, Sweden (Prof. Jan-E. Bäckvall)

Academic career

1998~2005	Assistant Professor, Kyoto University (with Prof. Jun-ichi Yoshida)
2005~2008	Associate Professor, Nagoya University (with Prof. Ryoji Noyori)
2005~2009	JST, PRESTO, Researcher
2008~2024	Professor, Department of Chemistry, Graduate School of Science, Nagoya University
2012~2022	Director, Institute of Transformative Bio-Molecules (ITbM), Nagoya University
2012~present	Principal Investigator, ITbM, Nagoya University
2013~2020	Research Director, JST-ERATO Itami Molecular Nanocarbon Project
2019~present	Joint Appointment Research Fellow, Institute of Chemistry, Academia Sinica, Taiwan
2024~present	Chief Scientist, Molecule Creation Laboratory, PRI, RIKEN
2025~present	Team Director, Expanded Chemical Space Research Team, CSRS, RIKEN,

Research fields

Organic chemistry, synthetic chemistry, molecular nanocarbon science,
catalytic chemistry, materials science, chemical biology

Summary of research achievements

Papers & book chapters	434 articles
Representative papers	<i>Science</i> (5), <i>Nature Chem.</i> (4), <i>Nature Commun.</i> (13), <i>Nature Synth.</i> (1), <i>Nature Catal.</i> (1), <i>Nature Chem. Biol.</i> (2), <i>Proc. Nat. Acad. Sci. USA</i> (1), <i>J. Am. Chem. Soc.</i> (58), <i>Angew. Chem.</i> (48), <i>Chem</i> (4), <i>ACS Cent. Sci.</i> (1), <i>Chem. Sci.</i> (28) [as of July 4th, 2025]
Citations	>30,000 times
H-index	96 (Web of Science, ResearcherID: B-5110-2011), 104 (Google Scholar)
Patents & patent application	101 files
Commercialization	23 compounds
Awards & honors	49 awards and honors
Alumni in academia	52 researchers
Plenary & invited lectures	460 times

Awards, honors, and named lectureships (49)

2025	Ambassador in Chemical Sciences in France, CNRS, France
2025	Organic Chemistry Frontiers Outstanding Paper Awards 2014-2023
2023	Irvine Organic Synthesis Lecturer, University of California, Irvine, USA
2023	The Job Lecturer, Memorial University of Newfoundland, Canada
2023	The Paul G. Gassman Lecturer, University of Minnesota, USA
2022	Frontiers of EOC Lectureship, Nankai University, China
2022	The Reuben Benjamin Sandin Lecturer, University of Alberta, Canada
2022	ChemSoc Lecturer, University of New South Wales (UNSW) Sydney, Australia
2021	Highly Cited Researchers 2021, Clarivate Analytics
2020	Highly Cited Researchers 2020, Clarivate Analytics
2019	Highly Cited Researchers 2019, Clarivate Analytics
2018	The Netherlands Scholar Award for Supra-molecular Chemistry
2018	Highly Cited Researchers 2018, Clarivate Analytics
2018	The Guthikonda Lecturer, Stanford University
2018	The Roland K. Pettit Centennial Lecturer, University of Texas, Austin, USA
2018	CSJ Award for Creative Work, The Chemical Society of Japan
2017	Highly Cited Researchers 2017, Clarivate Analytics
2017	ICI Distinguished Lecturer, University of Calgary, Canada
2017	The Chunichi Cultural Award
2017	The Bristol-Myers Squibb Lecturer, University of California, Berkeley, USA
2017	The Yomiuri Techno Forum Gold Medal Prize
2017	The SYNLETT Best Paper Award 2016, Thieme
2016	The Holger Erdtman Lecturer, KTH, Sweden
2016	The Nagase Prize
2016	Treat B. Johnson Lecturer, Yale University, USA
2016	Ta-Shue Chou Lectureship Award, Academia Sinica, Taiwan
2015	R. C. Fuson Visiting Professor, University of Illinois at Urbana-Champaign, USA
2015	Arthur C. Cope Scholar Award, American Chemical Society

2015	Swiss Chemical Society Lectureship Award
2014	Nankai University Lectureship Award, China
2014	The Aldrich Lectureship Award, Emory University, USA
2014	The JSPS Prize
2013	Novartis Chemistry Lectureship Award
2013	Mukaiyama Award
2013	Asian Rising Star Award, Asian Chemical Congress
2012	Fellow of the Royal Society of Chemistry, UK
2012	German Innovation Award "Gottfried Wagener Prize"
2012	Novartis-MIT Lecturer in Organic Chemistry (MIT, USA)
2011	ACP Lectureship Award, China
2011	ACP Lectureship Award, Malaysia
2011	Nozoe Memorial Award for Young Organic Chemists
2011	Overseas Distinguished Professor of Wuhan University, China
2008	Merck-Banyu Lectureship Award
2007	Banyu Young Chemist Award
2006	Minister's Award for Distinguished Young Scientists (MEXT)
2005	Mitsui Chemicals Catalysis Science Award of Encouragement
2005	The Chemical Society of Japan Award for Distinguished Young Chemists
2004	Thieme Journals Award
2000	Nissan Chemical Industries Award in Synthetic Organic Chemistry, Japan

Visiting professorship

2007	Kyushu University, Japan
2008	Tokyo Institute of Technology, Japan
2008	Kyoto University, Japan
2009	Kyoto University, Japan
2011	Wuhan University, China (Overseas Distinguished Professor)
2012	Osaka University, Japan
2014	University of Shizuoka, Japan
2013~15	The University of Tokyo, Japan
2015	Chiba University, Japan
2015	Okayama University, Japan
2015	Gifu Pharmaceutical University, Japan
2016	Hokkaido University, Japan
2018	Nagasaki University, Japan
2020	Shunshu University, Japan
2020	Chiba University, Japan
2021	The University of Tokyo, Japan
2025	Kwansei Gakuin University, Japan
2025	Tottori University, Japan

Editors and advisory board

2008~2011	<i>Canadian Journal of Chemistry</i> (Advisory Board)
2011~2017	<i>Organic & Biomolecular Chemistry</i> , RSC (Editorial Board)
2012~2022	<i>Beilstein Journal of Organic Chemistry</i> (Associate Editor)
2013~2016	<i>ChemCatChem</i> (International Advisory Board)

2013~present	<i>Bulletin of the Chemical Society of Japan</i> (Senior Editor)
2014~2021	<i>Chemistry - An Asian Journal</i> (International Advisory Board)
2014~present	<i>Advanced Synthesis & Catalysis</i> (Academic Advisory Board)
2015~present	<i>The Chemical Record</i> (Editorial Board)
2015~present	<i>Tetrahedron/Tetrahedron Letters</i> (Advisory Board)
2016~2018	<i>Accounts of Chemical Research</i> (Editorial Advisory Board)
2016~2023	<i>Chem, Cell Press</i> (Editorial Board)
2017~2020	<i>Angewandte Chemie</i> (International Advisory Board)
2019~present	<i>ACS Central Science</i> (Editorial Advisory Board)
2021~present	<i>Tetrahedron Chem</i> (Advisory Board)
2022~present	<i>Precision Chemistry, ACS</i> (Associate Editor)

Selection committee of awards

2008~2014	Yoshimasa Hirata Memorial Lectureship, selection committee
2014~2024	Hirata Award, selection committee
2017~2019	Mukaiyama Award, selection committee
2008~2024	Nagoya Medal Prize of Organic Chemistry, selection committee
2014~2022	Nagoya Medal Prize of Organic Chemistry, head of selection committee
2021	Tetrahedron Prize, selection committee

Commercialized compounds (23)

[15]Cycloparaphenylene, [\[15\]CPP](#) (Kanto Chemical)
 [12]Cycloparaphenylene, [\[12\]CPP](#) (TCI, Kanto Chemical)
 [11]Cycloparaphenylene, [\[11\]CPP](#) (TCI)
 [10]Cycloparaphenylene, [\[10\]CPP](#) (TCI)
 [9]Cycloparaphenylene, [\[9\]CPP](#) (TCI, Kanto Chemical)
 [8]Cycloparaphenylene, [\[8\]CPP](#) (TCI)
 [7]Cycloparaphenylene, [\[7\]CPP](#) (TCI)
 Methylene-bridged [6]cycloparaphenylene, [\[6\]MCPP](#) (TCI)
 (6,6)Carbon nanobelt bis(tetrahydrofuran) adduct, [\(6,6\)CNB](#) (TCI)
 Warped nanographene, [WNG](#) (Kanto Chemical)
 NanoPapillon ([HBT](#)) (Kishida Chemical, Taoka Chemical)
 [1,2-Bis(dicyclohexylphosphino)ethane]dicarbonylnickel(0), [Ni\(dcypt\)\(CO\)₂](#) (Kanto Chemical)
 3,4-Bis(dicyclohexylphosphino)thiophene, [dcypt](#) (Kanto Chemical)
 2,2'-Bis[bis(3,5-dimethylphenyl)phosphino]-1,1'-biphenyl, [Xyl-BIPHEP](#) (TCI)
 5-Adamantyl-IAA, [super-strong auxin](#) (TCI)
 Yoshimulactone Green, [YLG](#) (TCI)
 AMOR, [glyco-enhancer of plant fertilization](#) (TCI)
 Vinylboronic acid pinacol ester (TCI, Sigma-Aldrich)
 Bis[dimethyl(2-pyridyl)silyl]methane (TCI)
 2-(Allyldimethylsilyl)pyridine (Sigma-Aldrich)
 2-(Dimethylvinylsilyl)pyridine (TCI, Sigma-Aldrich)
 2-(Trimethylsilyl)pyridine (TCI, Sigma-Aldrich)
 2-(Dimethylsilyl)pyridine (Sigma-Aldrich)

Selected interviews and public lectures

[Chem-Station Spotlight Research](#) (Chem-Station)

[Changing the world with super molecules](#) (Toshin Highschool)
[Frontier Salon Teacher Introduction](#) (Frontier Salon Foundation)
[Portrait of researchers](#) (Technologist Magazine)
[Front runners](#) (Nikkei Science)
[Chem-Station Virtual Symposium](#) (YouTube)
[Essay in the Chemical Society of Japan](#)
[Introduction of ITbM](#) (YouTube)
[A conversation with Kenichiro Itami](#) (ACS Central Science)
[Carbon nanobelt commercialized from TCI](#) (YouTube)
[Commercialization of carbon nanobelt from TCI](#) (YouTube)
[The moment of the world-first synthesis of carbon nanobelt](#) (YouTube)
[Interview with Stuart L. Schreiber](#) (YouTube)
[Interview with Zhaomin Hou](#) (YouTube)
[The symposium of WPI 10th anniversary](#) (YouTube)
[WPI Science Talk Live 2013](#) (YouTube)
[MBLA 10th Anniversary Special Lectures](#) (YouTube)
[Angewandte Festsymposium](#) (ChemistryViews)
[2015 National Organic Chemistry Symposium](#) (American Chemical Society)
[Interview of Chem-Station](#) (Chem-Station)
[Author Profile](#) (*Angew. Chem. Int. Ed.*)

List of all papers (434 papers)

[Preprints, accepted or submitted]

(434) TBA

Daiki Imoto, Hideya Kono, Akiko Yagi, Kenichiro Itami

Submitted.

(433) Efficient nucleic acid delivery in mammalian and plant cells using precisely engineered cationic perylenes

Daisuke Shimizu, Erika Kato, Miu Fukatsu, Luca Hagemeyer, Dominik Zetschok, Atsushi Usami, Hayato Yamada, Seigo Kimura, Hiroshi Abe, Ayato Sato, Noriyoshi Yagi, Masayoshi Nakamura, Kazuma Amaike, Kenichiro Itami

ChemRxiv, DOI: [10.26434/chemrxiv-2025-d7zzq](https://doi.org/10.26434/chemrxiv-2025-d7zzq)

(432) New metabolites of fairy chemicals in tea and coffee, methylated AHX and AOH

Takahiro Abe, Sota Ino, Jae-Hoon Choi, Jing Wu, Sae Yokobori, Hitoshi Ouchi, Ryo Takita, Kazuma Amaike, Kenichiro Itami, Michio Sato, Kenji Watanabe, Hirofumi Hirai, Hirokazu Kawagishi

Under revision.

(431) TBA

Tomoki Kato, Daiki Imoto, Akiko Yagi, Kenichiro Itami

Submitted.

(430) Effect of nanocarbon molecules on the *Arabidopsis thaliana* transcriptome

Norihito Nakamichi, Ayato Sato, Yusuke Aihara, Toshinori Kinoshita, Yasutomo Segawa, Kazuma Amaike, Kenichiro Itami

bioRxiv, DOI: [10.1101/2020.05.22.110171v1](https://doi.org/10.1101/2020.05.22.110171v1)

[Published papers and accounts]

(429) In-insect nanocarbon synthesis (an account in Japanese)

Kenichiro Itami, Atsushi Usami

Chemistry Today 2025, 654, 8.

(428) C-H amination of arenes and heteroarenes through a dearomative (3+2) cycloaddition

Sajan Pradhan, Fahimeh Mohammadi, Rikuo Tanase, Kazuma Amaike, Kenichiro Itami, Jean Bouffard

J. Am. Chem. Soc. 2025, 147, 27731-27742.

DOI: [10.1021/jacs.5c06390](https://doi.org/10.1021/jacs.5c06390)

ChemRxiv, DOI: [10.26434/chemrxiv-2024-mj889-v2](https://doi.org/10.26434/chemrxiv-2024-mj889-v2)

(427) Twelfefold dearomative esterification of (6,6)carbon nanobelt

Tsubasa Okumura, Daiki Imoto, Yuri Arachi, Akiko Yagi, Takehisa Maekawa, Kenichiro Itami

Angew. Chem. Int. Ed. 2025, Early View.

DOI: [10.1002/anie.202510544](https://doi.org/10.1002/anie.202510544)

ChemRxiv, DOI: [10.26434/chemrxiv-2025-z8q3q](https://doi.org/10.26434/chemrxiv-2025-z8q3q)

(426) Cycloparaazine, a full-azine carbon nanoring

Till Drennhaus, Daiki Imoto, Elena S. Horst, Lena Lezius, Hiroki Shudo, Tomoki Kato, Klaus Bergander, Constantin G. Daniliuc, Dirk Leifert, Akiko Yagi, Armido Studer, Kenichiro Itami

Nature Commun. 2025, 16, 4643.

DOI: [10.1038/s41467-025-59934-5](https://doi.org/10.1038/s41467-025-59934-5)

Highlighted in The Chemical Daily.

ChemRxiv, DOI: [10.26434/chemrxiv-2024-qq1d](https://doi.org/10.26434/chemrxiv-2024-qq1d)

- (425) In-insect synthesis of oxygen-doped molecular nanocarbons

Atsushi Usami, Hideya Kono, Vic Austen, Quan Manh Phung, Hiroki Shudo, Tomoki Kato, Hayato Yamada, Akiko Yagi, Kazuma Amaike, Kazuhiro J. Fujimoto, Takeshi Yanai, Kenichiro Itami

Science 2025, 388, 1055-1061.

DOI: [10.1126/science.adp9384](https://doi.org/10.1126/science.adp9384)

Highlighted in C&E News, Nature, Chemistry World, EurekAlert!, PhysOrg, Life Technology, The Chemical Daily, Yahoo News, Nikkei Shimbun, Nikkan Kougyo Shimbun, Scienze Notizie, Mirage, Scienmag, Interesting Engineering, Bioenginner, RIKEN Research, etc.

ChemRxiv, DOI: [10.26434/chemrxiv-2024-1zd0b](https://doi.org/10.26434/chemrxiv-2024-1zd0b)

- (424) Birch reductive arylation by mechanochemical anionic activation of polycyclic aromatic compounds

Yoshifumi Toyama, Akiko Yagi, Kenichiro Itami, Hideto Ito

Nature Commun. 2025, 16, 5044.

DOI: [10.1038/s41467-025-60318-y](https://doi.org/10.1038/s41467-025-60318-y)

ChemRxiv, DOI: [10.26434/chemrxiv-2024-ts4vf](https://doi.org/10.26434/chemrxiv-2024-ts4vf)

- (423) Stable cationic nanobelts synthesized by chemical oxidation of methylene-bridged [6]cycloparaphenylene

Nobushige Kai, Hideya Kono, Timo Stünkel, Daiki Imoto, Riccardo Zanasi, Guglielmo Monaco, Francesco F. Summa, Lawrence T. Scott, Akiko Yagi, Kenichiro Itami

Chem. Sci. 2025, 16, 9195-9292.

DOI: [10.1039/D5SC01305D](https://doi.org/10.1039/D5SC01305D)

ChemRxiv, DOI: [10.26434/chemrxiv-2024-jh80w](https://doi.org/10.26434/chemrxiv-2024-jh80w)

- (422) Rh-catalyzed mechanochemical transfer hydrogenation for the synthesis of periphery-hydrogenated polycyclic aromatic compounds

Yoshifumi Toyama, Takumu Nakamura, Yushin Horikawa, Yuta Morinaka, Yohei Ono, Akiko Yagi, Kenichiro Itami, Hideto Ito

Chem. Sci. 2025, 16, 9117-9124.

DOI: [10.1039/D5SC01489A](https://doi.org/10.1039/D5SC01489A)

Selected as a cover.

ChemRxiv, DOI: [10.26434/chemrxiv-2025-np2hv](https://doi.org/10.26434/chemrxiv-2025-np2hv)

- (421) Functionalization and solubilization of polycyclic aromatic compounds by sulfoniumization

Johannes E. Erchinger, Tsubasa Okumura, Kanami Nakata, Daisuke Shimizu, Constantin G. Daniliuc, Kazuma Amaike, Frank Glorius, Kenichiro Itami, Hideto Ito

Chem. Sci. 2025, 16, 8262-8267.

DOI: [10.1039/D5SC01415H](https://doi.org/10.1039/D5SC01415H)

Selected as a back cover.

Highlighted in The Chemical Daily.

- (420) Synthesis of chrysene-based nanographenes by a successive APEX reaction

Yuichi Nakashige, Hidefumi Nakatsuji, Kaho Matsushima, Kazuo Murakami, Hideto Ito, Kenichiro Itami

Precis. Chem. 2025, 3, ASAP.
DOI: [10.1021/prechem.5c00032](https://doi.org/10.1021/prechem.5c00032)

- (419) Chemistry and application of methylene-bridged cycloparaphenylenes (account in Japanese)
Akiko Yagi, Hideya Kono, Kazuma Amaike, Kenichiro Itami

J. Synth. Org. Chem. Jpn. 2025, 83, 446-454.
DOI: [10.5059/yukigoseikyokaishi.83.446](https://doi.org/10.5059/yukigoseikyokaishi.83.446)

- (418) Chemical genetics reveals cross-activation of plant developmental signaling by the immune peptide-receptor pathway

Arvid Herrmann, Krishna Mohan Sepuru, Pengfei Bai, Hitoshi Endo, Ayami Nakagawa, Shuhei Kusano, Asraa Ziadi, Hiroe Kato, Ayato Sato, Jun Liu, Libo Shan, Seisuke Kimura, Kenichiro Itami, Naoyuki Uchida, Shinya Hagihara, Keiko U.Torii

Sci. Adv. 2025, 11, eads3718.
DOI: [10.1126/sciadv.ads3718](https://doi.org/10.1126/sciadv.ads3718)

Selected as a cover.

bioRxiv, DOI: [10.1101/2024.07.29.605519](https://doi.org/10.1101/2024.07.29.605519)

- (417) Spiro-fused dibenzo[*g,p*]chrysene: annulative π -extension (APEX) synthesis and properties
Kanghui Song, Yuying Zhang, Shuai Wu, Sha Yang, Shengchen Wei, Songhua Chen, Hideto Ito, Kenichiro Itami, Yuanming Li

Org. Chem. Front. 2025, 12, 2225-2231.
DOI: [10.1039/D4QO02104E](https://doi.org/10.1039/D4QO02104E)

- (416) Thiophene-fused aromatic belts

Hiroki Shudo, Philipp Wiesener, Elena Kolodzeiski, Kiichi Mizukami, Daiki Imoto, Harry Mönig, Saeed Amirjalayer, Hirotoshi Sakamoto, Henning Klaasen, Bart Jan Ravoo, Nobuo Kimizuka, Akiko Yagi, Kenichiro Itami

Nature Commun. 2025, 16, 1074.
DOI: [10.1038/s41467-025-55896-w](https://doi.org/10.1038/s41467-025-55896-w)

Highlighted in ITmedia Business Online.

ChemRxiv, DOI: [10.26434/chemrxiv-2024-zllzl](https://doi.org/10.26434/chemrxiv-2024-zllzl)

- (415) Rapid access to functionalized nanographenes through a palladium-catalyzed multi-annulation sequence

Takehisa Maekawa, Kenichiro Itami

Chem. Sci. 2025, 16, 3092-3098.
DOI: [10.1039/D4SC07995G](https://doi.org/10.1039/D4SC07995G)

Highlighted in Nikkei Shimbun and Optonics online.

- (414) De novo generation of dual-target compounds using artificial intelligence

Kasumi Yasuda Francois Berenger, Kazuma Amaike, Ayaka Ueda, Tomoya Nakagomi, Genki Hamasaki, Chen Li, Noriko Yuyama Otani, Kazuma Kaitoh, Koji Tsuda, Kenichiro Itami, Yoshihiro Yamanishi

iScience 2025, 28, 11526.
DOI: [10.1016/j.isci.2024.111526](https://doi.org/10.1016/j.isci.2024.111526)

- (413) Carbon nanobelt history and chemistry
Hiroki Shudo, Daiki Imoto, Akiko Yagi, Kenichiro Itami
Molecular Nanographenes: Synthesis, Properties, and Applications
(Edited by Nazario Martin and Colin P. Nuckolls)
Chapter 6.
- (412) Water-soluble aromatic nanobelt with unique cellular internalization
Konstantin Günther, Hideya Kono, Hiroki Shudo, Daisuke Shimizu, Reika Isoda, Masayoshi Nakamura, Akiko Yagi, Kazuma Amaike, Kenichiro Itami
Angew. Chem. Int. Ed. 2024, e202414645.
DOI: [10.1002/anie.202414645](https://doi.org/10.1002/anie.202414645)
Selected as a cover.
Highlighted in ITmedia Business Online and The Chemical Daily.
ChemRxiv, DOI: [10.26434/chemrxiv-2024-vv4nb](https://doi.org/10.26434/chemrxiv-2024-vv4nb)
- (411) A double-walled noncovalent carbon nanotube by columnar packing of nanotube fragments
Daiki Imoto, Hiroki Shudo, Kiichi Mizukami, Nobuo Kimizuka, Akiko Yagi, Kenichiro Itami
Angew. Chem. Int. Ed. 2024, e202413828.
DOI: [10.1002/anie.202413828](https://doi.org/10.1002/anie.202413828)
Selected as a cover.
ChemRxiv, DOI: [10.26434/chemrxiv-2024-kq19w](https://doi.org/10.26434/chemrxiv-2024-kq19w)
- (410) Chemical inhibition of stomatal differentiation by perturbation of the master-regulatory bHLH heterodimer via an ACT-like domain
Ayami Nakagawa, Krishna Mohan Sepuru, Shu Jan Yip, Hyemin Seo, Calvin M. Coffin, Kota Hashimoto, Zixuan Li, Yasutomo Segawa, Rie Iwasaki, Hiroe Kato, Daisuke Kurihara, Yusuke Aihara, Stephanie Kim, Toshinori Kinoshita, Kenichiro Itami, Soon-Ki Han, Kei Murakami, Keiko U. Torii
Nature Commun. 2024, 15, 8996.
DOI: [10.1038/s41467-024-53214-4](https://doi.org/10.1038/s41467-024-53214-4)
bioRxiv, DOI: [10.1101/2023.11.02.565226](https://doi.org/10.1101/2023.11.02.565226)
- (409) Synthesis and size-dependent properties of multiple sizes of chlorinated fluorocycloparaphenylenes
Daiki Imoto, Hiroki Shudo, Kiichi Mizukami, Nobuo Kimizuka, Akiko Yagi, Kenichiro Itami
Chem. Commun., 2024, 60, 12585-12588.
DOI: [10.1039/D4CC03336A](https://doi.org/10.1039/D4CC03336A)
- (408) Nonplanar nanographene: A hydrocarbon hole-transporting material that competes with triarylamine
Yuta Morinaka, Hideto Ito, Kazuhiro J. Fujimoto, Takeshi Yanai, Yohei Ono, Tsuyoshi Tanaka, Kenichiro Itami
Angew. Chem. Int. Ed. 2024, 63, e202409619.
DOI: [10.1002/anie.202409619](https://doi.org/10.1002/anie.202409619)
Highlighted in Daily Chemical News, The Chemical Daily.
- (407) Ferrocene-based conjugated macrocycles: Shotgun synthesis, size-dependent properties and tunable fluorescence intensity

- Lingyun Zhu, Jingdong Xu, Bin Lan, Xinyu Chen, Hideya Kono, Hui Xu, Jian-Feng Yan, Wenjuan Li, Akiko Yagi, Yaofeng Yuan, Kenichiro Itami, Yuanming Li
Org. Chem. Front. 2024, 11, 5130-5137.
 DOI: [10.1039/D4QO01079E](https://doi.org/10.1039/D4QO01079E)
- (406) A double twisted nanographene with a contorted pyrene core
 Yanping Dong, Zhiyu Zhang, Yoshifumi Hashikawa, He Meng, Fenghua Bai, Kenichiro Itami, Chaolun
Angew. Chem. Int. Ed. 2024, 63, e202406927.
 DOI: [10.1002/anie.202406927](https://doi.org/10.1002/anie.202406927)
Selected as a Cover. Selected as a Hot Paper.
- (405) Separation of enantiomers of chiral fullerene derivatives through enantioselective encapsulation within an adaptable helical cavity of syndiotactic poly(methyl methacrylate) with helicity memory
 Daisuke Taura, Akiko Minami, Fumihiko Mamiya, Naoki Ousaka, Kenichiro Itami, Eiji Yashima
Chirality 2024, 36, e23663.
 DOI: [10.1002/chir.23663](https://doi.org/10.1002/chir.23663)
- (404) Synthesis of diamondoids through hydrogenation of adamantane-annulated arenes
 Yoshifumi Toyama, Takaku Yoshihara, Hiroki Shudo, Hideto Ito, Kenichiro Itami, Akiko Yagi
Chem. Lett. 2024, 53, upad037.
 DOI: [10.1093/chemle/upad037](https://doi.org/10.1093/chemle/upad037)
Selected as a Cover.
- (403) Side-chain type ferrocene macrocycles
 Bin Lan, Jindong Xu, Linyun Zhu, Xinyu Chen, Hideya Kono, Peihan Wang, Xin Zuo, Jianfeng Yan, Akiko Yagi, Yongshen Zheng, Songhua Chen, Yaofeng Yuan, Kenichiro Itami, Yuanming Li
Precis. Chem. 2024, 2, 143-150.
 DOI: [10.1021/prechem.3c00121](https://doi.org/10.1021/prechem.3c00121)
- (402) Switchable decarboxylation by energy- or electron-transfer photocatalysis
 Yota Sakakibara, Kenichiro Itami, Kei Murakami
J. Am. Chem. Soc. 2024, 146, 1554-1562.
 DOI: [10.1021/jacs.3c11588](https://doi.org/10.1021/jacs.3c11588)
Featured in Chem-Station. Highlighted in Nikkei Shimbun.
ChemRxiv, DOI: [10.26434/chemrxiv-2022-drf9p](https://doi.org/10.26434/chemrxiv-2022-drf9p)
- (401) Synthesis of heptagon-containing polyarenes by catalytic C-H activation
 Keigo E. Yamada, Iain A. Stepek, Wataru Matsuoka, Hideto Ito, Kenichiro Itami
Angew. Chem. Int. Ed. 2023, 62, e202311770.
 DOI: [10.1002/anie.202311770](https://doi.org/10.1002/anie.202311770)
Highlighted in Synfacts.
- (400) A small-molecule modulator affecting the clock-associated PSEUDO-RESPONSE REGULATOR 7 amount
 Takahiro N. Uehara, Saori Takao, Hiromi Matsuo, Ami N. Saito, Eisuke Ota, Azusa Ono, Kenichiro Itami, Toshinori Kinoshita, Takafumi Yamashino, Junichiro Yamaguchi, Norihito Nakamichi

Plant Cell Physiol. 2023, 64, 1397-1406.
DOI: [10.1093/pcp/pcad107](https://doi.org/10.1093/pcp/pcad107)
bioRxiv, DOI: [10.1101/2020.05.25.113746](https://doi.org/10.1101/2020.05.25.113746)

- (399) Half-substituted fluorocycloparaphenylenes with high symmetry: Synthesis, properties and derivatization to densely substituted carbon nanorings
Hiroki Shudo, Motonobu Kuwayama, Yasutomo Segawa, Akiko Yagi, Kenichiro Itami
Chem. Commun. 2023, 59, 13494-13497.
DOI: [10.1039/D3CC04887J](https://doi.org/10.1039/D3CC04887J)
ChemRxiv, DOI: [10.26434/chemrxiv-2023-zsvnt](https://doi.org/10.26434/chemrxiv-2023-zsvnt)

- (398) Carbon nanobelts: Brief history and perspective
Daiki Imoto, Akiko Yagi, Kenichiro Itami
Precis. Chem. 2023, 1, 516-523.
DOI: [10.1021/prechem.3c00083](https://doi.org/10.1021/prechem.3c00083)
Selected as a Cover.

- (397) Heteroatom-embedding annulative π -extension (hetero-APEX) reactions – An overview
Hideto Ito, Kou P. Kawahara, Kenichiro Itami
Synthesis 2024, 56, 1335-1354.
DOI: [10.1055/a-2169-4078](https://doi.org/10.1055/a-2169-4078)

- (396) Noncovalent modification of cycloparaphenylene by catenane formation using an active metal template strategy
Hisayasu Ishibashi, Manuel Rondelli, Hiroki Shudo, Takehisa Maekawa, Hideto Ito, Kiichi Mizukami, Nobuo Kimizuka, Akiko Yagi, Kenichiro Itami
Angew. Chem. Int. Ed. 2023, 62, e202310613.
DOI: [10.1002/anie.202310613](https://doi.org/10.1002/anie.202310613)
Selected as Hot Paper. Highlighted in Mynavi News.
ChemRxiv, DOI: [10.26434/chemrxiv-2023-3rq4x](https://doi.org/10.26434/chemrxiv-2023-3rq4x)

- (395) Divergent transformation of carboxylic acids through photocatalytic decarboxylation with hypervalent iodine reagents
Yota Sakakibara, Kenichiro Itami, Kei Murakami
J. Synth. Org. Chem. Jpn. 2023, 81, 1050-1061.
DOI: [10.5059/yukigoseikyokaishi.81.1050](https://doi.org/10.5059/yukigoseikyokaishi.81.1050)

- (394) A small compound, HYGIC, promotes hypocotyl growth through ectopic ethylene response
Mizuki Murao, Rika Kato, Rina Hisamatsu, Hitoshi Endo, Yasuki Kawabata, Seisuke Kimura, Ayato Sato, Kenichiro Itami, Keiko U. Torii, Shinya Hagihara, Naoyuki Uchida
Plant Cell Physiol. 2023, 64, 1167-1177.
DOI: [10.1093/pcp/pcad083](https://doi.org/10.1093/pcp/pcad083)

- (393) Nickel/photoredox-catalyzed decarboxylative coupling of aryl bromides with *N*-protected glycine as an aminomethyl source
Jaehyun Jung, Takumi Kinoshita, Yuta Makihara, Yota Sakakibara, Kazuma Amaike, Kei Murakami, Kenichiro Itami

- (392) The first synthesis of carbon nanobelts: The 'belt' festival and the drama behind
(account in Japanese)
Kenichiro Itami

Dramatic Synthetic Organic Chemistry, Kagaku Dojin, 2023, 74-75.
https://www.ssoci.jp/symposium/80th/80th_book.pdf
- (391) Adamantane annulation to arenes: A strategy for property modulation of aromatic π -systems
Takaku Yoshihara, Hiroki Shudo, Akiko Yagi, Kenichiro Itami

J. Am. Chem. Soc. 2023, 145, 11754-11763.
DOI: [10.1021/jacs.3c02788](https://doi.org/10.1021/jacs.3c02788)
Featured in Chem-Station.
Highlighted in EE Times Japan, ITmedia, Yahoo! Japan, Synfacts.
ChemRxiv, DOI: [10.26434/chemrxiv-2023-1jsp4](https://doi.org/10.26434/chemrxiv-2023-1jsp4)
- (390) Expanded [2,1][*n*]carbohelicenes with 15- and 17-benzene rings
Michihisa Toya, Takuya Omine, Fumitaka Ishiwari, Akinori Saeki, Hideto Ito, Kenichiro Itami

J. Am. Chem. Soc. 2023, 145, 11553-11565.
DOI: [10.1021/jacs.3c00109](https://doi.org/10.1021/jacs.3c00109)
ChemRxiv, DOI: [10.26434/chemrxiv-2023-k9pzi](https://doi.org/10.26434/chemrxiv-2023-k9pzi)
- (389) Identification and improvement of isothiocyanate-based inhibitors on stomatal opening to act as drought tolerance-conferring agrochemicals
Yusuke Aihara, Bumpei Maeda, Kanna Goto, Koji Takahashi, Mika Nomoto, Shigeo Toh, Wenxiu Ye, Yosuke Toda, Mami Uchida, Eri Asai, Yasuomi Tada, Kenichiro Itami, Ayato Sato, Kei Murakami, Toshinori Kinoshita

Nature Commun. 2023, 14, 2665.
DOI: [10.1038/s41467-023-38102-7](https://doi.org/10.1038/s41467-023-38102-7)
Highlighted in Chunichi Shimbun, Asahi Shimbun, Kyodo Tsushin, Kagaku Shimbun.
- (388) Development of a novel PET ligand, [^{11}C]GO289 targeting CK2 expressed in the brain
Aya Ogata, Takashi Yamada, Saori Hattori, Hiroshi Ikenuma, Junichiro Abe, Mari Tada, Masanori Ichise, Masaaki Suzuki, Kengo Ito, Takashi Kato, Kazuma Amaike, Tsuyoshi Hirota, Akiyoshi Kakita, Kenichiro Itami, Yasuyuki Kimura

Bioorg. Med. Chem. Lett. 2023, 90, 129327.
DOI: [10.1016/j.bmcl.2023.129327](https://doi.org/10.1016/j.bmcl.2023.129327)
- (387) Methylene-bridged [6]-, [8]-, and [10]cycloparaphenylenes: Size-dependent properties and paratropic belt currents
Hideya Kono, Yuanming Li, Riccardo Zanasi, Guglielmo Monaco, Francesco F. Summa, Lawrence T. Scott, Akiko Yagi, Kenichiro Itami

J. Am. Chem. Soc. 2023, 145, 8939-8946.
DOI: [10.1021/jacs.2c13208](https://doi.org/10.1021/jacs.2c13208)
Featured in Chem-Station.
Highlighted in Nikkan Kogyo Shimbun, EurekAlert!, Phys.org., Life Technology, Chemistry Today.

- (386) Lithium-mediated mechanochemical cyclodehydrogenation
Kanna Fujishiro, Yuta Morinaka, Yohei Ono, Tsuyoshi Tanaka, Lawrence T. Scott, Hideto Ito, Kenichiro Itami
J. Am. Chem. Soc. 2023, 145, 8163-8175.
DOI: [10.1021/jacs.3c01185](https://doi.org/10.1021/jacs.3c01185)
Featured in Chem-Station.
Highlighted in Mycom.
ChemRxiv, DOI: [10.26434/chemrxiv-2023-k4z34](https://doi.org/10.26434/chemrxiv-2023-k4z34)
- (385) Identification of a pluripotency-inducing small compound, PLU, that induces callus formation via Heat Shock Protein 90-mediated activation of auxin signaling
Yuki Nakashima, Yuka Kobayashi, Mizuki Murao, Rika Kato, Hitoshi Endo, Asuka Higo, Rie Iwasaki, Mikiko Kojima, Yumiko Takebayashi, Ayato Sato, Mika Nomoto, Hitoshi Sakakibara, Yasuomi Tada, Kenichiro Itami, Seisuke Kimura, Shinya Hagihara, Keiko U. Torii, Naoyuki Uchida
Front. Plant Sci. 2023, 14, 1099587.
DOI: [10.3389/fpls.2023.1099587](https://doi.org/10.3389/fpls.2023.1099587)
- (384) One-step synthesis of polycyclic thianthrenes from unfunctionalized aromatics by thia-APEX reaction
Kou P. Kawahara, Hideto Ito, Kenichiro Itami
Org. Chem. Front. 2023, 10, 1880-1889.
DOI: [10.1039/D2QO02058K](https://doi.org/10.1039/D2QO02058K)
Selected as a cover of the journal.
Selected as Organic Chemistry Frontiers Outstanding Paper Awards 2014-2023.
- (383) Synthesis and properties of methylene-bridged [6]cyclo-2,6-naphthylene
Nobushige Kai, Hideya Kono, Akiko Yagi, Kenichiro Itami
Synlett 2023, 34, 1433-1436.
DOI: [10.1055/a-2009-8219](https://doi.org/10.1055/a-2009-8219)
Special issue honoring Prof. Masahiro Murakami's contributions to science
- (382) Discovery of 2,6-dihalopurines as stomata opening inhibitors: Implication of an LRX-mediated H⁺-ATPase phosphorylation pathway
Ayaka Ueda, Yusuke Aihara, Shinya Sato, Keiko Kano, Emi Mishiro-Sato, Hiroyuki Kitano, Ayato Sato, Kazuhiro J. Fujimoto, Takeshi Yanai, Kazuma Amaike, Toshinori Kinoshita, Kenichiro Itami
ACS Chem. Biol. 2023, 18, 347-355.
DOI: [10.1021/acscchembio.2c00771](https://doi.org/10.1021/acscchembio.2c00771)
Selected as a cover of the journal.
Highlighted in PhysOrg, EurekAlert!
ChemRxiv, DOI: [10.26434/chemrxiv-2022-6s89g](https://doi.org/10.26434/chemrxiv-2022-6s89g)
- (381) Rapid access to polycyclic thiopyrylium compounds from unfunctionalized aromatics by thia-APEX reaction
Kou P. Kawahara, Hideto Ito, Kenichiro Itami
Chem. Commun. 2023, 59, 1157-1160.
DOI: [10.1039/D2CC06706D](https://doi.org/10.1039/D2CC06706D)

- (380) π -Extended rubrenes via dearomative annulative π -extension reaction
Wataru Matsuoka, Kou P. Kawahara, Hideto Ito, David Sarlah, Kenichiro Itami
J. Am. Chem. Soc. 2023, 145, 658-666.
DOI: [10.1021/jacs.2c11338](https://doi.org/10.1021/jacs.2c11338)
- (379) Making new forms of molecular nanocarbons (account in Japanese)
Kenichiro Itami
Organic Chemistry Innovation, Tokyo Kagaku Dojin, 2023, 171-182.
<https://www.tkd-pbl.com/book/b10029297.html>
- (378) C-H arylation enables synthesis of imidazole-4-carboxamide (ICA) based fairy chemicals with plant growth promoting activity
Ayaka Ueda, Kazuma Amaike, Yoko Shirotani, Robin Warstat, Hideto Ito, Jae-Hoon Choi, Hirokazu Kawagishi, Kenichiro Itami
Can. J. Chem. 2023, 101, 449-452.
DOI: [10.1139/cjc-2022-0256](https://doi.org/10.1139/cjc-2022-0256)
Special issue in honor of Prof. Cathleen M. Crudden.
- (377) Synthesis of Möbius carbon nanobelt: Construction of topological molecular nanocarbons (account in Japanese)
Yasutomo Segawa, Kenichiro Itami
Journal of Society of Automotive Engineers of Japan 2023, 77, 110-111.
- (376) Synthesis, properties, and material hybridization of bare aromatic polymers enabled by dendrimer support
Shusei Fujiki, Kazuma Amaike, Akiko Yagi, Kenichiro Itami
Nature Commun. 2022, 13, 5358.
DOI: [10.1038/s41467-022-33100-7](https://doi.org/10.1038/s41467-022-33100-7)
Featured in Chem-Station.
Highlighted in ScienMag, EurekAlert!, Phys.org, True Viral News, Mirage News, Bioengineer.org, Swift Telecast, Nikkei xTECH.
- (375) C-H borylation of arenes: Steric-controlled *para*-selectivity and application to molecular nanocarbons
Yasutomo Segawa, Mai nagase, Yutaro saito, Kenta Kato, Kenichiro Itami
J. Synth. Org. Chem. Jpn. 2022, 80, 994-999.
DOI: [10.5059/yukigoseikyokaishi.80.994](https://doi.org/10.5059/yukigoseikyokaishi.80.994)
- (374) N-doped nonalternant aromatic belt via a six-fold annulative double N-arylation
Hiroki Sato, Rie Suizu, Tomoki Kato, Akiko Yagi, Yasutomo Segawa, Kunio Awaga, Kenichiro Itami
Chem. Sci. 2022, 13, 9947-9951.
DOI: [10.1039/D2SC02647C](https://doi.org/10.1039/D2SC02647C)
ChemRxiv, DOI [10.26434/chemrxiv-2022-igvv2](https://doi.org/10.26434/chemrxiv-2022-igvv2)
- (373) New paradigms in molecular nanocarbon science
Iain A. Stepek, Mai Nagase, Akiko Yagi, Kenichiro Itami

Tetrahedron 2022, 123, 132907.

DOI: [10.1016/j.tet.2022.132907](https://doi.org/10.1016/j.tet.2022.132907)

Special issue for the 65th anniversary of Tetrahedron.

- (372) Statistical verification of anomaly in chiral angle distribution of air-suspended carbon nanotubes
Taishi Nishihara, Akira Takakura, Keisuke Matsui, Kenichiro Itami, Yuhei Miyauchi

Nano Lett. 2022, 22, 5818-5824.

DOI: [10.1021/acs.nanolett.2c01473](https://doi.org/10.1021/acs.nanolett.2c01473)

- (371) Perfluorocycloparaphenylenes

Hiroki Shudo, Motonobu Kuwayama, Masafumi Shimasaki, Taishi Nishihara, Youhei Takeda,
Nobuhiko Mitoma, Takuya Kuwabara, Akiko Yagi, Yasutomo Segawa, Kenichiro Itami

Nature Commun. 2022, 13, 3713.

DOI: [10.1038/s41467-022-31530-x](https://doi.org/10.1038/s41467-022-31530-x)

Highlighted in Chemical & Engineering News (ACS) and Chemistry Today.

Featured as Editors' Highlights in Nature Commun.

ChemRxiv, DOI [10.33774/chemrxiv-2021-7kd63](https://doi.org/10.33774/chemrxiv-2021-7kd63)

- (370) Synthesis of a Möbius carbon nanobelt

Yasutomo Segawa, Tsugunori Watanabe, Kotono Yamanoue, Motonobu Kuwayama, Kosuke
Watanabe, Jenny Pirillo, Yuh Hijikata, Kenichiro Itami

Nature Synth. 2022, 1, 535-541.

DOI: [10.1038/s44160-022-00075-8](https://doi.org/10.1038/s44160-022-00075-8)

Selected as Cover.

Highlighted in Nature, Nature Synth., Chem (Cell Press), and Synfacts.

Highlighted in Kyodo Tsushin, Mainichi Shimbun, Kagaku Shimbun, Chunichi Shimbun,

many other newspapers, Yahoo! News, Phys.org., EurekAlert!, Cosmos magazine,

ScienMag, New Scientist, Bioengineer.org, Science Daily, Today UK News, Mirage News,

Nanowerk, Azonano, Alert Breaking News, Tek Deeps, Scientific Russia, PhysicsWorld,

Science and Life Russia, Mycom.

ChemRxiv, DOI [10.26434/chemrxiv-2021-w09lc](https://doi.org/10.26434/chemrxiv-2021-w09lc)

- (369) Identification of stomatal-regulating molecules from *de novo* arylamine collection through aromatic
C-H amination

Yosuke Toda, Gregory J. P. Perry, Shimpei Inoue, Eri Ito, Takahiro Kawakami, Mina R. Narouz,
Koji Takahashi, Yusuke Aihara, Bumpei Maeda, Toshinori Kinoshita, Kenichiro Itami, Kei Murakami

Sci. Rep. 2022, 12, 949.

DOI: [10.1038/s41598-022-04947-z](https://doi.org/10.1038/s41598-022-04947-z)

- (368) C-H acyloxylation of polycyclic aromatic hydrocarbons

Yota Sakakibara, Kei Murakami, Kenichiro Itami

Org. Lett. 2022, 24, 602-607.

DOI: [10.1021/acs.orglett.1c04030](https://doi.org/10.1021/acs.orglett.1c04030)

- (367) Phosphorylation of RNA polymerase II by CDKC2 maintains the Arabidopsis circadian clock period

Takahiro N. Uehara, Takashi Nonoyama, Kyomi Taki, Keiko Kuwata, Ayato Sato, Kazuhiro J.
Fujimoto, Tsuyoshi Hirota, Hiromi Matsuo, Akari E. Maeda, Azusa Ono, Tomoaki T. Takahara,

- Hiroki Tsutsui, Takamasa Suzuki, Takeshi Yanai, Steve A. Kay, Kenichiro Itami, Toshinori Kinoshita, Junichiro Yamaguchi, Norihito Nakamichi
Plant Cell Physiol. 2022, 63, 450-462.
 DOI: [10.1093/pcp/pcac011](https://doi.org/10.1093/pcp/pcac011)
- (366) Synthesis of octagon-containing molecular nanocarbons
 Greco González Miera, Satoshi Matsubara, Hideya Kono, Kei Murakami, Kenichiro Itami
Chem. Sci. 2022, 12, 1848-1868.
 DOI: [10.1039/D1SC05586K](https://doi.org/10.1039/D1SC05586K)
- (365) Infinitene: A helically twisted figure-eight [12]circulene topoisomer
 Maciej Krzeszewski, Hideto Ito, Kenichiro Itami
J. Am. Chem. Soc. 2022, 144, 862-871.
 DOI: [10.1021/jacs.1c10807](https://doi.org/10.1021/jacs.1c10807)
Selected as the Molecule of the Year 2021 (C&E News, ACS).
Highlighted in C&E News (ACS), ChemistryViews (RSC), Chemistry World, and Synfacts.
Selected as a cover of the journal.
ChemRxiv, DOI [10.33774/chemrxiv-2021-pcwcc](https://doi.org/10.33774/chemrxiv-2021-pcwcc).
- (364) Molecular nanocarbons add new dimensions to organic chemistry
 Kenichiro Itami, Takehisa Maekawa
J. Org. Chem. 2021, 86, 14239-14241.
 DOI: [10.1021/acs.joc.1c02389](https://doi.org/10.1021/acs.joc.1c02389)
Org. Lett. 2021, 23, 8119-8121.
 DOI: [10.1021/acs.orglett.1c03331](https://doi.org/10.1021/acs.orglett.1c03331)
Editorial for Virtual Issue "Molecular Nanocarbons: Organic Chemistry with Atomic Precision".
- (363) Stepwise generation of mono-, di-, and triply-reduced warped nanographenes: Charge-dependent aromaticity, surface nonequivalence, swing distortion and metal binding sites
 Sarah N. Spisak, Zheng Zhou, Shuyang Liu, Qi Xu, Zheng Wei, Kenta Kato, Yasutomo Segawa, Kenichiro Itami, Andrey Yu. Rogachev, Marina A. Petrukhina
Angew. Chem. Int. Ed. 2021, 60, 25445-25453.
 DOI: [10.1002/anie.202110748](https://doi.org/10.1002/anie.202110748)
- (362) Chemical synthesis of carbon nanorings and nanobelts
 Yuanming Li, Hideya Kono, Takehisa Maekawa, Yasutomo Segawa, Akiko Yagi, Kenichiro Itami
Acc. Mater. Res. 2021, 2, 681-691.
 DOI: [10.1021/accountsmr.1c00105](https://doi.org/10.1021/accountsmr.1c00105)
Selected as a cover of the journal.
- (361) Photoredox-catalyzed benzylic esterification via radical-polar crossover
 Bumpei Maeda, Yota Sakakibara, Kei Murakami, Kenichiro Itami
Org. Lett. 2021, 23, 5113-5117.
 DOI: [10.1021/acs.orglett.1c01645](https://doi.org/10.1021/acs.orglett.1c01645)
- (360) Diversity-oriented synthesis of nanographenes enabled by dearomative annulative π -extension
 Wataru Matsuoka, Hideto Ito, David Sarlah, Kenichiro Itami

Nature Commun. 2021, 12, 3940.

DOI: [10.1038/s41467-021-24261-y](https://doi.org/10.1038/s41467-021-24261-y)

Highlighted in Chunichi Shimbun, EurekAlert!, Phys.org, Bioengineer.org, Nanowerk, Azom.com, Azonano, Science Daily, Chem-Station, FrogHeart

- (359) Reversible modulation of circadian time with chronophotopharmacology

Dušan Kolarski, Carla Miró-Vinyals, Akiko Sugiyama, Ashutosh Srivastava, Daisuke Ono, Yoshiko Nagai, Mui Iida, Kenichiro Itami, Florence Tama, Wiktor Szymanski, Tsuyoshi Hirota, Ben L. Feringa

Nature Commun. 2021, 12, 3164.

DOI: [10.1038/s41467-021-23301-x](https://doi.org/10.1038/s41467-021-23301-x)

Highlighted in Nature Commun., C&EN (ACS), Scitech Daily, Phys.org, ScienMag, infosurhoy, Bioengineer.org, AZO Life Sciences, ScienceNewsNet, Science Daily, The Medical News, Wikipedia (2021 in science)

- (358) Synthesis and properties of helically-folded poly(arylenediethynylene)s

Michihisa Toya, Hideto Ito, Kenichiro Itami

Polym. Chem. 2021, 12, 3290-3298.

DOI: [10.1039/D1PY00144B](https://doi.org/10.1039/D1PY00144B)

- (357) Construction of heptagon-containing molecular nanocarbons

Chaolumen, Iain A. Stepek, Keigo E. Yamada, Hideto Ito, Kenichiro Itami

Angew. Chem. Int. Ed. 2021, 60, 23508-23532.

DOI: [10.1002/anie.202100260](https://doi.org/10.1002/anie.202100260)

- (356) Photo-induced arylation of carbazoles with aryldiazonium salts

Bumpei Maeda, Genki Mori, Yota Sakakibara, Akiko Yagi, Kei Murakami, Kenichiro Itami

Asian J. Org. Chem. 2021, 10, 1428-1431.

DOI: [10.1002/ajoc.202100191](https://doi.org/10.1002/ajoc.202100191)

- (355) Double-helix supramolecular nanofibers assembled from negatively curved nanographenes

Kenta Kato, Kiyofumi Takaba, Saori Maki-Yonekura, Nobuhiko Mitoma, Yusuke Nakanishi, Taishi Nishihara, Taito Hatakeyama, Takuma Kawada, Yuh Hijikata, Jenny Pirillo, Lawrence T. Scott, Koji Yonekura, Yasutomo Segawa, Kenichiro Itami

J. Am. Chem. Soc. 2021, 143, 5465-5469.

DOI: [10.1021/jacs.1c00863](https://doi.org/10.1021/jacs.1c00863)

Highlighted in Science, Nanotechnology Now, ScienMag, Bioengineer.org, Nanowerk. Selected as a cover of the journal.

ChemRxiv, DOI [10.26434/chemrxiv.13270607.v1](https://doi.org/10.26434/chemrxiv.13270607.v1)

- (354) Reductive stability evaluation of 6-azopurine photoswitches for the regulation of CKI α activity and circadian rhythm

Dušan Kolarski, Akiko Sugiyama, Theo Rodat, Albert Schulte, Christian Peifer, Kenichiro Itami, Tsuyoshi Hirota, Ben L. Feringa, Wiktor Szymanski

Org. Biomol. Chem. 2021, 19, 2312-2321.

DOI: [10.1039/D1OB00014D](https://doi.org/10.1039/D1OB00014D)

- (353) Synthesis of a zigzag carbon nanobelt
Kwan Yin Cheung, Kosuke Watanabe, Yasutomo Segawa, Kenichiro Itami
Nature Chem. 2021, 13, 255-259.
DOI: [10.1038/s41557-020-00627-5](https://doi.org/10.1038/s41557-020-00627-5)
Highlighted in Nature Chem., Synfatcs, EurekAlert!, Bioengineer.org, ScienMag, Nanowerk, Phys.org, Azonano, Science Bulletin.
ChemRxiv, DOI [10.26434/chemrxiv.12324353.v2](https://doi.org/10.26434/chemrxiv.12324353.v2).
- (352) Photopharmacological manipulation of mammalian CRY1 for regulation of the circadian clock
Dušan Kolarski, Simon Miller, Tsuyoshi Oshima, Yoshiko Nagai, Yugo Aoki, Piermichele Kobauri, Ashutosh Srivastava, Akiko Sugiyama, Kazuma Amaike, Ayato Sato, Florence Tama, Wiktor Szymanski, Ben L. Feringa, Kenichiro Itami, Tsuyoshi Hirota
J. Am. Chem. Soc. 2021, 143, 2078-2087.
DOI: [10.1021/jacs.0c12280](https://doi.org/10.1021/jacs.0c12280)
Highlighted in Bionity, Naked Science, The Medical News, Bioengineer.org., Phys.org.
- (351) Exciton spatial dynamics and self-trapping in carbon nanocages
Beatriz Rodríguez-Hernández, Tammie Nelson, Nicolas Oldani, Aliezer Martínez-Mesa, Llinersy Uranga-Piña, Yasutomo Segawa, Sergei Tretiak, Kenichiro Itami, Sebastian Fernandez-Alberti
J. Phys. Chem. Lett. 2021, 12, 224-231.
DOI: [10.1021/acs.jpclett.0c03364](https://doi.org/10.1021/acs.jpclett.0c03364)
- (350) A theoretical study on the strain energy of helicene-containing carbon nanobelts
Kosuke Watanabe, Yasutomo Segawa, Kenichiro Itami
Chem. Commun. 2020, 56, 15044-15047.
DOI: [10.1039/D0CC06373H](https://doi.org/10.1039/D0CC06373H)
- (349) Development of potent inhibitors for strigolactone receptor DWARF 14
Masahiko Yoshimura, Sojung F. Kim, Ryosuke Takise, Shuhei Kusano, Sakuya Nakamura, Masanori Izumi, Akiko Yagi, Kenichiro Itami, Shinya Hagihara
Chem. Commun. 2020, 56, 14917-14919.
DOI: [10.1039/D0CC01989E](https://doi.org/10.1039/D0CC01989E)
- (348) Small molecules modulating mammalian biological clocks: Exciting new opportunities for synthetic chemistry
Kazuma Amaike, Tsuyoshi Oshima, Nicola Stephanie Skoulding, Yoshifumi Toyama, Tsuyoshi Hirota, Kenichiro Itami
Chem 2020, 6, 2186-2198.
DOI: [10.1016/j.chempr.2020.08.011](https://doi.org/10.1016/j.chempr.2020.08.011)
- (347) A N-terminally deleted form of the CK2a' catalytic subunit is sufficient to support cell viability
Christian Borgo, Claudio D'Amore, Luca Cesaro, Kenichiro Itami, Tsuyoshi Hirota, Mauro Salvi, Lorenzo A. Pinna
Biochem. Biophys. Res. Commun. 2020, 531, 409-415.
DOI: [10.1016/j.bbrc.2020.07.112](https://doi.org/10.1016/j.bbrc.2020.07.112)
- (346) "Janus" efficacy of CX-5011: CK2 inhibition and methuosis induction by independent mechanisms

Claudio D'Amore, Enrico Moro, Christian Borgo, Kenichiro Itami, Tsuyoshi Hirota, Lorenzo A. Pinna, Mauro Salvi

Biochem. Biophys. Acta. Mol. Cell Res. 2020, 1867, 118807.

DOI: [10.1016/j.bbamcr.2020.118807](https://doi.org/10.1016/j.bbamcr.2020.118807)

- (345) The prospects of Excellence Initiatives in research: Key ingredients for a successful academic research institute

Wolf B. Frommer, Kenichiro Itami

EMBO Reports 2020, 21, e51398.

DOI: [10.15252/embr.202051398](https://doi.org/10.15252/embr.202051398)

- (344) Creation of negatively curved polyaromatics enabled by annulative coupling that forms an eight-membered ring

Satoshi Matsubara, Yoshito Koga, Yasutomo Segawa, Kei Murakami, Kenichiro Itami

Nature Catal. 2020, 3, 710-718.

DOI: [10.1038/s41929-020-0487-0](https://doi.org/10.1038/s41929-020-0487-0)

Highlighted in ScienMag, Nanowerk, Phys.org, Science Daily, Chem-Station.

- (343) Recent advances in C-H activation for the synthesis of π -extended materials

Iain A. Stepek, Kenichiro Itami

ACS Mater. Lett. 2020, 2, 951-974.

DOI: [10.1021/acsmaterialslett.0c00206](https://doi.org/10.1021/acsmaterialslett.0c00206)

DOI: [10.1021/acsmaterialslett.1c00214](https://doi.org/10.1021/acsmaterialslett.1c00214)

- (342) Synthetic strategies of carbon nanobelts and related belt-shaped polycyclic aromatic hydrocarbons

Kwan Yin Cheun, Yasutomo Segawa, Kenichiro Itami

Chem. Eur. J. 2020, 26, 14791-14801.

DOI: [10.1002/chem.202002316](https://doi.org/10.1002/chem.202002316)

- (341) A nonalternant aromatic belt: Methylene-bridged [6]cycloparaphenylene synthesized from pillar[6]arene

Yuanming Li, Yasutomo Segawa, Akiko Yagi, Kenichiro Itami

J. Am. Chem. Soc. 2020, 142, 12850-12856.

DOI: [10.1021/jacs.0c06007](https://doi.org/10.1021/jacs.0c06007)

The molecule ([6]MCP) became commercially available from TCI.

ChemRxiv, DOI [10.26434/chemrxiv.12415166](https://doi.org/10.26434/chemrxiv.12415166).

- (340) Synthesis of cycloptycenes from carbon nanobelt

Hiroki Shudo, Motonobu Kuwayama, Yasutomo Segawa, Kenichiro Itami

Chem. Sci. 2020, 11, 6775-6779.

DOI: [10.1039/D0SC02501A](https://doi.org/10.1039/D0SC02501A)

Highlighted in Chemistry World and ChemistryViews.

- (339) An isoform-selective modulator of Cryptochrome 1 regulates circadian rhythms in mammals

Simon Miller, Yoshiki Aikawa, Akiko Sugiyama, Yoshiko Nagai, Tsuyoshi Oshima, Kazuma Amaike, Steve A. Kay, Kenichiro Itami, Tsuyoshi Hirota

Cell Chem. Biol. 2020, 27, 1192-1198.

- (338) Molecular nanocarbon science: present and future
Kenichiro Itami, Takehisa Maekawa

Nano Lett. 2020, 20, 4718-4720.

DOI: [10.1021/acs.nanolett.0c02143](https://doi.org/10.1021/acs.nanolett.0c02143)

- (337) σ -Bond hydroboration of cyclopropanes

Hiroki Kondo, Shin Miyamura, Kaoru Matsushita, Hiroki Kato, Chisa Kobayashi, Arifin, Kenichiro Itami, Daisuke Yokogawa, Junichiro Yamaguchi

J. Am. Chem. Soc. 2020, 142, 11306-11313.

DOI: [10.1021/jacs.0c05213](https://doi.org/10.1021/jacs.0c05213)

Highlighted in ChemistryViews, ZDNetJapan, and Kyodo News.

- (336) Programmable synthesis of multiply arylated cubanes through C-H metalation and arylation
Ryo Okude, Genki Mori, Akiko Yagi, Kenichiro Itami

Chem. Sci. 2020, 11, 7672-7675.

DOI: [10.1039/D0SC01909G](https://doi.org/10.1039/D0SC01909G)

The 10th Anniversary Issue.

Highlighted in Chemistry World, ChemistryViews, and Synfacts.

- (335) Synthesis of polybenzoacenes: Annulative dimerization of phenylene triflate by twofold C-H activation

Mizuho Uryu, Taito Hiraga, Yoshito Koga, Yutaro Saito, Kei Murakami, Kenichiro Itami

Angew. Chem. Int. Ed. 2020, 59, 6551-6554.

DOI: [10.1002/anie.202001211](https://doi.org/10.1002/anie.202001211)

DOI: [10.1002/anie.202017333](https://doi.org/10.1002/anie.202017333)

Selected as VIP paper. Selected as Cover of the journal. Highlighted in ChemistryViews.

- (334) Isoform-selective regulation of mammalian cryptochromes

Simon Miller, You Lee Son, Yoshiki Aikawa, Eri Makino, Yoshiko Nagai, Ashutosh Srivastava, Tsuyoshi Oshima, Akiko Sugiyama, Aya Hara, Kazuhiro Abe, Kunio Hirata, Shinya Oishi, Shinya Hagihara, Ayato Sato, Florence Tama, Kenichiro Itami, Steve A. Kay, Megumi Hatori, Tsuyoshi Hirota

Nature Chem. Biol. 2020, 16, 676-685.

DOI: [10.1038/s41589-020-0505-1](https://doi.org/10.1038/s41589-020-0505-1)

Highlighted in Nature Chem. Biol., Phys.org, Technology Networks, Drug Target Review, Galileonet, Neuroscience News Updates.

- (333) Selective transformation of strychnine and 1,2-disubstituted benzenes by C-H borylation
Yutaro Saito, Kotonou Yamanoue, Yasutomo Segawa, Kenichiro Itami

Chem 2020, 6, 985-993.

DOI: [10.1016/j.chempr.2020.02.004](https://doi.org/10.1016/j.chempr.2020.02.004)

The ligand (Xyl-BIPHEP) became commercially available from TCI.

- (332) Six-fold C-H borylation of hexa-*peri*-hexabenzocoronene

Mai Nagase, Kenta Kato, Akiko Yagi, Yasutomo Segawa, Kenichiro Itami

- (331) Rapid access to kinase inhibitor pharmacophore by regioselective C-H arylation of thieno[2,3-d]pyrimidine
Shuya Yamada, Kaylin Nicole Flesch, Kei Murakami, Kenichiro Itami
Org. Lett. 2020, 22, 1547-1551.
DOI: [10.1021/acs.orglett.0c00143](https://doi.org/10.1021/acs.orglett.0c00143)
- (330) Roles of base in the Pd-catalyzed annulative chlorophenylene dimerization
Li-Ping Xu, Brandon E. Haines, Manjaly J. Ajitha, Kei Murakami, Kenichiro Itami, Djamaladdin G. Musaev
ACS Catal. 2020, 10, 3059-3073.
DOI: [10.1021/acscatal.9b05328](https://doi.org/10.1021/acscatal.9b05328)
- (329) Synthesis of nitrogen-containing polyaromatics by aza-annulative π -extension of unfunctionalized aromatics
Kou P. Kawahara, Wataru Matsuoka, Hideto Ito, Kenichiro Itami
Angew. Chem. Int. Ed. 2020, 59, 6383-6388.
DOI: [10.1002/anie.201913394](https://doi.org/10.1002/anie.201913394)
- (328) Synthesis of highly twisted, nonplanar aromatic macrocycles enabled by axially chiral 4,5-diphenylphenanthrene building block
Yuanming Li, Akiko Yagi, Kenichiro Itami
J. Am. Chem. Soc. 2020, 142, 3246-3253.
DOI: [10.1021/jacs.9b13549](https://doi.org/10.1021/jacs.9b13549)
- (327) Synthesis and structure of [9]cycloparaphenylene catenane: An all-benzene catenane consisting of small rings
Yasutomo Segawa, Motonobu Kuwayama, Kenichiro Itami
Org. Lett. 2020, 22, 1067-1070.
DOI: [10.1021/acs.orglett.9b04599](https://doi.org/10.1021/acs.orglett.9b04599)
- (326) Toward uncaptured and passionate research
(essay in Japanese)
Kenichiro Itami
Chemistry & Chemical Industry 2020, 73, 5-6.
<https://www.chemistry.or.jp/opinion/ronsetsu2001.pdf>
- (325) A quest for structurally uniform graphene nanoribbons: synthesis, properties, and applications
Yuuta Yano, Nobuhiko Mitoma, Hideto Ito, Kenichiro Itami
J. Org. Chem. 2020, 85, 4-33.
DOI: [10.1021/acs.joc.9b02814](https://doi.org/10.1021/acs.joc.9b02814)
DOI: [10.1021/acs.joc.1c00300](https://doi.org/10.1021/acs.joc.1c00300)
- (324) Topologically unique molecular nanocarbons

Acc. Chem. Res. 2019, 52, 2760-2767.

DOI: [10.1021/acs.accounts.9b00402](https://doi.org/10.1021/acs.accounts.9b00402)

Special issue on "Advanced Molecular Nanocarbons".

- (323) Controlling the circadian clock with high temporal resolution through photodosing
Dušan Kolarski, Akiko Sugiyama, Ghislain Breton, Christin Rakers, Daisuke Ono, Albert Schulte, Florence Tama, Kenichiro Itami, Wiktor Szymanski, Tsuyoshi Hirota, Ben L. Feringa
J. Am. Chem. Soc. 2019, 141, 15784-15791.
DOI: [10.1021/jacs.9b05445](https://doi.org/10.1021/jacs.9b05445)
Highlighted in various media.
- (322) Two-step synthesis of a red-emissive warped nanographene derivative *via* a ten-fold C-H borylation
Kenta Kato, Hsing-An Lin, Motonobu Kuwayama, Mai Nagase, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami
Chem. Sci. 2019, 10, 9038-9041.
DOI: [10.1039/C9SC03061A](https://doi.org/10.1039/C9SC03061A)
- (321) Negatively curved warped nanographene self-assembled on metal surfaces
José I. Urgel, Marco Di Giovannantonio, Yasutomo Segawa, Pascal Ruffieux, Lawrence T. Scott, Carlo A. Pignedoli, Kenichiro Itami, Roman Fasel
J. Am. Chem. Soc. 2019, 141, 13158-13164.
DOI: [10.1021/jacs.9b05501](https://doi.org/10.1021/jacs.9b05501)
- (320) Topological molecular nanocarbons: all-benzene catenane and trefoil knot
Yasutomo Segawa, Motonobu Kuwayama, Yuh Hijikata, Masako Fushimi, Taishi Nishihara, Jenny Pirillo, Junya Shirasaki, Natsumi Kubota, Kenichiro Itami
Science 2019, 365, 272-276.
DOI: [10.1126/science.aav5021](https://doi.org/10.1126/science.aav5021)
*Selected as the Molecule of the Year (ACS).
Highlighted in Science, C&E News, 7th Space Family Portal, Phys.org.,
Science Daily, Nanowerk, Chem-Station.*
- (319) An axially chiral 1,1'-biazulene and its π -extended derivative: Synthesis, structures and properties
Chaolumen, Hideto Ito, Kenichiro Itami
Chem. Commun. 2019, 55, 9606-9609.
DOI: [10.1039/C9CC03510A](https://doi.org/10.1039/C9CC03510A)
Highlighted in Front cover.
- (318) Strength of carbon nanotubes depends on their chemical structures
Akira Takakura, Ko Beppu, Taishi Nishihara, Akihito Fukui, Takahiro Kozeki, Takahiro Namazu, Yuhei Miyauchi, Kenichiro Itami
Nature Commun. 2019, 10, 3040.
DOI: [10.1038/s41467-019-10959-7](https://doi.org/10.1038/s41467-019-10959-7)
Highlighted in Nanowerk, Lab Manager, Phys.org, PBS.
- (317) Casein kinase 1 family regulates PRR5 and TOC1 in the Arabidopsis circadian clock

Takahiro N Uehara, Yoshiyuki Mizutani, Keiko Kuwata, Tsuyoshi Hirota, Ayato Sato, Junya Mizoie, Saori Takao, Hiromi Matsuo, Takamasa Suzuki, Shogo Ito, Ami N Saito, Taeko Nishiwaki-Ohkawa, Kazuko Yamaguchi-Shinozaki, Takashi Yoshimura, Steve Kay, Kenichiro Itami, Toshinori Kinoshita, Junichiro Yamaguchi, Norihito Nakamichi

Proc. Nat. Acad. Sci. 2019, 116, 11528-11536.

DOI: [10.1073/pnas.1903357116](https://doi.org/10.1073/pnas.1903357116)

Highlighted in many newspapers.

- (316) A unique ultra-narrow-band thermal exciton radiation phenomena of carbon nanotubes
(account in Japanese)

Taishi Nishihara, Akira Takakura, Yuhei Miyauchi, Kenichiro Itami

Technical Information Institute Magazine 2019, 361-369.

- (315) Synthesis of polycyclic aromatic compounds by direct coupling
(account in Japanese)

Wataru Matsuoka, Hideto Ito, Kenichiro Itami

Development and Application of Direct Aromatic Coupling Reactions,

CMC Press, Chapter 12, 136-148.

https://www.cmcbooks.co.jp/products/detail.php?product_id=5636

- (314) Synthesis of sterically hindered 4,5-diarylphenanthrenes via acid-catalyzed bisannulation of benzenediacetaldehydes with alkynes

Yuanming Li, Akiko Yagi, Kenichiro Itami

Chem. Sci. 2019, 10, 5470-5475.

DOI: [10.1039/C9SC00334G](https://doi.org/10.1039/C9SC00334G)

Selected as 2019 Chemical Science HOT Article.

- (313) Armchair and chiral carbon nanobelts: Scholl reaction in strained nanorings

Akiko Yagi, Yasutomo Segawa, Kenichiro Itami

Chem 2019, 5, 746-748.

DOI: [10.1016/j.chempr.2019.03.013](https://doi.org/10.1016/j.chempr.2019.03.013)

- (312) Dehydrogenative synthesis of 2,2'-bipyridyls through regioselective pyridine dimerization

Shuya Yamada, Takeshi Kaneda, Philip Steib, Kei Murakami, Kenichiro Itami

Angew. Chem. Int. Ed. 2019, 58, 8341-8345.

DOI: [10.1002/anie.201814701](https://doi.org/10.1002/anie.201814701)

- (311) Bay-region selective annulative π -extension (APEX) of perylene diimides with arynes

Takayuki Nakamuro, Kazushi Kumazawa, Hideto Ito, Kenichiro Itami

Synlett 2019, 30, 423-428.

DOI: [10.1055/s-0037-1611668](https://doi.org/10.1055/s-0037-1611668)

Contribution to the 30 years Synlett Pearl Anniversary issue

- (310) Synthesis and structural features of thiophene-fused analogues of warped nanographene and quintuple helicene

Hsing-An Lin, Kenta Kato, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami

Chem. Sci. 2019, 10, 2326-2330.

- (309) Ultra-narrow-band thermal exciton radiation phenomena of carbon nanotubes
(account in Japanese)
Taishi Nishihara, Akira Takakura, Kenichiro Itami, Yuhei Miyauchi
Clean Energy 2019, 28, 7-14.
- (308) Cell-based screen identifies a new potent and highly selective CK2 inhibitor for modulation of circadian rhythms and cancer cell growth
Tsuyoshi Oshima, Yoshimi Niwa, Keiko Kuwata, Ashutosh Srivastava, Tomoko Hyoda, Yoshiki Tsuchiya, Megumi Kumagai, Masato Tsuyuguchi, Teruya Tamaru, Akiko Sugiyama, Natsuko Ono, Norjin Zolboot, Yoshiki Aikawa, Shunsuke Oishi, Atsushi Nonami, Fumio Arai, Shinya Hagihara, Junichiro Yamaguchi, Florence Tama, Yuya Kunisaki, Kazuhiro Yagita, Masaaki Ikeda, Takayoshi Kinoshita, Steve A. Kay, Kenichiro Itami, Tsuyoshi Hirota
Science Adv. 2019, 5, eau9060.
DOI: [10.1126/sciadv.aau9060](https://doi.org/10.1126/sciadv.aau9060)
Highlighted in Jamaice Observer, Xinhua, Cooperative, Health Canal, China.org, Drug Discovery and Development, R&D, Technology Networks, eancer, Science Daily, MidicalXpress, EurekAlert!.
- (307) Polycyclic arene synthesis by annulative π -extension
Hideto Ito, Yasutomo Segawa, Kei Murakami, Kenichiro Itami
J. Am. Chem. Soc. 2019, 141, 3-10.
DOI: [10.1021/jacs.8b09232](https://doi.org/10.1021/jacs.8b09232)
- (306) New directions in natural product synthesis
Huw M. L. Davies, Kenichiro Itami, Brian M. Stoltz
Chem. Soc. Rev. 2018, 47, 7828-7829.
DOI: [10.1039/C8CS90115E](https://doi.org/10.1039/C8CS90115E)
- (305) Dissecting plant hormone signaling with synthetic molecules: perspective from the chemists
Shinya Hagihara, Ryotaro Yamada, Kenichiro Itami, Keiko U. Torii
Curr. Opin. Plant Biol. 2018, 47, 32-37.
DOI: [10.1016/j.pbi.2018.09.002](https://doi.org/10.1016/j.pbi.2018.09.002)
- (304) Discovery of plant growth stimulants by C-H arylation of 2-azahypoxanthine
Hiroyuki Kitano, Jae-Hoon Choi, Ayaka Ueda, Hideto Ito, Shinya Hagihara, Toshiyuki Kan, Hirokazu Kawagishi, Kenichiro Itami
Org. Lett. 2018, 20, 5684-5687.
DOI: [10.1021/acs.orglett.8b02407](https://doi.org/10.1021/acs.orglett.8b02407)
Highlighted in C&E News (ACS).
- (303) Symmetric multiple carbohelicenes
Kenta Kato, Yasutomo Segawa, Kenichiro Itami
Synlett 2019, 30, 370-377.
DOI: [10.1055/s-0037-1610283](https://doi.org/10.1055/s-0037-1610283)
- (302) Ultra-narrow-band thermal exciton radiation in intrinsic one-dimensional semiconductors

Taishi Nishihara, Akira Takakura, Yuhei Miyauchi, Kenichiro Itami

Nature Commun. 2018, 9, 3144.

DOI: [10.1038/s41467-018-05598-3](https://doi.org/10.1038/s41467-018-05598-3)

Highlighted in Chunichi Shimbun.

- (301) Annulative π -extension of indoles and pyrroles with diiodobiaryls by Pd catalysis: Rapid synthesis of nitrogen-containing polycyclic aromatic compounds

Hiroyuki Kitano, Wataru Matsuoka, Hideto Ito, Kenichiro Itami

Chem. Sci. 2018, 9, 7556-7561.

DOI: [10.1039/C8SC02802H](https://doi.org/10.1039/C8SC02802H)

- (300) Synthesis and size-dependent properties of [12], [16], and [24]carbon nanobelts

Guillaume Povie, Yasutomo Segawa, Taishi Nishihara, Yuhei Miyauchi, Kenichiro Itami

J. Am. Chem. Soc. 2018, 140, 10054-10059.

DOI: [10.1021/jacs.8b06842](https://doi.org/10.1021/jacs.8b06842)

- (299) Carbon nanosheets by morphology-retained carbonization of two-dimensional assembled anisotropic carbon nanorings

Taizo Mori, Hiroyuki Tanaka, Amit Dalui, Nobuhiko Mitoma, Kengo Suzuki, Mutsuyoshi Matsumoto, Nikhil Aggarwal, Archita Patnaik, Somabrata Acharya, Lok Kumar Shrestha, Hirotoshi Sakamoto, Kenichiro Itami, Katsuhiko Ariga

Angew. Chem. Int. Ed. 2018, 57, 9679-9683.

DOI: [10.1002/anie.201803859](https://doi.org/10.1002/anie.201803859)

Selected as Hot Paper.

- (298) Gold-catalyzed C-H imidation of polycyclic aromatic hydrocarbons

Yip Shu Jan, Takahiro Kawakami, Kei Murakami, Kenichiro Itami

Asian J. Org. Chem. 2018, 7, 1372-1375.

DOI: [10.1002/ajoc.201800293](https://doi.org/10.1002/ajoc.201800293)

- (297) Modular synthesis of heptaarylindole

Shin Suzuki, Kenichiro Itami, Kei Muto, Junichiro Yamaguchi

Org. Biol. Chem. 2018, 16, 3771-3776.

DOI: [10.1039/C8OB00993G](https://doi.org/10.1039/C8OB00993G)

- (296) Synthesis of heptaarylisoquinolines: Unusual disconnection for constructing isoquinoline frameworks

Takashi Asako, Shin Suzuki, Kenichiro Itami, Kei Muto, Junichiro Yamaguchi

Chem. Lett. 2018, 47, 968-970.

DOI: [10.1246/cl.180429](https://doi.org/10.1246/cl.180429)

- (295) Pd-catalyzed decarbonylative C-H coupling of azoles and aromatic esters

Kaoru Matsushita, Ryosuke Takise, Tomoya Hisada, Shin Suzuki, Ryota Isshiki, Kenichiro Itami, Kei Muto, Junichiro Yamaguchi

Chem. Asian J. 2018, 13, 2393-2396.

DOI: [10.1002/asia.201800478](https://doi.org/10.1002/asia.201800478)

- (294) Late-stage functionalization of arylacetic acids by photoredox-catalyzed decarboxylative carbon-heteroatom bond formation
Yota Sakakibara, Eri Ito, Tomohiro Fukushima, Kei Murakami, Kenichiro Itami
Chem. Eur. J. 2018, 24, 9254-9258.
DOI: [10.1002/chem.201802143](https://doi.org/10.1002/chem.201802143)
- (293) A super strong engineered auxin-TIR1 pair
Ryotaro Yamada, Keiichi Murai, Naoyuki Uchida, Koji Takahashi, Rie Iwasaki, Yasuomi Tada, Toshinori Kinoshita, Kenichiro Itami, Keiko U. Torii, Shinya Hagihara
Plant Cell Physiol. 2018, 59, 1538-1544.
DOI: [10.1093/pcp/pcy127](https://doi.org/10.1093/pcp/pcy127)
The molecule (5-adamantyl-IAA) became commercially available from TCI.
- (292) Photoredox-catalyzed decarboxylative oxidation of arylacetic acids
Yota Sakakibara, Philippa Cooper, Kei Murakami, Kenichiro Itami
Chem. Asian J. 2018, 13, 2410-2413.
DOI: [10.1002/asia.201800529](https://doi.org/10.1002/asia.201800529)
- (291) Merging synthetic chemistry with plant biology and chronobiology for creating transformative molecules (account in Japanese)
Kenichiro Itami, Shinya Hagihara, Ayato Sato
Medchem News 2018, 28, 1-7.
DOI: [10.14894/medchem.28.2_59](https://doi.org/10.14894/medchem.28.2_59)
- (290) Palladium-catalyzed esterification of carboxylic acids with aryl iodides
Hiroyuki Kitano, Hideto Ito, Kenichiro Itami
Org. Lett. 2018, 20, 2428-2432.
DOI: [10.1021/acs.orglett.8b00775](https://doi.org/10.1021/acs.orglett.8b00775)
- (289) Synthesis and structure of a propeller-shaped polycyclic aromatic hydrocarbon containing seven-membered rings
Kazuya Kawai, Kenta Kato, Lingqing Peng, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami
Org. Lett. 2018, 20, 1932-1935.
DOI: [10.1021/acs.orglett.8b00477](https://doi.org/10.1021/acs.orglett.8b00477)
- (288) Recent advances in acetylene-based helical oligomers and polymers: Synthesis, structures, and properties
Michihisa Toya, Hideto Ito, Kenichiro Itami
Tetrahedron Lett. 2018, 59, 1531-1547.
DOI: [10.1016/j.tetlet.2018.03.018](https://doi.org/10.1016/j.tetlet.2018.03.018)
- (287) A water-soluble warped nanographene: Synthesis and applications for photo-induced cell death
Hsing-An Lin, Yoshikatsu Sato, Yasutomo Segawa, Taishi Nishihara, Nagisa Sugimoto, Lawrence T. Scott, Tetsuya Higashiyama, Kenichiro Itami
Angew. Chem. Int. Ed. 2018, 57, 2874-2878.
DOI: [10.1002/anie.201713387](https://doi.org/10.1002/anie.201713387)
Selected as VIP Paper.

Highlighted in Nikkei Shimbun, Asia Research News, KEXMY, Phys Org, Science Daily, Science Newslane, WILEY, NEWS MEDICAL LIFE SCIENCES, BioSpectrum, SPACE DAILY, fabcross, Photonics.com, Controlled Environments, Azonano, The Medical News.

- (286) Discovery of shoot branching regulator targeting strigolactone receptor DWARF14
Masahiko Yoshimura, Ayato Sato, Keiko Kuwata, Yoshiaki Inukai, Toshinori Kinoshita, Kenichiro Itami, Yuichiro Tsuchiya, Shinya Hagihara
ACS Cent. Sci. 2018, 4, 230-234.
DOI: [10.1021/acscentsci.7b00554](https://doi.org/10.1021/acscentsci.7b00554)
Highlighted in SeedQuest, Phys.org, EurekAlert!.
- (285) Unidirectional molecular assembly alignment on graphene enabled by nanomechanical symmetry breaking
Liu Hong, Taishi Nishihara, Yuh Hijikata, Yuhei Miyauchi, Kenichiro Itami
Sci. Rep. 2018, 2333.
DOI: [10.1038/s41598-018-20760-z](https://doi.org/10.1038/s41598-018-20760-z)
Selected as Top 100 papers.
Highlighted in OPTRONICS, Research in Japan.
- (284) C-H arylation of phenanthrene with trimethylphenylsilane by Pd/o-chloranil catalysis: Computational studies on the mechanism, regioselectivity, and role of o-chloranil
Mari Shibata, Hideto Ito, Kenichiro Itami
J. Am. Chem. Soc. 2018, 140, 2196-2205.
DOI: [10.1021/jacs.7b11260](https://doi.org/10.1021/jacs.7b11260)
- (283) Design, synthesis and evaluation of g-turn mimetics as LSD1-selective inhibitors
Yosuke Ota, Shin Miyamura, Misaho Araki, Yukihiro Itoh, Shusuke Yasuda, Mitsuharu Masuda, Tomoyuki Taniguchi, Yoshihiro Sowa, Toshiyuki Sakai, Kenichiro Itami, Junichiro Yamaguchi, Takayoshi Suzuki
Bioorg. Med. Chem. 2018, 26, 775-785.
DOI: [10.1016/j.bmc.2017.12.045](https://doi.org/10.1016/j.bmc.2017.12.045)
- (282) Synthesis of partially and fully fused polyaromatics by annulative chlorophenylene dimerization
Yoshito Koga, Takeshi Kaneda, Yutaro Saito, Kei Murakami, Kenichiro Itami
Science 2018, 359, 435-439.
DOI: [10.1126/science.aap9801](https://doi.org/10.1126/science.aap9801)
Highlighted in NHK Television News, Chunichi Shimbun, Asahi Shimbun, Nikkan Kogyo Shimbun, Kagaku Shimbun, C&E News, NNNS chemistry blog, AlphaGalileo, Brightsurf Science News and Current Events, CRWE WORLD, Energy Cheap, EurekAlert!, nanowerk, Phys Org, Science Daily, STRN, TECH EXPLORIST, tech news, livedoor blog, OPTRONICS, Materilas Today, Space Daily.
- (281) Chemical hijacking of auxin signaling with an engineered auxin-TIR1 pair
Naoyuki Uchida, Koji Takahashi, Rie Iwasaki, Ryotaro Yamada, Masahiko Yoshimura, Takaho A. Endo, Seisuke Kimura, Hua Zhang, Mika Nomoto, Yasuomi Tada, Toshinori Kinoshita, Kenichiro Itami, Shinya Hagihara, Keiko U. Torii
Nature Chem. Biol. 2018, 14, 299-305.
DOI: [10.1038/nchembio.2555](https://doi.org/10.1038/nchembio.2555)

Highlighted in Chunichi Shimbun, Mainichi Shimbun, EurekAlert!, Phys.Org, Science Newsline, My Science, Newswise, Yonhapnews, Lab Manager, Technology Networks, GARNet Community Blog, Technology.org, Physorg.

- (280) A quintuple [6]helicene with a corannulene core as a C₅-symmetric propeller-shaped p-system
Kenta Kato, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami

Angew. Chem. Int. Ed. 2018, 57, 1337-1341.

DOI: [10.1002/anie.201711985](https://doi.org/10.1002/anie.201711985)

Selected as Hot Paper.

Highlighted in Photonics.com, Controlled Environments, Azonano, Long Room.

- (279) Synthesis of α -fluoroimines by copper-catalyzed reaction of diarylacetylenes and N-fluorobenzenesulfonimide

Shu Jan Yip, Tetsushi Yoshidomi, Kei Murakami, Kenichiro Itami

Chem. Lett. 2018, 47, 329-331.

DOI: [10.1246/cl.171097](https://doi.org/10.1246/cl.171097)

- (278) Hole-transporting materials based on thiophene-fused arenes from sulfur-mediated thienannulations

Hsing-An Lin, Nobuhiko Mitoma, Lingkui Meng, Yasutomo Segawa, Atsushi Wakamiya, Kenichiro Itami

Mater. Chem. Front. 2018, 2, 275-280.

DOI: [10.1039/C7QM00473G](https://doi.org/10.1039/C7QM00473G)

- (277) Synthesis of octaaryl naphthalenes and anthracenes with different substituents

Shin Suzuki, Kenichiro Itami, Junichiro Yamaguchi

Angew. Chem. Int. Ed. 2017, 56, 15010-15013.

DOI: [10.1002/anie.201709332](https://doi.org/10.1002/anie.201709332)

- (276) Catalytic α -arylation of ketones with heteroaromatic esters

Ryota Isshiki, Ryosuke Takise, Kenichiro Itami, Kei Muto, Junichiro Yamaguchi

Synlett 2017, 28, 2599-2603.

DOI: [10.1055/s-0036-1589120](https://doi.org/10.1055/s-0036-1589120)

- (275) Oxidative homocoupling reaction of aryltrimethylsilanes by Pd/o-chloranil catalysis

Mari Shibata, Hideto Ito, Kenichiro Itami

Chem. Lett. 2017, 46, 1701-1704.

DOI: [10.1246/cl.170723](https://doi.org/10.1246/cl.170723)

- (274) Discovery of synthetic small molecules that enhance the number of stomata: C-H functionalization chemistry for plant biology

Asraa Ziadi, Naoyuki Uchida, Hiroe Kato, Rina Hisamatsu, Ayato Sato, Shinya Hagihara, Kenichiro Itami, Keiko U. Torii

Chem. Commun. 2017, 53, 9632-9635.

DOI: [10.1039/C7CC04526C](https://doi.org/10.1039/C7CC04526C)

Highlighted in Chemical & Engineering News (ACS), Alpha Galileo, ResearchSEA, EurekAlert!, Phys.Org, SeedQuest, Science Daily, Mihan Magazine, Bioengineer,

- (273) Rapid access to nanographenes and fused heteroaromatics by palladium-catalyzed annulative π -extension reaction of unfunctionalized aromatics with diiodobiaryls
Wataru Matsuoka, Hideto Ito, Kenichiro Itami
Angew. Chem. Int. Ed. 2017, 56, 12224-12228.
DOI: [10.1002/anie.201707486](https://doi.org/10.1002/anie.201707486)
Highlighted in Organometallic Chemistry, Current Trends in Organometallic and Synthetic Chemistry
- (272) Laterally π -extended dithia[6]helicenes with heptagons: Saddle-helix hybrid molecules
Takao Fujikawa, Yasutomo Segawa, Kenichiro Itami
J. Org. Chem. 2017, 82, 7745-7749.
DOI: [10.1021/acs.joc.7b01540](https://doi.org/10.1021/acs.joc.7b01540)
- (271) Aromatic C-H amination: A radical approach for adding new functions into biology- and materials-oriented aromatics
Kei Murakami, Gregory J. P. Perry, Kenichiro Itami
Org. Biomol. Chem. 2017, 15, 6071-6075.
DOI: [10.1039/C7OB00985B](https://doi.org/10.1039/C7OB00985B)
- (270) Dramatic history behind the first synthesis of a carbon nanobelt (account in Japanese)
Kenichiro Itami, Yasutomo Segawa, Haruka Omachi, Akiko Yagi
Kagaku 2017, 72, 23-31.
<https://www.kagakudojin.co.jp/book/b308350.html>
- (269) Strigolactone receptors in *Striga hermonthica* (account in Japanese)
Masahiko Yoshimura, Yuichiro Tsuchiya, Yoshikatsu Sato, Kenichiro Itami, Toshinori Kinoshita, Shinya Hagihara
Plant Morphology 2017, 29, 33-37.
https://www.jstage.jst.go.jp/article/plmorphol/29/1/29_33/-char/ja
- (268) Synthesis of a carbon nanobelt (account in Japanese)
Yasutomo Segawa, Kenichiro Itami
Chemistry Today 2017, 556, 36-39.
<https://www.tkd-pbl.com/book/b298065.html>
- (267) Electrically activated conductivity and white light emission of a hydrocarbon nanoring-iodine assembly
Noriaki Ozaki, Hirotohi Sakamoto, Taishi Nishihara, Toshihiko Fujimori, Yuh Hijikata, Ryuto Kimura, Stephan Irle, Kenichiro Itami
Angew. Chem. Int. Ed. 2017, 56, 11196-11202.
DOI: [10.1002/anie.201703648](https://doi.org/10.1002/anie.201703648)
Selected as Frontispiece and Hot Paper.
Featured in Chunichi Shimbun, Nikkan Kogyo Shimbun, Kagaku Shimbun, Nikkei Shimbun, AlphaGalileo, Ansa, Asian Scientist, Azo Materials, Controlled Environments, Corriere, Technologie, EurekAlert!, Fanpage, Global Info Research, INOVACAO tecnologica, Nanotechnology Now, Nanotechweb, Nanowork, Novus Light, Phys.Org, Poltvesti, R&D Magazine, ResearchSEA,

- (266) Annulative π -extension (APEX): Rapid access to fused aromatics, heteroaromatics, and nanographenes
Hideto Ito, Kyohei Ozaki, Kenichiro Itami
Angew. Chem. Int. Ed. 2017, 56, 11144-11164.
DOI: [10.1002/anie.201701058](https://doi.org/10.1002/anie.201701058)
- (265) Thiazole-based σ_1 receptor ligands: Diversity by late-stage C-H arylation of thiazoles, structure affinity and selectivity relationships and molecular interactions
Artur Kokornaczyk, Dirk Schepmann, Junichiro Yamaguchi, Kenichiro Itami, Erik Laurini, Maurizio Fermeiglia, Sabrina Pricl, Bernhard Wünsch
ChemMedChem. 2017, 12, 1070-1080.
DOI: [10.1002/cmdc.201700166](https://doi.org/10.1002/cmdc.201700166)
- (264) Synthesis, properties, and crystal structures of π -extended double [6]helicenes: Contorted multi-dimensional stacking lattices
Takao Fujikawa, Nobuhiko Mitoma, Atsushi Wakamiya, Akinori Saeki, Yasutomo Segawa, Kenichiro Itami
Org. Biomol. Chem. 2017, 15, 4697-4703.
DOI: [10.1039/C7OB00987A](https://doi.org/10.1039/C7OB00987A)
- (263) Theoretical elucidation of potential enantioselectivity in a Pd-catalyzed aromatic C-H coupling reaction
Yoshio Nishimoto, Hiroki Kondo, Kazuya Yamaguchi, Daisuke Yokogawa, Junichiro Yamaguchi, Kenichiro Itami, Stephan Irle
J. Org. Chem. 2017, 82, 4900-4906.
DOI: [10.1021/acs.joc.6b02675](https://doi.org/10.1021/acs.joc.6b02675)
- (262) Direct coupling of naphthalene and sulfonimides promoted by DDQ and blue light
Yota Sakakibara, Eri Ito, Takahiro Kawakami, Shuya Yamada, Kei Murakami, Kenichiro Itami
Chem. Lett. 2017, 46, 1014-1016.
DOI: [10.1246/cl.170321](https://doi.org/10.1246/cl.170321)
- (261) C-H functionalization of azines
Kei Murakami, Shuya Yamada, Takeshi Kaneda, Kenichiro Itami
Chem. Rev. 2017, 117, 9302-9332.
DOI: [10.1021/acs.chemrev.7b00021](https://doi.org/10.1021/acs.chemrev.7b00021)
- (260) Synthesis of a carbon nanobelt
Guillaume Povie, Yasutomo Segawa, Taishi Nishihara, Yuhei Miyauchi, Kenichiro Itami
Science 2017, 356, 172-175.
DOI: [10.1126/science.aam8158](https://doi.org/10.1126/science.aam8158)
Featured in TV (NHK, Fuji TV, Chukyo TV, CBC TV, Nagoya TV, Tokai TV), Nature, and Yahoo! News, Chunichi Shimbun, Asahi Shimbun, Yomiuri Shimbun, Mainichi Shimbun, Nikkei Shimbun, Nikkan Kogyo Shimbun, The Chemical Daily, Jiji Tsushin, Asahi Shogakusei Shimbun. Highlighted

in Science, C&E News (ACS), Chemistry World (RSC), Synfacts, Chem, Physics Today, Angew. Chem. Int. Ed., Kagaku, Gendai Kagaku, Computational Chemistry Highlights, materialstoday, chembites, Chem-station, Asia Research News, BIGLOBE, BIONITY, CBC News, Compound Interest, Controlled Environments, EETimes Japan, Innovation Toronto.
The molecule, (6,6)C₆₀, became commercially available from TCI.

- (259) Annulative π -extension (APEX) of heteroarenes with dibenzosiloles and dibenzogermoles by palladium/*o*-chloranil catalysis
Kyohei Ozaki, Wataru Matsuoka, Hideto Ito, Kenichiro Itami

Org. Lett. 2017, 19, 1930-1933.
DOI: [10.1021/acs.orglett.7b00684](https://doi.org/10.1021/acs.orglett.7b00684)

- (258) Synthesis of multiply arylated pyridines
Takashi Asako, Wakana Hayashi, Kazuma Amaike, Shin Suzuki, Kenichiro Itami, Kei Muto, Junichiro Yamaguchi

Tetrahedron 2017, 73, 3669-3676.
DOI: [10.1016/j.tet.2017.03.095](https://doi.org/10.1016/j.tet.2017.03.095)
A special issue in honor of Prof. Ang Li

- (257) Polymorphism of [6]cycloparaphenylene for packing structure-dependent host-guest interaction
Tomohiro Fukushima, Hiroto Sakamoto, Kohei Tanaka, Yuh Hijikata, Stephan Irle, Kenichiro Itami

Chem. Lett. 2017, 46, 855-857.
DOI: [10.1246/cl.170210](https://doi.org/10.1246/cl.170210)
Selected as Editor's Choice.

- (256) Rh-catalyzed regiodivergent hydrosilylation of aminocyclopropanes controlled by monophosphine ligands
Hiroki Kondo, Kenichiro Itami, Junichiro Yamaguchi

Chem. Sci. 2017, 8, 3799-3803.
DOI: [10.1039/C7SC00071E](https://doi.org/10.1039/C7SC00071E)

- (255) Catalytic dehydrogenative C-H imidation of arenes enabled by photo-generated hole donation to sulfonimide
Eri Ito, Tomohiro Fukushima, Takahiro Kawakami, Kei Murakami, Kenichiro Itami

Chem 2017, 2, 383-392.
DOI: [10.1016/j.chempr.2017.02.006](https://doi.org/10.1016/j.chempr.2017.02.006)
Selected as Cover Picture. Highlighted in Chem-Station.

- (254) Decarbonylative diaryl ether synthesis by Pd and Ni catalysis
Ryosuke Takise, Ryota Isshiki, Kei Muto, Kenichiro Itami, Junichiro Yamaguchi

J. Am. Chem. Soc. 2017, 139, 3340-3343.
DOI: [10.1021/jacs.7b00049](https://doi.org/10.1021/jacs.7b00049)
*Featured in newspapers (The Chemical Daily, Nikkei Sangyo Shimbun).
Highlighted in Chem-Station, ScienceDaily, Phys.org.
Most read article (March 2017).*

- (253) Synthesis, structure, and electrochemical property of a bimetallic bis-2-pyridylidene palladium acetate complex
Tetsushi Yoshidomi, Tomohiro Fukushima, Kenichiro Itami, Yasutomo Segawa
Chem. Lett. 2017, 46, 587-590.
DOI: [10.1246/cl.170091](https://doi.org/10.1246/cl.170091)
- (252) Palladium-catalyzed decarbonylative alkynylation of aromatic esters
Toshimasa Okita, Kazushi Kumazawa, Ryosuke Takise, Kei Muto, Kenichiro Itami, Junichiro Yamaguchi
Chem. Lett. 2017, 46, 218-220.
DOI: [10.1246/cl.161001](https://doi.org/10.1246/cl.161001)
Most read article (November-December 2016).
- (251) Toward an ideal synthesis of (bio)molecules through direct arene assembling reactions
Junichiro Yamaguchi, Kenichiro Itami
Bull. Chem. Soc. Jpn. 2017, 90, 367-383.
DOI: [10.1246/bcsj.20160365](https://doi.org/10.1246/bcsj.20160365)
Selected as Back Cover. Most read article (December 2016).
- (250) One-step annulative π -extension of alkynes with dibenzosiloles or dibenzogermoles by palladium/*o*-chloranil catalysis
Kyohei Ozaki, Keiichiro Murai, Wataru Matsuoka, Katsuaki Kawasumi, Hideto Ito, Kenichiro Itami
Angew. Chem. Int. Ed. 2017, 56, 1361-1364.
DOI: [10.1002/anie.201610374](https://doi.org/10.1002/anie.201610374)
Selected as Hot Paper. Highlighted in Synfacts.
- (249) Key structural elements of unsymmetrical cyanine dyes for highly sensitive fluorescence turn-on DNA probe
Kakishi Uno, Taeko Sasaki, Nagisa Sugimoto, Hideto Ito, Taishi Nishihara, Shinya Hagihara, Tetsuya Higashiyama, Narie Sasaki, Yoshikatsu Sato, Kenichiro Itami
Chem. Asian J. 2017, 12, 233-238.
DOI: [10.1002/asia.201601430](https://doi.org/10.1002/asia.201601430)
Most accessed article in January 2017.
- (248) Synthesis, structure, and reactivity of a cylinder-shaped cyclo[12]orthophenylene[6]ethynylene: Toward the synthesis of zigzag carbon nanobelts
Katsuma Matsui, Masako Fushimi, Yasutomo Segawa, Kenichiro Itami
Org. Lett. 2016, 18, 5352-5355.
DOI: [10.1021/acs.orglett.6b02702](https://doi.org/10.1021/acs.orglett.6b02702)
Highlighted in Synfacts.
- (247) Syntheses of biologically active 2-arylcylopropylamines
Shin Miyamura, Kenichiro Itami, Junichiro Yamaguchi
Synthesis 2017, 49, 1131-1149.
DOI: [10.1055/s-0036-1588390](https://doi.org/10.1055/s-0036-1588390)
Highlighted in Front Cover.

- (246) Phenanthro[9,10-*a*]corannulene by one-step annulative π -extension of corannulene
Kenta Kato, Yasutomo Segawa, Kenichiro Itami
Can. J. Chem. 2017, 95, 329-333.
DOI: [10.1139/cjc-2016-0467](https://doi.org/10.1139/cjc-2016-0467)
Special issue to honor Prof. Reginald Mitchell.
- (245) Palladium-catalyzed decarbonylative cross-coupling of azinecarboxylates with arylboronic acids
Kei Muto, Taito Hatakeyama, Kenichiro Itami, Junichiro Yamaguchi
Org. Lett. 2016, 18, 5106-5109.
DOI: [10.1021/acs.orglett.6b02556](https://doi.org/10.1021/acs.orglett.6b02556)
- (244) Cu-catalyzed aromatic C-H imidation with *N*-fluorobenzenesulfonimide: Mechanistic details and predictive models
Brandon E. Haines, Takahiro Kawakami, Keiko Kuwata, Kei Murakami, Kenichiro Itami, Djamaladdin G. Musaev
Chem. Sci. 2017, 8, 998-1001.
DOI: [10.1039/C6SC04145K](https://doi.org/10.1039/C6SC04145K)
Highlighted in Chemical & Engineering News.
- (243) Flexible reaction pocket on bulky diphosphine-Ir complex controls regioselectivity in *para*-selective C-H borylation of arenes
Brandon E. Haines, Yutaro Saito, Yasutomo Segawa, Kenichiro Itami, Djamaladdin G. Musaev
ACS Catal. 2016, 6, 7536-7546.
DOI: [10.1021/acscatal.6b02317](https://doi.org/10.1021/acscatal.6b02317)
- (242) (*R*)- and (*S*)-2,2'-bis(3,5-dimethylphenylphosphino)-6,6'-dimethoxy-1,1'-biphenyl
Yutaro Saito, Yasutomo Segawa, Kenichiro Itami
Electronic Encyclopedia of Reagents for Organic Synthesis, Wiley, online.
- (241) Structure-activity relation of AMOR sugar molecule that activates pollen-tubes for ovular guidance
Jiao Jiao, Akane G. Mizukami, Subramanian Sankaranarayanan, Junichiro Yamaguchi, Kenichiro Itami, Tetsuya Higashiyama
Plant Physiology 2017, 173, 354-363.
DOI: [10.1104/pp.16.01655](https://doi.org/10.1104/pp.16.01655)
- (240) Synthesis and properties of [8]-, [10]-, [12]-, and [16]cyclo-1,4-naphthylenes
Keishu Okada, Akiko Yagi, Yasutomo Segawa, Kenichiro Itami
Chem. Sci. 2017, 8, 661-667.
DOI: [10.1039/C6SC04048A](https://doi.org/10.1039/C6SC04048A)
- (239) Macrocyclization by Rh-catalyzed cross-cyclotrimerization of L-shaped diynes with di-*tert*-butyl acetylenedicarboxylate: Effect of bent linkers of diynes
Shuhei Nishigaki, Yuta Miyauchi, Keiichi Noguchi, Hideto Ito, Kenichiro Itami, Yu Shibata, Ken Tanaka
Eur. J. Org. Chem 2016, 4668-4673.
DOI: [10.1002/ejoc.201600909](https://doi.org/10.1002/ejoc.201600909)

- (238) Nickel-catalyzed aromatic C-H functionalization
Junichiro Yamaguchi, Kei Muto, Kenichiro Itami
Top. Curr. Chem. 2016, 374, 55.
DOI: [10.1007/s41061-016-0053-z](https://doi.org/10.1007/s41061-016-0053-z)
- (237) Construction of covalent organic nanotubes by light-induced cross-linking of diacetylene-based helical polymers
Kaho Maeda, Liu Hong, Taishi Nishihara, Yusuke Nakanishi, Yuhei Miyauchi, Ryo Kitaura, Naoki Ousaka, Eiji Yashima, Hideto Ito, Kenichiro Itami
J. Am. Chem. Soc. 2016, 138, 11001-11008.
DOI: [10.1021/jacs.6b05582](https://doi.org/10.1021/jacs.6b05582)
Selected as a cover picture of the journal. Most Read Articles. Highlighted in JACS spotlight, JST Press Release, Nikkei Sangyo Shimbun, Kagaku Shimbun, Chunichi Shimbun, Chem-Station, Nikkei Press Release, Mynavi News, Livedoor News, Biglobe News, Infoseek News, Mapion, NTT Docomo News, Excite News, Goo News, Niconico News, Jorudan News, Gunosy, J-New21, E-Start, Secerity Online News, Nikkei Technology, Fabcross for Enginner, EETimes Japan, Busicom Post, Alpja Galileo JP, EurekAlert! JP, ACS Spotlights, AlphaGalileo, EurekAlert!, ResearcherSEA, Science Daily, Phys.Org, Science Newsline, Nanowerk, RD Magazine, Science Codex, I Connect 007, Science Magazine, Health Medicine Network, Science & Technology Research News, Rambler News Service, Azo Nano, Technology Networks, ChemEurope, Scicasts. Selected in Synfacts.
- (236) Thiophene-fused π -systems from diarylacetylenes and elemental sulfur
Lingkui Meng, Takao Fujikawa, Motonobu Kuwayama, Yasutomo Segawa, Kenichiro Itami
J. Am. Chem. Soc. 2016, 138, 10351-10355.
DOI: [10.1021/jacs.6b06486](https://doi.org/10.1021/jacs.6b06486)
Highlighted in JST Press Release, EE Times Japan, Nikkei Technology, Security Online News, Synfacts.
- (235) C-H activation enables a rapid structure-activity relationship study of arylcyclopropyl amines for potent and selective LSD1 inhibitors
Shin Miyamura, Misaho Araki, Yosuke Ota, Yukihiro Itoh, Shusuke Yasuda, Mitsuharu Masuda, Tomoyuki Taniguchi, Yoshihiro Sowa, Toshiyuki Sakai, Takayoshi Suzuki, Kenichiro Itami, Junichiro Yamaguchi
Org. Biomol. Chem. 2016, 14, 8576-8585.
DOI: [10.1039/C6OB01483F](https://doi.org/10.1039/C6OB01483F)
- (234) Cyanation of phenol derivatives with aminoacetonitriles by nickel catalysis
Ryosuke Takise, Kenichiro Itami, Junichiro Yamaguchi
Org. Lett. 2016, 18, 4428-4431.
DOI: [10.1021/acs.orglett.6b02265](https://doi.org/10.1021/acs.orglett.6b02265)
- (233) Corannulene-helicene hybrids: Chiral π -systems comprising both bowl and helical motifs
Takao Fujikawa, Dorin V. Preda, Yasutomo Segawa, Kenichiro Itami, Lawrence T. Scott
Org. Lett. 2016, 18, 3992-3995.
DOI: [10.1021/acs.orglett.6b01801](https://doi.org/10.1021/acs.orglett.6b01801)

- (232) High-throughput assay for quantification of aminoglycoside-ribosome interaction
Shun Yamashita, Dominik Bergmann, Ayato Sato, Mika Nomoto, Yasuomi Tada, Hans-Ulrich Humpf, Kenichiro Itami, Shinya Hagihara
Chem. Lett. 2016, 45, 1048-1050.
DOI: [10.1246/cl.160508](https://doi.org/10.1246/cl.160508)
- (231) Regiodivergent cross-dehydrogenative coupling of pyridines and benzoxazoles: Discovery of organic halides as regio-switching oxidants
Shuya Yamada, Kei Murakami, Kenichiro Itami
Org. Lett. 2016, 18, 2415-2418.
DOI: [10.1021/acs.orglett.6b00932](https://doi.org/10.1021/acs.orglett.6b00932)
Most Read Articles.
- (230) Chemical synthesis of cycloparaphenylenes
Yasutomo Segawa, Akiko Yagi, Kenichiro Itami
Phys. Sci. Rev. 2017, 2, 137-226.
[*Chemistry of Carbon Nanostructures*, Eds. K. Müllen, X. Feng, Chapter 3, De Gruyter (2017)]
DOI: [10.1515/psr-2016-0102](https://doi.org/10.1515/psr-2016-0102)
- (229) Helically twisted tetracene: Synthesis, crystal structure, and photophysical properties of hexabenzof[a,c,fg,j,l,op]tetracene
Yuuta Yano, Hideto Ito, Yasutomo Segawa, Kenichiro Itami
Synlett 2016, 27, 2081-2084.
DOI: [10.1055/s-0035-1561455](https://doi.org/10.1055/s-0035-1561455)
- (228) Molecules that control witchweed *Striga* (account in Japanese)
Shinya Hagihara, Masahiko Yoshimura, Yuichiro Tsuchiya, Toshinori Kinoshita, Kenichiro Itami
Kagaku 2016, 71, 35-39.
<https://www.kagakudojin.co.jp/book/b223393.html>
- (227) Cycloparaphenylene as a molecular porous carbon solid with uniform pores exhibiting adsorption-induced softness
Hiroto Sakamoto, Toshihiko Fujimori, Xiaolin Li, Katsumi Kaneko, Kai Kan, Noriaki Ozaki, Yuh Hijikata, Stephan Irle, Kenichiro Itami
Chem. Sci. 2016, 7, 4204-4210.
DOI: [10.1039/C6SC00092D](https://doi.org/10.1039/C6SC00092D)
- (226) A theoretical study on the strain energy of carbon nanobelts
Yasutomo Segawa, Akiko Yagi, Hideto Ito, Kenichiro Itami
Org. Lett. 2016, 18, 1430-1433.
DOI: [10.1021/acs.orglett.6b00365](https://doi.org/10.1021/acs.orglett.6b00365)
- (225) Synthesis and structural features of quadruple helices: Highly distorted π systems enabled by accumulation of helical repulsions
Takao Fujikawa, Yasutomo Segawa, Kenichiro Itami
J. Am. Chem. Soc. 2016, 138, 3587-3595.
DOI: [10.1021/jacs.6b01303](https://doi.org/10.1021/jacs.6b01303)

- (224) The AMOR arabinogalactan sugar chain induces pollen-tube competency to respond to ovular guidance

Akane G. Mizukami, Rie Inatsugi, Jiao Jiao, Toshihisa Kotake, Keiko Kuwata, Kento Ootani, Satohiro Okuda, Subramanian Sankaranarayanan, Yoshikatsu Sato, Daisuke Maruyama, Hiroaki Iwai, Estelle Garenaux, Chihiro Sato, Ken Kitajima, Yoichi Tsumuraya, Hitoshi Mori, Junichiro Yamaguchi, Kenichiro Itami, Narie Sasaki, Tetsuya Higashiyama

Curr. Biol. 2016, 26, 1091-1097.

DOI: [10.1016/j.cub.2016.02.040](https://doi.org/10.1016/j.cub.2016.02.040)

Highlighted in Current Biology, Chunichi Shimbun, Asahi Shimbun, AlphaGalileo, EurekaAlert!, ResearchSEA, Science Daily, Phys.Org, Technology Org, My Informis, Science Codex, R&D Magazine, Science Magazine, Technobahn, RevoScience, Technology Networks, JPubb, Alpha Galileo JP, EurekaAlert! JP, Science Portal, Mynabi News, JST News, Saga Shimbun, Nikkei Shimbun.

The molecule (AMOR) became commercially available from TCI.

- (223) Palladium-catalyzed C-H arylation of pyridines with aryl triflates

Jiao Jiao, Kei Murakami, Kenichiro Itami

Chem. Lett. 2016, 45, 529-531.

DOI: [10.1246/cl.160133](https://doi.org/10.1246/cl.160133)

- (222) Synthesis of triarylpyridines in thiopeptide antibiotics by using a C-H arylation/ring-transformation strategy

Kazuma Amaike, Kenichiro Itami, Junichiro Yamaguchi

Chem. Eur. J. 2016, 22, 4384-4388.

DOI: [10.1002/chem.201600351](https://doi.org/10.1002/chem.201600351)

- (221) Structurally uniform and atomically precise carbon nanostructures

Yasutomo Segawa, Hideto Ito, Kenichiro Itami

Nature Rev. Mat. 2016, 1, 15002.

DOI: [10.1038/natrevmats.2015.2](https://doi.org/10.1038/natrevmats.2015.2)

Highlighted in Nature Japan.

- (220) Design and synthesis of carbon nanotube segments

Yasutomo Segawa, Akiko Yagi, Katsuma Matsui, Kenichiro Itami

Angew. Chem. Int. Ed. 2016, 55, 5136-5158.

DOI: [10.1002/anie.201508384](https://doi.org/10.1002/anie.201508384)

- (219) Microwave-assisted regioselective direct C-H arylation of thiazole derivatives leading to increased σ_1 receptor affinity

Artur Kokornaczyk, Dirk Schepmann, Junichiro Yamaguchi, Kenichiro Itami, Bernhard Wünsch

Med. Chem. Commun. 2016, 7, 327-331.

DOI: [10.1039/C5MD00526D](https://doi.org/10.1039/C5MD00526D)

- (218) Catalytic methods for aromatic C-H amination: An ideal strategy for nitrogen-based functional molecules

- (217) Development and mechanistic elucidation of the Ni-catalyzed direct coupling reactions
(account in Japanese)

Junichiro Yamaguchi, Kei Muto, Kenichiro Itami

The Chemical Times 2016, 2-7.

https://www.kanto.co.jp/dcms_media/other/backno8_pdf15.pdf

- (216) Pyridylidene ligand facilitates gold-catalyzed oxidative C-H arylation of heterocycles

Kazuhiro Hata, Hideto Ito, Yasutomo Segawa, Kenichiro Itami

Beilstein J. Org. Chem. 2015, 11, 2737-2746.

DOI: [10.3762/bjoc.11.295](https://doi.org/10.3762/bjoc.11.295)

- (215) Concise synthesis and facile nanotube assembly of a symmetrically multi-functionalized cycloparaphenylenes

Yuta Miyauchi, Kohei Johmoto, Nobuhiro Yasuda, Hidehiro Uekusa, Shintaro Fujii, Manabu

Kiguchi, Hideto Ito, Kenichiro Itami, Ken Tanaka

Chem. Eur. J. 2015, 21, 18900-18904.

DOI: [10.1002/chem.201504185](https://doi.org/10.1002/chem.201504185)

Selected as Inside Cover of the journal.

- (214) Synthesis of open-shell ladder π -systems by catalytic C-H annulation of diarylacetylenes

Takehisa Maekawa, Hiroshi Ueno, Yasutomo Segawa, Michael M. Haley, Kenichiro Itami

Chem. Sci. 2016, 7, 650-654.

DOI: [10.1039/C5SC03391H](https://doi.org/10.1039/C5SC03391H)

- (213) Synthesis of natural products and pharmaceuticals via catalytic C-H functionalization

Junichiro Yamaguchi, Kazuma Amaike, Kenichiro Itami

Transition Metal-Catalyzed Heterocycle Synthesis via C-H Activation,

Ed. X.-F. Wu, Chapter 16, Wiley-VCH (2016).

- (212) Making dimethylamino a transformable directing group by nickel-catalyzed C-N borylation

Hua Zhang, Shinya Hagihara, Kenichiro Itami

Chem. Eur. J. 2015, 21, 16796-16800.

DOI: [10.1002/chem.201503596](https://doi.org/10.1002/chem.201503596)

- (211) C-H arylation and alkenylation of imidazoles by nickel catalysis: Solvent-accelerated imidazole C-H activation

Kei Muto, Taito Hatakeyama, Junichiro Yamaguchi, Kenichiro Itami

Chem. Sci. 2015, 6, 6792-6798.

DOI: [10.1039/C5SC02942B](https://doi.org/10.1039/C5SC02942B)

- (210) Changing biological clock rhythm by catalysts: Discovery of new molecules by interdisciplinary research (account in Japanese)

Kenichiro Itami, Takashi Yoshimura

- (209) Probing strigolactone receptors in *Striga hermonthica* with fluorescence
Yuichiro Tsuchiya, Masahiko Yoshimura, Yoshikatsu Sato, Keiko Kuwata, Shigeo Toh, Duncan Hollbrock-Smith, Hua Zhang, Peter McCourt, Kenichiro Itami, Toshinori Kinoshita, Shinya Hagihara
Science 2015, 349, 864-868.
DOI: [10.1126/science.aab3831](https://doi.org/10.1126/science.aab3831)
Highlighted in This Week in Science, Nature Chemical Biology, Science News, Chunichi Shimbun, Yahoo! News, Yomiuri Shimbun, Alpha Gelileo JP, EurekAlert!, JP, Alpha Gelileo, EurekAlert!, ResearchSEA, Science Daily, Science Newslane, Phys.Org, Technobahn, RevoScience, Laser Focus World, Asian Scientist, Mocosuku, Kagaku Shimbun, Saharabia, Global Plant Council, ASPB Plant Science Today, Seed Daily, Science Magazine. Selected as "Signaling Breakthroughs of the Year 2015" in Science Magazine. Highlighted in Nature Plants. The molecule (Yoshimulactone Green) became commercially available from TCI.
- (208) Synthesis, properties, and packing structures of corannulene-based π -systems containing heptagons
Kenta Kato, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami
Chem. Asian J. 2015, 10, 1635-1639.
DOI: [10.1002/asia.201500560](https://doi.org/10.1002/asia.201500560)
- (207) Curved oligophenylenes as donors in shape-persistent donor-acceptor macrocycles with solvatofluorochromic properties
Takuya Kuwabara, Jun Orie, Yasutomo Segawa, Kenichiro Itami
Angew. Chem. Int. Ed. 2015, 54, 9646-9649.
DOI: [10.1002/anie.201503397](https://doi.org/10.1002/anie.201503397)
Highlighted in ACS Central Science.
- (206) Porous frameworks constructed by non-covalent linking of substitution-inert metal complexes
Takahiro Itoh, Mio Kondo, Hirotoishi Sakamoto, Kaori Wakabayashi, Mari Kanaike, Kenichiro Itami, Shigeyuki Masaoka
Dalton Trans 2015, 44, 15334-15342.
DOI: [10.1039/C5DT01620G](https://doi.org/10.1039/C5DT01620G)
- (205) Decarbonylative organoboron cross-coupling of esters by nickel catalysis
Kei Muto, Junichiro Yamaguchi, Djamaladdin G. Musaev, Kenichiro Itami
Nature Commun. 2015, 6, 7508.
DOI: [10.1038/ncomms8508](https://doi.org/10.1038/ncomms8508)
Highlighted in Alpha Gelileo, EurekAlert!, ResearchSEA, Phys.Org, Science Daily, Science Newslane, Bioquick News, Innovation Report, News Medical, Chemicals Technology, Chem Europe, Alpha Gelileo JP, EurekAlert! JP, Nature Asia.
- (204) Synthesis, structures, and properties of π -extended double helicene: A combination of planar and nonplanar π -systems
Takao Fujikawa, Yasutomo Segawa, Kenichiro Itami
J. Am. Chem. Soc. 2015, 137, 7763-7768.

- (203) C-H activation generates period-shortening molecules that target cryptochrome in the mammalian circadian clock

Tsuyoshi Oshima, Iori Yamanaka, Anupriya Kumar, Junichiro Yamaguchi, Taeko Nishiwaki-Ohkawa, Kei Muto, Rika Kawamura, Tsuyoshi Hirota, Kazuhiro Yagita, Stephan Irle, Steve A. Kay, Takashi Yoshimura, Kenichiro Itami

Angew. Chem. Int. Ed. 2015, 54, 7193-7197.

DOI: [10.1002/anie.201502942](https://doi.org/10.1002/anie.201502942)

Highlighted in Chunichi Shimbun, Yahoo! News, Zaikei Shimbun, Monolist, Alpha Galileo JP, EurekAlert! JP, Kagaku, ResearchSEA, Alpha Galileo, EurekAlert!, Biology News Net, Science Newslane, Science Daily, Medical News Today, Press News Org, Deep Stuff, News Medical, Health Medicine Net, Bio Spectrum, Chemisch2Weekblad, Lab Roots, EN-CPhI.CN, Terra Daily, Open Science World, Sleep Review, Asian Scientist, NU Research, Asia Research News, Kagaku. Selected as a cover of the journal.

- (202) *para*-C-H borylation of benzene derivatives by a bulky iridium catalyst

Yuichiro Saito, Yasutomo Segawa, Kenichiro Itami

J. Am. Chem. Soc. 2015, 137, 5193-5198.

DOI: [10.1021/jacs.5b02052](https://doi.org/10.1021/jacs.5b02052)

Highlighted in Alpha Galileo, ResearchSEA, EurekAlert!, Nanowerk, Science Daily, Phys.Org., Nanotechnology World, Science Newslane, ECN Magazine, Chemistry News, The News on Time, Scicasts, Chemisch2week, Beta Banen, Chem Europe, RevoScience, Innovations Report, Nikkei Press Release, Kagaku Shimbun, The Chemical Daily.

- (201) Aromatic C-H borylation by nickel catalysis

Hua Zhang, Shinya Hagihara, Kenichiro Itami

Chem. Lett. 2015, 44, 779-781.

DOI: [10.1246/cl.150154](https://doi.org/10.1246/cl.150154)

- (200) Palladium-free synthesis of [10]cycloparaphenylene

Yasutomo Segawa, Takuya Kuwabara, Katsuma Matsui, Satoru Kawai, Kenichiro Itami

Tetrahedron 2015, 71, 4500-4503.

DOI: [10.1016/j.tet.2015.02.066](https://doi.org/10.1016/j.tet.2015.02.066)

A special issue in honor of Prof. Yoshiaki Nakao

- (199) Catalytic C-H imidation of aromatic cores of functional molecules: Ligand-accelerated Cu catalysis and application to materials- and biology-oriented aromatics

Takahiro Kawakami, Kei Murakami, Kenichiro Itami

J. Am. Chem. Soc. 2015, 137, 2460-2463.

DOI: [10.1021/ja5130012](https://doi.org/10.1021/ja5130012)

Most read articles (February & March 2015).

- (198) Cycloparaphenylene-based ionic donor-acceptor supramolecule: Isolation and characterization of Li⁺@C₆₀[10]CPP

Hiroshi Ueno, Taishi Nishihara, Yasutomo Segawa, Kenichiro Itami

Angew. Chem. Int. Ed. 2015, 54, 3707-3711.

DOI: [10.1002/anie.201500544](https://doi.org/10.1002/anie.201500544)

Selected as a cover of the journal.

- (197) One-shot K-region-selective annulative π -extension for nanographene synthesis and functionalization

Kyohei Ozaki, Katsuaki Kawasumi, Mari Shibata, Hideto Ito, Kenichiro Itami

Nature Commun. 2015, 6, 6251.

DOI: [10.1038/ncomms7251](https://doi.org/10.1038/ncomms7251)

Highlighted in Chunichi Shimbun, Science Portal, Nikkan Kogyo Shimbun, The Chemical Daily, Mynavi News, ResearchSEA, Science Daily, e! Science News, Zaikei Shimbun, Livedoor News, Biglobe News, EurekAlert!, Phys.Org., Nanowerk, Scicasts, Nanotechnology Now, Innovations Report, TG Techno, Nano Daily, Nikkei Shimbun, Livedoor News, Nifty News, Bio-impact, Alpha Galileo, Chem Europe, Azo Nano, Kagaku Shimbun, Nature Asia, JST News, Synfacts. Most-accessed articles.

- (196) Synthesis and characterization of hexaarylbenzenes with five or six different substituents enabled by programmed synthesis

Shin Suzuki, Yasutomo Segawa, Kenichiro Itami, Junichiro Yamaguchi

Nature Chem. 2015, 7, 227-233.

DOI: [10.1038/nchem.2174](https://doi.org/10.1038/nchem.2174)

Highlighted in Toyo Keizai, Yahoo! Japan News, Chunichi Shimbun, Asahi Shimbun, Nikkei Shimbun, Nifty News, Nokoniko News, Infoseek News, Nikkei Press News, Science Portal, Japanese Research, JPubb, Mynabi News, Zaikei Shimbun, The Huffington Post, Livedoor News, Bioimpact, Nikkei Biotech, Biglobe News, Ascii, EurekAlert!, ResearchSEA, Science Newslane, Phys.Org, Chemicals Technology, Chemistry News, Health Medicine Network, Science Daily, Technobahn, Innovation Reports, Chemistry 2011, RevoScience, Asian Scientist, Kagaku Shimbun, Alpha Galileo, Chemical & Engineering News, Synfacts, NU Research.

- (195) η^6 -Cycloparaphenylene transition metal complexes: Synthesis, structure, photophysical properties, and application to the selective monofunctionalization of cycloparaphenylenes

Natsumi Kubota, Yasutomo Segawa, Kenichiro Itami

J. Am. Chem. Soc. 2015, 137, 1356-1361.

DOI: [10.1021/ja512271p](https://doi.org/10.1021/ja512271p)

Highlighted in Japanese Research, Zaikei Shimbun, Livedoor News, Nifty News, Biglobe News, Rikaken News, EurekAlert!, ResearchSEA, Phys.Org., Science Newslane, Nanowerk, Nanotechnology Now, Bright Surf, New Materials Report, Chemistry News, Innovations Report, Nanotechnology Zone, Nanotech Magazine, Health Medicine Network, Nanodaily, Science Daily, Technobahn, Azo Nano, Space Daily, Chemistry 2011, RevoScience, Spectroscopy Now, Nanotech Japan, Alpha Galileo, NU Research.

- (194) Concise syntheses of dictyodendrins A and F by a sequential C-H functionalization strategy

Atsushi D. Yamaguchi, Kathryn M. Chepiga, Junichiro Yamaguchi, Kenichiro Itami, Huw M. L. Davies

J. Am. Chem. Soc. 2015, 137, 644-647.

DOI: [10.1021/ja512059d](https://doi.org/10.1021/ja512059d)

Highlighted in EurekaAlerts!, Phys.Org., ResearchSEA, Science Newsline, Science Daily, Breaking New, Health Medicine Network, Bright Surf, Sci Casts, Medical News Today, Emory News Center, Society for Neuroscience.

- (193) Synthesis, binding affinity and structure-activity relationships of novel, selective and dual targeting CCR2 and CCR5 receptor antagonists
Anna Junker, Artur K. Kokornaczyk, Annelien J. M. Zweemer, Bastian Frehland, Dirk Schepmann, Junichiro Yamaguchi, Kenichiro Itami, Andreas Faust, Sven Hermann, Stefan Wagner, Michael Schäfers, Michael Koch, Christina Weiss, Laura H. Heitman, Klaus Kopka, Bernhard Wünsch
Org. Biomol. Chem. 2015, 13, 2407-2422.
DOI: [10.1039/C4OB02397H](https://doi.org/10.1039/C4OB02397H)
- (192) Stereodivergent synthesis of arylcyclopropylamines by sequential C-H borylation and Suzuki-Miyaura coupling
Shin Miyamura, Misaho Araki, Takayoshi Suzuki, Junichiro Yamaguchi, Kenichiro Itami
Angew. Chem. Int. Ed. 2015, 54, 846-851.
DOI: [10.1002/anie.201409186](https://doi.org/10.1002/anie.201409186)
- (191) Ni-catalyzed α -arylation of esters and amides with phenol derivatives
Eva Koch, Ryosuke Takise, Armido Studer, Junichiro Yamaguchi, Kenichiro Itami
Chem. Commun. 2015, 51, 855-857.
DOI: [10.1039/C4CC08426H](https://doi.org/10.1039/C4CC08426H)
Top 25 most downloaded articles (Oct-Dec 2014).
- (190) Thiophene-based, radial π -conjugation: Synthesis, structure, and photophysical properties of cyclo-1,4-phenylene-2',5'-thienylenes
Hideto Ito, Yukari Mitamura, Yasutomo Segawa, Kenichiro Itami
Angew. Chem. Int. Ed. 2015, 54, 159-163.
DOI: [10.1002/anie.201409389](https://doi.org/10.1002/anie.201409389)
Selected as a cover of the journal. Highlighted in Kagaku.
- (189) Synthesis of extended π -systems through C-H activation
Yasutomo Segawa, Takehisa Maekawa, Kenichiro Itami
Angew. Chem. Int. Ed. 2015, 54, 66-81.
DOI: [10.1002/anie.201403729](https://doi.org/10.1002/anie.201403729)
Most accessed paper (September 2014).
- (188) All-benzene carbon nanocages: Size-selective synthesis, photophysical properties, and crystal structure
Katsuma Matsui, Yasutomo Segawa, Kenichiro Itami
J. Am. Chem. Soc. 2014, 136, 16452-16458.
DOI: [10.1021/ja509880v](https://doi.org/10.1021/ja509880v)
Most read articles (December 2014).
- (187) Key mechanistic features of Ni-catalyzed C-H/C-O biaryl coupling of azoles and naphthalen-2-yl pivalates

Huiying Xu, Kei Muto, Junichiro Yamaguchi, Cunyuan Zhao, Kenichiro Itami, Djamaladdin G. Musaev

J. Am. Chem. Soc. 2014, 136, 14834-14844.

DOI: [10.1021/ja5071174](https://doi.org/10.1021/ja5071174)

Highlighted in EurekAlerts!, Phys.Org., Science Codex, Science Newslines, Science Daily, Emory University eScience Commons, Bright Surf, Laboratory Equipment, Web Newswire, Medical News Today, Emory News Center, Jersey Tribune, Science Seeker, News Locker, USA News, News Nom, Bio Portfolio, Toronto Telegraph, Technobahn, The Daily Purrs, Chemistry2011.

- (186) β -Selective C-H arylation of pyrroles leading to concise syntheses of lamellarins C and I

Kirika Ueda, Kazuma Amaike, Richard M. Maceiczky, Kenichiro Itami, Junichiro Yamaguchi

J. Am. Chem. Soc. 2014, 136, 13226-13232.

DOI: [10.1021/ja508449y](https://doi.org/10.1021/ja508449y)

Most read articles (October 2014).

- (185) Branch-selective allylic C-H carboxylation of terminal alkenes by Pd/sox catalyst

Hiroki Kondo, Feng Yu, Junichiro Yamaguchi, Guosheng Liu, Kenichiro Itami

Org. Lett. 2014, 16, 4212-4215.

DOI: [10.1021/ol5019135](https://doi.org/10.1021/ol5019135)

- (184) Nickel-catalyzed α -arylation of ketones with phenol derivatives

Ryosuke Takise, Kei Muto, Junichiro Yamaguchi, Kenichiro Itami

Angew. Chem. Int. Ed. 2014, 53, 6791-6794.

DOI: [10.1002/anie.201403823](https://doi.org/10.1002/anie.201403823)

Highlighted in BBC News, Chemistry Views, Phys.Org., Science Daily, Science Newslines, R&D Magazine, The Chemical Daily, Kagaku Shimbun, Gendai Kagaku, Chemical Processing, Optronics Online, Wiley Science Café, EurekAlert!, Science Codex, Breaking News, Medindia, ResearchSEA, Innovations Report, Crazy Chucks, News nom, News Locker, USA News, Bio-Medicine, e! Science News, Technobahn, Brunch News, Interesting Tech, Press News, Chemistry 2011.org, Health Medicine Network, BioPortfolio, News Dump, Regator, Coyne Chemical, topix, Business News, Interceder, Nets247, I4U News, Jersey Tribune, Health News, Red Orbit, Medicininfos, Medic finder, Locker Dome, Chemistry Times.
The ligand (dcypt) became commercially available from Kanto Chemical.

- (183) Synthesis and dimerization of chloro[10]cycloparaphenylene: A directly-connected cycloparaphenylene dimer

Yuuki Ishii, Sanae Matsuura, Yasutomo Segawa, Kenichiro Itami

Org. Lett. 2014, 16, 2174-2176.

DOI: [10.1021/ol500643c](https://doi.org/10.1021/ol500643c)

- (182) Exciton recombination dynamics in nanoring cycloparaphenylenes

Taishi Nishihara, Yasutomo Segawa, Kenichiro Itami, Yoshihiko Kanemitsu

Chem. Sci. 2014, 5, 2293-2296.

DOI: [10.1039/C3SC53462F](https://doi.org/10.1039/C3SC53462F)

- (181) 2,4- and 2,5-disubstituted arylthiazoles: Rapid synthesis by C-H coupling and biological evaluation

Lilia Lohrey, Takahiro N. Uehara, Satoshi Tani, Junichiro Yamaguchi, Hans-Ulrich Humpf, Kenichiro Itami

Eur. J. Org. Chem. 2014, 3387-3394.

DOI: [10.1002/ejoc.201402129](https://doi.org/10.1002/ejoc.201402129)

- (180) Manganese-catalyzed intermolecular C-H/C-H coupling of carbonyls and heteroarenes

Keika Hattori, Asraa Ziadi, Kenichiro Itami, Junichiro Yamaguchi

Chem. Commun. 2014, 50, 4105-4107.

DOI: [10.1039/C4CC01376J](https://doi.org/10.1039/C4CC01376J)

Most Read Articles (March 2014).

- (179) Late-stage C-H coupling enables rapid identification of HDAC inhibitors: Synthesis and evaluation of NCH-31 analogues

Hiromi Sekizawa, Kazuma Amaike, Yukihiro Itoh, Takayoshi Suzuki, Kenichiro Itami, Junichiro Yamaguchi

ACS Med. Chem. Lett. 2014, 5, 582-586.

DOI: [10.1021/ml500024s](https://doi.org/10.1021/ml500024s)

Most Read Articles (March 2014).

- (178) Size-selective complexation and extraction of endohedral metallofullerenes with cycloparaphenylene

Yusuke Nakanishi, Haruka Omachi, Sanae Matsuura, Yasumitsu Miyata, Ryo Kitaura, Yasutomo Segawa, Kenichiro Itami, Hisanori Shinohara

Angew. Chem. Int. Ed. 2014, 53, 3102-3106.

DOI: [10.1002/anie.201311268](https://doi.org/10.1002/anie.201311268)

Selected as Inside Back Cover.

- (177) Synthesis and properties of cycloparaphenylene-2,7-pyrenylene: A pyrene-containing carbon nanoring

Akiko Yagi, Gandikota Venkataramana, Yasutomo Segawa, Kenichiro Itami

Chem. Commun. 2014, 50, 957-959.

DOI: [10.1039/C3CC48198K](https://doi.org/10.1039/C3CC48198K)

Most Read Articles (November 2013).

- (176) Selective synthesis of [7]- and [8]cycloparaphenylenes

Friederike Sibbel, Katsuma Matsui, Yasutomo Segawa, Armido Studer, Kenichiro Itami

Chem. Commun. 2014, 50, 954-956.

DOI: [10.1039/C3CC48683D](https://doi.org/10.1039/C3CC48683D)

Most Read Articles (November 2013).

The molecules [7]CPP and [8]CPP became commercially available from TCI.

- (175) CDC reactions without metal

Hideto Ito, Kirika Ueda, Kenichiro Itami

Carbon-Carbon Bond Formations via Cross Dehydrogenative Coupling of C-H Bonds,

Chapter 8, The Royal Society of Chemistry, 2015.

- (174) Tris(1,1,1,3,3,3-hexafluoro-2-propyl)phosphite

- (173) Synthesis of dihydrobenzo[*b*]furans by diastereoselective acyloxyarylation
Kazuhiro Hata, Zhiheng He, Constantin Gabriel Daniliuc, Kenichiro Itami, Armido Studer
Chem. Commun. 2014, 50, 463-465.
DOI: [10.1039/C3CC47350C](https://doi.org/10.1039/C3CC47350C)
Most Read Articles (November 2013).
- (172) Isolation, structure, and reactivity of an arylnickel(II) pivalate complex in catalytic C-H/C-O biaryl coupling
Kei Muto, Junichiro Yamaguchi, Aiwen Lei, Kenichiro Itami
J. Am. Chem. Soc. 2013, 135, 16384-16387.
DOI: [10.1021/ja409803x](https://doi.org/10.1021/ja409803x)
- (171) Diverse modification of the 4-methylphenyl moiety of TAK-779 by late-stage Suzuki-Miyaura cross-coupling
Anna Junker, Dirk Schepmann, Junichiro Yamaguchi, Kenichiro Itami, Andreas Faust, Klaus Kopka, Stefan Wagner, Bernhard Wunsch
Org. Biomol. Chem. 2014, 12, 177-186.
DOI: [10.1039/C3OB41873A](https://doi.org/10.1039/C3OB41873A)
- (170) Palladium-catalyzed C-H and C-N arylation of aminothiazoles with arylboronic acids
Takahiro N. Uehara, Junichiro Yamaguchi, Kenichiro Itami
Asian J. Org. Chem. 2013, 2, 938-942.
DOI: [10.1002/ajoc.201300172](https://doi.org/10.1002/ajoc.201300172)
*Mukaiyama Aldol Issue. Highlighted in Chemistry Views.
Most Accessed Paper (No.1 in November 2013).*
- (169) Programmed synthesis of arylthiazoles through sequential C-H couplings
Satoshi Tani, Takahiro N. Uehara, Junichiro Yamaguchi, Kenichiro Itami
Chem. Sci. 2014, 5, 123-135.
DOI: [10.1039/C3SC52199K](https://doi.org/10.1039/C3SC52199K)
Most Read Article (No. 1 in October 2013). Highlighted in Synfacts.
- (168) C-H alkenylation of azoles with enols and esters by nickel catalysis
Lingkui Meng, Yuko Kamada, Kei Muto, Junichiro Yamaguchi, Kenichiro Itami
Angew. Chem. Int. Ed. 2013, 52, 10048-10051.
DOI: [10.1002/anie.201304492](https://doi.org/10.1002/anie.201304492)
Highlighted in The Chemical Daily.
- (167) A grossly warped nanographene and the consequences of multiple odd-membered-ring defects
Katsuaki Kawasumi, Qianyan Zhang, Yasutomo Segawa, Lawrence T. Scott, Kenichiro Itami
Nature Chem. 2013, 5, 739-744.
DOI: [10.1038/nchem.1704](https://doi.org/10.1038/nchem.1704)
Ranked as the 4th high-scored paper among all Nature Chemistry papers ever published. Selected as the cover image of Nature Chemistry. Featured in "New and Views" of Nature Chemistry.

Highlighted in Chemistry World (RSC), C&E News (ACS), Computational Chemistry Highlights, Phys. Org., IEEE Spectrum, MaterialsViews, Science Daily, Yomiuri Shimbun, Chunichi Shimbun, Nikkan Kogyo Shimbun, Tokyo Shimbun, The Chemical Daily, Kyodo-Tsushin, Kagaku Shimbun, Asahi Shimbun, Sankei Shimbun, Ceramics Japan, Synfacts, Sentaku Magazine, Economist Magazine, Science Agora. Featured in Newton Magazine.
Selected as "Cutting edge chemistry in 2013" by Chemistry World (RSC).
The molecule (warped nanographene) became commercially available from Kanto Chemical.

- (166) One-shot indole-to-carbazole π -extension by Pd-Cu-Ag trimetallic system
 Kyohei Ozaki, Hua Zhang, Hideto Ito, Aiwen Lei, Kenichiro Itami
Chem. Sci. 2013, 4, 3416-3420.
 DOI: [10.1039/C3SC51447A](https://doi.org/10.1039/C3SC51447A)
Most Read Articles (June and July 2013). Selected as "Hot Articles". Selected as Back Cover.
Highlighted in Synfacts. Top 25 most-read Chemical Science articles in 2013.
- (165) Aromatic C-H coupling with hindered arylboronic acids by Pd/Fe dual catalysts
 Kazuya Yamaguchi, Hiroki Kondo, Junichiro Yamaguchi, Kenichiro Itami
Chem. Sci. 2013, 4, 3753-3757.
 DOI: [10.1039/C3SC51206A](https://doi.org/10.1039/C3SC51206A)
Most Read Articles (June 2013).
- (164) Initiation of carbon nanotube growth by well-defined carbon nanorings
 Haruka Omachi, Takuya Nakayama, Eri Takahashi, Yasutomo Segawa, Kenichiro Itami
Nature Chem. 2013, 5, 572-576.
 DOI: [10.1038/nchem.1655](https://doi.org/10.1038/nchem.1655)
Highlighted in Nature Nanotech., Chemistry World (RSC), Yomiuri Shimbun, Chunichi Shimbun, Nikkan Kogyo Shimbun, Tokyo Shimbun, The Chemical Daily, NanotechJapan, Sentaku Magazine.
Featured in Newton Magazine.
Selected as "Cutting edge chemistry in 2013" by Chemistry World (RSC).
- (163) Nickel-catalyzed direct coupling of heteroarenes (account in Japanese)
 Junichiro Yamaguchi, Kei Muto, Kazuma Amaike, Takuya Yamamoto, Kenichiro Itami
J. Synth. Org. Chem. Jpn. 2013, 71, 576-587.
 DOI: [10.5059/yukigoseikyokaishi.71.576](https://doi.org/10.5059/yukigoseikyokaishi.71.576)
- (162) Synthesis of thiophene-based TAK-779 analogues by C-H arylation
 Anna Junker, Junichiro Yamaguchi, Kenichiro Itami, Bernhard Wünsch
J. Org. Chem. 2013, 78, 5579-5586.
 DOI: [10.1021/jo400692p](https://doi.org/10.1021/jo400692p)
- (161) New cross-coupling reactions through nickel catalysis (account in Japanese)
 Junichiro Yamaguchi, Kazuma Amaike, Kei Muto, Kenichiro Itami
Catalyst Design and Reaction Control 2013, 624-645.
- (160) Pyridine-based dicarbene ligand: Synthesis and structure of bis-2-pyridylidene palladium complex
 Tetsushi Yoshidomi, Yasutomo Segawa, Kenichiro Itami
Chem. Commun. 2013, 49, 5648-5650.

- (159) Decarbonylative C-H biaryl coupling (account in Japanese)
Junichiro Yamaguchi, Kenichiro Itami

Kagaku 2013, 35-39.
<https://www.kagakudojin.co.jp/book/b109538.html>

- (158) C-H activation route to dibenzo[a,e]pentalenes: Annulation of arylacetylenes promoted by PdCl₂-AgOTf-*o*-chloranil
Takehisa Maekawa, Yasutomo Segawa, Kenichiro Itami

Chem. Sci. 2013, 4, 2369-2373.
DOI: [10.1039/C3SC50585E](https://doi.org/10.1039/C3SC50585E)
Highlighted in Synfacts.

- (157) Improvement of σ_1 receptor affinity by late-stage C-H bond arylation of spirocyclic lactones
Christina Meyer, Benedikt Neue, Dirk Schepmann, Shuichi Yanagisawa, Junichiro Yamaguchi, Ernst-Ulrich Würthwein, Kenichiro Itami, Bernhard Wünsch

Bioorg. Med. Chem. 2013, 21, 1844-1856.
DOI: [10.1016/j.bmc.2013.01.038](https://doi.org/10.1016/j.bmc.2013.01.038)

- (156) Palladium-catalyzed direct phenylation of perylene: Structural and optical properties of 3,4,9-triphenylperylene and 3,4,9,10-tetraphenylperylene
Katsuaki Kawasumi, Kenji Mochida, Yasutomo Segawa, Kenichiro Itami

Tetrahedron 2013, 69, 4371-4374.
DOI: [10.1016/j.tet.2013.01.037](https://doi.org/10.1016/j.tet.2013.01.037)
A special issue on metal-catalyzed C-H bond functionalization

- (155) Origin of the size-dependent fluorescence blueshift in [n]cycloparaphenylenes
Cristopher Camacho, Thomas A. Niehaus, Kenichiro Itami, Stephan Irle

Chem. Sci. 2013, 4, 187-195.
DOI: [10.1039/C2SC20878D](https://doi.org/10.1039/C2SC20878D)

- (154) Excited states in cycloparaphenylenes: Dependence of optical properties on ring length
Taishi Nishihara, Yasutomo Segawa, Kenichiro Itami, Yoshihiko Kanemitsu

J. Phys. Chem. Lett. 2012, 3, 3125-3128.
DOI: [10.1021/jz3014826](https://doi.org/10.1021/jz3014826)

- (153) Palladium-catalyzed C-H activation taken to the limit. Flattening an aromatic bowl by total arylation
Qianyan Zhang, Katsuaki Kawasumi, Yasutomo Segawa, Kenichiro Itami, Lawrence T. Scott

J. Am. Chem. Soc. 2012, 134, 15664-15667.
DOI: [10.1021/ja306992k](https://doi.org/10.1021/ja306992k)
Most Read Articles (October 2012).
Highlighted in Nature Chemistry, Computational Chemistry Highlights.

- (152) Palladium-catalyzed tetraallylation of C₆₀ with allyl chloride and allylstannane: Mechanism, regioselectivity, and enantioselectivity

Chem. Sci. 2012, 3, 3474-3481.

DOI: [10.1039/C2SC21126B](https://doi.org/10.1039/C2SC21126B)

- (151) Synthesis and properties of all-benzene carbon nanocages: A junction unit of branched carbon nanotubes

Katsuma Matsui, Yasutomo Segawa, Tomotaka Namikawa, Kenji Kamada, Kenichiro Itami

Chem. Sci. 2013, 4, 84-88.

DOI: [10.1039/C2SC21322B](https://doi.org/10.1039/C2SC21322B)

Featured in J-Wave Radio. Highlighted in Yomiuri Shimbun, Chunichi Shimbun, The Chemical Daily, Tokyo Shimbun, Nikkan Kogyo Shimbun, Nikkei Sangyo Shimbun, JIJI Press, Yahoo! News, C&E News, Kagaku Shimbun, Newton, Synfacts. Most Read Articles (August/September 2012). Selected as Inside Back Cover.

- (150) Pd-catalyzed direct C-H bond functionalization of spirocyclic σ_1 ligands: Generation of a pharmacophore model and analysis of reverse binding mode by docking into a 3D homology model of the σ_1 receptor

Christina Meyer, Dirk Schepmann, Shuichi Yanagisawa, Junichiro Yamaguchi, Valentina Dal Col, Erik Laurini, Kenichiro Itami, Sabrina Pricl, Bernhard Wünsch

J. Med. Chem. 2012, 55, 8047-8065.

DOI: [10.1021/jm300894h](https://doi.org/10.1021/jm300894h)

Highlighted in Nature Chemistry.

- (149) Late-stage C-H bond arylation of spirocyclic σ_1 ligands for analysis of complementary σ_1 receptor surface

Christina Meyer, Dirk Schepmann, Shuichi Yanagisawa, Junichiro Yamaguchi, Bernhard Wünsch, Kenichiro Itami

Eur. J. Org. Chem. 2012, 5972-5979.

DOI: [10.1002/ejoc.201200837](https://doi.org/10.1002/ejoc.201200837)

- (148) Recent progress in nickel-catalyzed biaryl coupling

Junichiro Yamaguchi, Kei Muto, Kenichiro Itami

Eur. J. Org. Chem. 2013, 19-30.

DOI: [10.1002/ejoc.201200914](https://doi.org/10.1002/ejoc.201200914)

Most Accessed Articles (No. 3 in 2013).

- (147) Synthesis of bioactive compounds through C-H bond functionalization (account in Japanese)

Junichiro Yamaguchi, Kenichiro Itami

Fine Chemicals 2012, 41, 38.

<https://www.fujisan.co.jp/product/1281680660/b/842205/>

- (146) Chemical synthesis of nanographenes (account in Japanese)

Katsuaki Kawasumi, Kenichiro Itami

Function and Applications of Graphenes 2 2012, 102-110.

https://www.cmcbooks.co.jp/products/detail.php?product_id=5679

- (145) Direct C-H arylation of polycyclic aromatic hydrocarbons toward bottom-up synthesis of nanographenes (account in Japanese)
Yasutomo Segawa, Kenichiro Itami
Catalysts and Catalysis 2012, 54, 409-413.
- (144) Biaryl synthesis through metal-catalyzed C-H arylation
Junichiro Yamaguchi, Kenichiro Itami
Metal Catalyzed Cross-Coupling Reactions and More; Wiley-VCH, 2014.
- (143) C-H bond functionalization: Emerging synthetic tools for natural products and pharmaceuticals
Junichiro Yamaguchi, Atsushi D. Yamaguchi, Kenichiro Itami
Angew. Chem. Int. Ed. 2012, 51, 8960-9009.
DOI: [10.1002/anie.201201666](https://doi.org/10.1002/anie.201201666)
*Selected as a cover of the Issue. Highlighted in Chemistry Views.
Most Accessed Articles #1 (August 2012). Most Accessed Articles (2012).*
- (142) Decarbonylative C-H coupling of azoles and aryl esters: Unprecedented nickel catalysis and application to the synthesis of muscoride A
Kazuma Amaike, Kei Muto, Junichiro Yamaguchi, Kenichiro Itami
J. Am. Chem. Soc. 2012, 134, 13573-13576.
DOI: [10.1021/ja306062c](https://doi.org/10.1021/ja306062c)
*Highlighted in Asahi Shimbun, Chunichi Shimbun, Kagaku Shimbun, Nikkan Kogyo Shimbun, The Chemical Daily, Yahoo! News, Kagaku, Angew. Chem.
Most Read Articles (August 2012).
The catalyst (Ni(dcppe)(CO)₂) became commercially available from Kanto Chemical.*
- (141) Pd- and Cu-catalyzed C-H arylation of indazoles
Keika Hattori, Kazuya Yamaguchi, Junichiro Yamaguchi, Kenichiro Itami
Tetrahedron 2012, 68, 7605-7612.
DOI: [10.1016/j.tet.2012.05.091](https://doi.org/10.1016/j.tet.2012.05.091)
A special issue in honor of Prof. Manfred Reetz
- (140) 1,3,5-Triaryl 2-pyridylidene: Base-promoted generation and complexation
Kazuhiro Hata, Yasutomo Segawa, Kenichiro Itami
Chem. Commun. 2012, 48, 6642-6644.
DOI: [10.1039/C2CC33184E](https://doi.org/10.1039/C2CC33184E)
- (139) Carbon nanoring: A shortest carbon nanotube (account in Japanese)
Yasutomo Segawa, Kenichiro Itami
Expected Materials for the Future 2012, 12, 10-15.
<http://www.nts-book.co.jp/mirai/bn2012.html>
- (138) Size-selective synthesis of [9]-[11] and [13]cycloparaphenylenes
Yuuki Ishii, Yusuke Nakanishi, Haruka Omachi, Sanae Matsuura, Katsuma Matsui, Hisanori Shinohara, Yasutomo Segawa, Kenichiro Itami
Chem. Sci. 2012, 3, 2340-2345.
DOI: [10.1039/C2SC20343J](https://doi.org/10.1039/C2SC20343J)

*Most Read Articles (May 2012). Highlighted in RSC Chemical Science Blog.
The molecules ([9]-[11]CPP) became commercially available from TCI and Kanto Chemical.*

- (137) Synthesis of cycloparaphenylenes and related carbon nanorings: A step toward the controlled synthesis of carbon nanotubes
Haruka Omachi, Yasutomo Segawa, Kenichiro Itami

Acc. Chem. Res. 2012, 45, 1378-1389.

DOI: [10.1021/ar300055x](https://doi.org/10.1021/ar300055x)

Selected as a cover of the journal. Most Read Articles (May 2012).

- (136) Hindered biaryls by C-H coupling: Bisoxazoline-Pd catalysis leading to enantioselective C-H coupling
Kazuya Yamaguchi, Junichiro Yamaguchi, Armido Studer, Kenichiro Itami

Chem. Sci. 2012, 3, 2165-2169.

DOI: [10.1039/C2SC20277H](https://doi.org/10.1039/C2SC20277H)

Most Read Articles (March and April 2012). Highlighted in RSC Chemical Science Blog.

- (135) Synthesis and properties of cycloparaphenylene-2,5-pyridylidene: A nitrogen-containing carbon nanoring
Katsuma Matsui, Yasutomo Segawa, Kenichiro Itami

Org. Lett. 2012, 14, 1888-1891.

DOI: [10.1021/ol3005112](https://doi.org/10.1021/ol3005112)

- (134) Combined experimental and theoretical studies on the photophysical properties of cycloparaphenylenes
Yasutomo Segawa, Aiko Fukazawa, Sanae Matsuura, Haruka Omachi, Shigehiro Yamaguchi, Stephan Irle, Kenichiro Itami

Org. Biomol. Chem. 2012, 10, 5979-5984.

DOI: [10.1039/C2OB25199J](https://doi.org/10.1039/C2OB25199J)

- (133) Synthesis and properties of [9]cyclo-1,4-naphthylene: A π -extended carbon nanoring
Akiko Yagi, Yasutomo Segawa, Kenichiro Itami

J. Am. Chem. Soc. 2012, 134, 2962-2965.

DOI: [10.1021/ja300001q](https://doi.org/10.1021/ja300001q)

Most Read Articles (February 2012).

Highlighted in Computational Organic Chemistry, JACS Image Challenge.

- (132) Toward controlled synthesis of carbon nanotubes and graphenes
Kenichiro Itami

Pure Appl. Chem. 2012, 84, 907-916.

DOI: [10.1351/PAC-CON-11-11-15](https://doi.org/10.1351/PAC-CON-11-11-15)

- (131) Mechanistic studies on the Pd-catalyzed direct C-H arylation of 2-substituted thiophene derivatives with arylpalladium bipyridyl complexes
Marc Steinmetz, Kirika Ueda, Stefan Grimme, Junichiro Yamaguchi, Sylvia Kirchberg, Kenichiro Itami, Armido Studer

Chem. Asian J. 2012, 7, 1256-1260.

- (130) The 1,1-carboboration of bis(alkynyl)phosphines as a route to phosphole framework
Juri Möbus, Quentin Bonnin, Kirika Ueda, Roland Fröhlich, Kenichiro Itami, Gerald Kehr, Gerhard Erker
Angew. Chem. Int. Ed. 2012, 51, 1954-1957.
DOI: [10.1002/anie.201107398](https://doi.org/10.1002/anie.201107398)
- (129) CPP: A beautiful benzene-based ring molecule (account in Japanese)
Kenichiro Itami
Chemistry & Chemical Industry 2012, 65, 115-116.
<https://www.chemistry.or.jp/journal/chemical-industry/vol65no2.html>
- (128) Pd(OAc)₂/*o*-chloranil/M(OTf)_n: A catalyst for the direct C-H arylation of polycyclic aromatic hydrocarbons with boryl-, silyl-, and unfunctionalized arenes
Katsuaki Kawasumi, Kenji Mochida, Tomonori Kajino, Yasutomo Segawa, Kenichiro Itami
Org. Lett. 2012, 14, 418-421.
DOI: [10.1021/ol203235w](https://doi.org/10.1021/ol203235w)
- (127) Nickel-catalyzed C-H/C-O coupling of azoles with phenol derivatives
Kei Muto, Junichiro Yamaguchi, Kenichiro Itami
J. Am. Chem. Soc. 2012, 134, 169-172.
DOI: [10.1021/ja210249h](https://doi.org/10.1021/ja210249h)
Highlighted in Yomiuri Shimbun, Chunichi Shimbun, Nikkei Sangyo Shimbun, Kagaku Shimbun, Nikkan Kogyo Shimbun, The Chemical Daily, NanotechJapan, Yahoo! News, SynStory of Synform, Chemical Engineering. Most Read Articles (December 2011).
- (126) Functionalization of a simple dithienylethene via palladium-catalyzed regioselective direct arylation
Hiroki Kamiya, Shuichi Yanagisawa, Satoru Hiroto, Kenichiro Itami, Hiroshi Shinokubo
Org. Lett. 2011, 13, 6394-6397.
DOI: [10.1021/ol2026069](https://doi.org/10.1021/ol2026069)
- (125) Synthesis of dracmacidin D via direct C-H coupling
Debashis Mandal, Atsushi D. Yamaguchi, Junichiro Yamaguchi, Kenichiro Itami
J. Am. Chem. Soc. 2011, 133, 19660-19663.
DOI: [10.1021/ja209945x](https://doi.org/10.1021/ja209945x)
Most Read Article (November 2011). Highlighted in Chemistry World.
- (124) Exploitation of an additional hydrophobic pocket of s₁ receptors: Late-stage diverse modifications of spirocyclic thiophenes by C-H bond functionalization
Christina Meyer, Benedikt Neue, Dirk Schepmann, Shuichi Yanagisawa, Junichiro Yamaguchi, Ernst-Ulrich Würthwein, Kenichiro Itami, Bernhard Wünsch
Org. Biomol. Chem. 2011, 9, 8016-8029.
DOI: [10.1039/C1OB06149F](https://doi.org/10.1039/C1OB06149F)
- (123) Molecular catalysis for fullerene functionalization
Kenichiro Itami

Chem. Rec. 2011, 11, 226-235.

DOI: [10.1002/tcr.201100022](https://doi.org/10.1002/tcr.201100022)

A special issue on Merck-Banyu Lectureship Award. Most-accessed Article.

- (122) Synthesis of bioactive compounds through C-H bond functionalization (account in Japanese)
Junichiro Yamaguchi, Kenichiro Itami

Catalysts and Catalysis 2011, 53, 293-297.

Top 5 Most-accessed Articles.

- (121) Direct arylation of polycyclic aromatic hydrocarbons through palladium catalysis
Kenji Mochida, Katsuaki Kawasumi, Yasutomo Segawa, Kenichiro Itami

J. Am. Chem. Soc. 2011, 133, 10716-10719.

DOI: [10.1021/ja202975w](https://doi.org/10.1021/ja202975w)

Highlighted in Chunichi Shimbun, The Chemical Daily, Nikkan Kogyo Shimbun, Kagaku Shimbun, Nikkei Business Daily, Mainichi Communication, Yahoo! News, Goo News, NanotechJapan, Synfacts, Chemistry World, Nature Chemistry.

- (120) Nickel-catalyzed C-H arylation of azoles with haloarenes: Scope, mechanism, and applications to the synthesis of bioactive molecules
Takuya Yamamoto, Kei Muto, Masato Komiyama, Jerome Canivet, Junichiro Yamaguchi, Kenichiro Itami

Chem. Eur. J. 2011, 17, 10113-10122.

DOI: [10.1002/chem.201101091](https://doi.org/10.1002/chem.201101091)

Highlighted in Synfacts.

- (119) Controlled alcohol-carbonyl interconversion by nickel catalysis
Takehisa Maekawa, Hiromi Sekizawa, Kenichiro Itami

Angew. Chem. Int. Ed. 2011, 50, 7022-7026.

DOI: [10.1002/anie.201102092](https://doi.org/10.1002/anie.201102092)

Highlighted in Org. Proc. Res. Dev. and Synfacts.

- (118) Oxidative C-H/C-H coupling of azine and indole/pyrrole nuclei: Palladium catalysis and synthesis of eudistomin U
Atsushi D. Yamaguchi, Debashis Mandal, Junichiro Yamaguchi, Kenichiro Itami

Chem. Lett. 2011, 40, 555-557.

DOI: [10.1246/cl.2011.555](https://doi.org/10.1246/cl.2011.555)

Selected as "Editor's Choice". Most-Accessed Articles.

Highlighted in Angew. Chem. Int. Ed., Synlett.

- (117) Synthesis and racemization process of chiral carbon nanorings: A step toward the chemical synthesis of chiral carbon nanotubes
Haruka Omachi, Yasutomo Segawa, Kenichiro Itami

Org. Lett. 2011, 13, 2480-2483.

DOI: [10.1021/ol200730m](https://doi.org/10.1021/ol200730m)

Highlighted in Computational Organic Chemistry.

- (116) Is total synthesis of fullerenes or carbon nanotubes possible? (account in Japanese)

- (115) Electrophilic metalation mechanism or base-assisted proton abstraction mechanism

(account in Japanese)

Kenichiro Itami

CSJ Current Review (Bond Activation and Molecular Activation), Kagaku Dojin, 2011.

<https://www.kagakudojin.co.jp/book/b86727.html>

- (114) Multiple arylation of aromatic compounds for organic materials

(account in Japanese)

Kenichiro Itami

CSJ Current Review (Bond Activation and Molecular Activation), Kagaku Dojin, 2011.

<https://www.kagakudojin.co.jp/book/b86727.html>

- (113) Palladium/2,2'-bipyridyl/Ag₂CO₃ catalyst for C-H bond arylation of heteroarenes with haloarenes

Shuichi Yanagisawa, Kenichiro Itami

Tetrahedron 2011, 67, 4425-4430.

DOI: [10.1016/j.tet.2011.03.093](https://doi.org/10.1016/j.tet.2011.03.093)

A special issue in honor of Prof. F. Dean Toste.

- (112) [9]Cycloparaphenylene: Nickel-mediated synthesis and crystal structure

Yasutomo Segawa, Petr Šenel, Sanae Matsuura, Haruka Omachi, Kenichiro Itami

Chem. Lett. 2011, 40, 423-425.

DOI: [10.1246/cl.2011.423](https://doi.org/10.1246/cl.2011.423)

Selected as "Editor's Choice".

The molecule ([9]CPP) became commercially available from TCI and Kanto Chemical.

- (111) Aziridinofullerene: A versatile platform for functionalized fullerenes

Masakazu Nambo, Yasutomo Segawa, Kenichiro Itami

J. Am. Chem. Soc. 2011, 133, 2402-2405.

DOI: [10.1021/ja111213k](https://doi.org/10.1021/ja111213k)

Highlighted in Synfacts.

- (110) Concise synthesis and crystal structure of [12]cycloparaphenylene

Yasutomo Segawa, Shinpei Miyamoto, Haruka Omachi, Sanae Matsuura, Petr Šenel, Takahiro

Sasamori, Norihiro Tokitoh, Kenichiro Itami

Angew. Chem. Int. Ed. 2011, 50, 3244-3248.

DOI: [10.1002/anie.201007232](https://doi.org/10.1002/anie.201007232)

Highlighted in Science. Featured in CBC Television.

The molecule ([12]CPP) became commercially available from TCI and Kanto Chemical.

- (109) *tert*-Butoxide-mediated C-H bond arylation of aromatic compounds with haloarenes

Shuichi Yanagisawa, Kenichiro Itami

ChemCatChem 2011, 3, 827-829.

DOI: [10.1002/cctc.201000431](https://doi.org/10.1002/cctc.201000431)

Highlighted in Angew. Chem. Int. Ed.

- (108) Oxidative biaryl coupling of thiophenes and thiazoles with arylboronic acids through palladium catalysis: Otherwise difficult C4-selective C-H arylation enabled by boronic acids
Sylvia Kirchberg, Satoshi Tani, Kirika Ueda, Junichiro Yamaguchi, Armido Studer, Kenichiro Itami
Angew. Chem. Int. Ed. 2011, 50, 2387-2391.
DOI: [10.1002/anie.201007060](https://doi.org/10.1002/anie.201007060)
Highlighted in Synfacts.
- (107) Selective introduction of organic groups to C₆₀ and C₇₀ using organoboron compounds and rhodium catalyst: A new synthetic approach to organo(hydro)fullerenes
Masakazu Nambo, Yasutomo Segawa, Atsushi Wakamiya, Kenichiro Itami
Chem. Asian J. 2011, 6, 590-598.
DOI: [10.1002/asia.201000583](https://doi.org/10.1002/asia.201000583)
A special issue in honor of Prof. Eiichi Nakamura
- (106) A modular and size-selective synthesis of [n]cycloparaphenylenes: A step toward the selective synthesis of [n,n] single-walled carbon nanotubes
Haruka Omachi, Sanae Matsuura, Yasutomo Segawa, Kenichiro Itami
Angew. Chem. Int. Ed. 2010, 49, 10202-10205.
DOI: [10.1002/anie.201005734](https://doi.org/10.1002/anie.201005734)
Featured in Tokai Television. Highlighted in Nature, Asahi Shimbun, Chunichi Shimbun, Yomiuri Shimbun, Nikkan Kogyo Shimbun, The Chemical Daily, NanotechJapan, Synfacts, Gendai-Kagaku. Selected as "Hot Paper" of Angew. Chem. The molecule ([15]CPP) became commercially available from Kanto Chemical.
- (105) Toward ideal arene assembly: Catalytic C-H bond arylation of aromatic compounds
Kenichiro Itami
J. Synth. Org. Chem. Jpn. 2010, 68, 1132-1141.
DOI: [10.5059/yukigoseikyokaishi.68.1132](https://doi.org/10.5059/yukigoseikyokaishi.68.1132)
- (104) A general catalyst for the b-selective C-H bond arylation of thiophenes with iodoarenes
Kirika Ueda, Shuichi Yanagisawa, Junichiro Yamaguchi, Kenichiro Itami
Angew. Chem. Int. Ed. 2010, 49, 8946-8949.
DOI: [10.1002/anie.201005082](https://doi.org/10.1002/anie.201005082)
Highlighted in Synfacts.
- (103) Rhodium-catalyzed C-H bond arylation of arenes
Jean Bouffard, Kenichiro Itami
Top. Curr. Chem. 2010, 292, 231-280.
DOI: [10.1007/128_2009_12](https://doi.org/10.1007/128_2009_12)
A volume of C-H activation
- (102) Theoretical studies on the structures and strain energies of cycloparaphenylenes
Yasutomo Segawa, Haruka Omachi, Kenichiro Itami
Org. Lett. 2010, 12, 2262-2265.
DOI: [10.1021/ol1006168](https://doi.org/10.1021/ol1006168)

- (101) Photopatterning of poly(arylene diene) by the photoacid-catalyzed deprotection-elimination reaction of a precursor polymer
Jean Bouffard, Mitsuru Watanabe, Hiroko Takaba, Kenichiro Itami
Macromolecules 2010, 43, 1425-1429.
DOI: [10.1021/ma902442r](https://doi.org/10.1021/ma902442r)
Highlighted in Synfacts.
- (100) Regioselective unsymmetrical tetraallylation of C₆₀ through palladium catalysis
Masakazu Nambo, Atsushi Wakamiya, Shigehiro Yamaguchi, Kenichiro Itami
J. Am. Chem. Soc. 2009, 131, 15112-15113.
DOI: [10.1021/ja9071173](https://doi.org/10.1021/ja9071173)
Highlighted in Synfacts.
- (99) Programmed synthesis of tetraarylthiophenes through sequential C-H arylation
Shuichi Yanagisawa, Kirika Ueda, Hiromi Sekizawa, Kenichiro Itami
J. Am. Chem. Soc. 2009, 131, 14622-14623.
DOI: [10.1021/ja906215b](https://doi.org/10.1021/ja906215b)
Highlighted in Synfacts. Selected in JACS-beta.
- (98) A nickel catalyst for the addition of organoboronate esters to ketones and aldehydes
Jean Bouffard, Kenichiro Itami
Org. Lett. 2009, 11, 4410-4413.
DOI: [10.1021/ol9017613](https://doi.org/10.1021/ol9017613)
Highlighted in Synfacts.
- (97) Structure-affinity-relationship study of bicyclic σ receptor ligands
Ralph Holl, Christian Geiger, Masakazu Nambo, Kenichiro Itami, Dirk Schepmann, Bernhard Wünsch
Cent. Nerv. Syst. Agents Med. Chem. 2009, 9, 220-229.
DOI: [10.2174/1871524910909030220](https://doi.org/10.2174/1871524910909030220)
- (96) Fe-catalyzed oxidative coupling of heteroarenes and methylamines
Masaki Ohta, Matthias P. Quick, Junichiro Yamaguchi, Bernhard Wünsch, Kenichiro Itami
Chem. Asian J. 2009, 4, 1416-1419.
DOI: [10.1002/asia.200900157](https://doi.org/10.1002/asia.200900157)
Most-Accessed Articles (July/August 2009).
- (95) Selective synthesis of [12]cycloparaphenylene
Hiroko Takaba, Haruka Omachi, Yosuke Yamamoto, Jean Bouffard, Kenichiro Itami
Angew. Chem. Int. Ed. 2009, 48, 6112-6116.
DOI: [10.1002/anie.200902617](https://doi.org/10.1002/anie.200902617)
Highlighted in Asahi Shimbun, Nikkei Shimbun, Chunichi Shimbun, Yomiuri Shimbun, Nikkan Kogyo Shimbun, Yahoo! News, NanotechJapan, Synfacts, Chemistry & Industry. Selected as Synstory in Synform. Most-Accessed Articles (July 2009).
The molecule ([12]CPP) became commercially available from TCI and Kanto Chemical.
- (94) Arene-assembling reactions through C-H bond functionalization

- (93) Iridium catalysis for C-H bond arylation of heteroarenes with iodoarenes
Benoit Join, Takuya Yamamoto, Kenichiro Itami
Angew. Chem. Int. Ed. 2009, 48, 3644-3647.
DOI: [10.1002/anie.200806358](https://doi.org/10.1002/anie.200806358)
Selected as "HOT PAPER". Most-Accessed Articles (April 2009). Highlighted in Synfacts.
- (92) Nickel-catalyzed biaryl coupling of heteroarenes and aryl halides/triflates
Jerome Canivet, Junichiro Yamaguchi, Ikuya Ban, Kenichiro Itami
Org. Lett. 2009, 11, 1733-1736.
DOI: [10.1021/ol9001587](https://doi.org/10.1021/ol9001587)
Top 5 Most Cited Articles of Org. Lett. (2009-2011). Highlighted in Synfacts.
- (91) Palladium-catalyzed carbon-carbon bond formation and cleavage of organo(hydro)fullerenes
Masakazu Nambo, Kenichiro Itami
Chem. Eur. J. 2009, 15, 4760-4764.
DOI: [10.1002/chem.200900022](https://doi.org/10.1002/chem.200900022)
Selected as a cover of the journal. Highlighted in Synfacts.
- (90) Palladium(II)-catalyzed conjugate phosphination of electron-deficient acceptors
Verena T. Trepohl, Susumu Mori, Kenichiro Itami, Martin Oestreich
Org. Lett. 2009, 11, 1091-1094.
DOI: [10.1021/ol8028466](https://doi.org/10.1021/ol8028466)
- (89) Arylation of allylsilanes through rhodium catalysis
Haruka Omachi, Kenichiro Itami
Chem. Lett. 2009, 38, 186-187.
DOI: [10.1246/cl.2009.186](https://doi.org/10.1246/cl.2009.186)
- (88) Coupling of nitrogen heteroarenes and alkanes without transition metal: A new oxidative cross-coupling at C-H/C-H bonds
Guojun Deng, Kirika Ueda, Shuichi Yanagisawa, Kenichiro Itami, Chao-Jun Li
Chem. Eur. J. 2009, 15, 333-337.
DOI: [10.1002/chem.200801893](https://doi.org/10.1002/chem.200801893)
Most-Accessed Articles (December 2008).
- (87) Synthesis of new nano carbon materials
Masakazu Nambo, Kenichiro Itami
McGraw-Hill Yearbook of Science & Technology 2009, 379-381.
DOI: [10.1036/1097-8542.YB090021](https://doi.org/10.1036/1097-8542.YB090021)
- (86) Potassium *t*-butoxide alone can promote the biaryl coupling of electron-deficient nitrogen heterocycles and haloarenes
Shuichi Yanagisawa, Kirika Ueda, Tadashi Taniguchi, Kenichiro Itami

Org. Lett. 2008, 10, 4673-4676.

DOI: [10.1021/ol8019764](https://doi.org/10.1021/ol8019764)

Highlighted in Nature Chemistry and Angew. Chem. Int. Ed.

- (85) A bench-stable Pd catalyst for the hydroarylation of fullerene with boronic acids
Susumu Mori, Masakazu Nambo, Liang-Chen Chi, Jean Bouffard, Kenichiro Itami

Org. Lett. 2008, 10, 4609-4612.

DOI: [10.1021/ol801936j](https://doi.org/10.1021/ol801936j)

Highlighted in Synfacts.

- (84) Copper-mediated C-H bond arylation of arenes with arylboronic acids
Ikuya Ban, Tomoko Sudo, Tadashi Taniguchi, Kenichiro Itami

Org. Lett. 2008, 10, 3607-3609.

DOI: [10.1021/ol8013717](https://doi.org/10.1021/ol8013717)

Top 10 Most Cited Articles 2008-2010. Highlighted in Synfacts.

- (83) Chelation-controlled Mizoroki-Heck reactions
Kenichiro Itami, Jun-ichi Yoshida

The Mizoroki-Heck Reaction; Wiley-VCH, Chap 4 (2008).

- (82) Carbomagnesiation reactions
Kenichiro Itami, Jun-ichi Yoshida

The Chemistry of Organomagnesium Compounds,

Wiley-VCH, Chap 14, 631-680 (2008).

- (81) Direct coupling of arenes and iodoarenes catalyzed by rhodium complex with strongly π -accepting phosphite ligand
Shuichi Yanagisawa, Tomoko Sudo, Ryoji Noyori, Kenichiro Itami

Tetrahedron 2008, 64, 6073-6081.

DOI: [10.1016/j.tet.2008.01.053](https://doi.org/10.1016/j.tet.2008.01.053)

A special issue on catalytic aromatic C-H activation

- (80) Catalytic direct functionalization of olefins, aromatics, and fullerenes (account in Japanese)
Kenichiro Itami

Kobunshi 2008, 57, 134-137.

https://www.jstage.jst.go.jp/article/kobunshi1952/57/3/57_3_134/pdf/-char/ja

- (79) Rh-catalyzed arylation and alkenylation of C₆₀ using organoboron compounds
Masakazu Nambo, Ryoji Noyori, Kenichiro Itami

J. Am. Chem. Soc. 2007, 129, 8080-8081.

DOI: [10.1021/ja073042x](https://doi.org/10.1021/ja073042x)

Highlighted in Synfacts.

- (78) Generation of pyridyl coordinated organosilicon cation pool by oxidative Si-Si bond dissociation
Toshiki Nokami, Ryoji Soma, Yoshimasa Yamamoto, Toshiyuki Kamei, Kenichiro Itami, Jun-ichi Yoshida

Beilstein J. Org. Chem. 2007, 3, 7.

- (77) Direct C-H arylation of (hetero)arenes with aryl iodides via rhodium catalysis
Shuichi Yanagisawa, Tomoko Sudo, Ryoji Noyori, Kenichiro Itami
J. Am. Chem. Soc. 2006, 128, 11748-11749.
DOI: [10.1021/ja064500p](https://doi.org/10.1021/ja064500p)
Highlighted in Science and Synfacts.
- (76) Multisubstituted olefins: Platform synthesis and applications to materials science and pharmaceutical chemistry
Kenichiro Itami, Jun-ichi Yoshida
Bull. Chem. Soc. Jpn. 2006, 79, 811-824.
DOI: [10.1246/bcsj.79.811](https://doi.org/10.1246/bcsj.79.811)
Award Account.
- (75) Platform synthesis: A useful strategy for rapid and systematic generation of molecular diversity
Kenichiro Itami, Jun-ichi Yoshida
Chem. Eur. J. 2006, 12, 3966-3974.
DOI: [10.1002/chem.200500958](https://doi.org/10.1002/chem.200500958)
- (74) Sequential Pd- and Rh-catalyzed three-component cyclization with allenylboronate platform
Keisuke Tonogaki, Kenichiro Itami, Jun-ichi Yoshida
Org. Lett. 2006, 8, 1419-1422.
DOI: [10.1021/ol060197l](https://doi.org/10.1021/ol060197l)
Highlighted in Synfacts.
- (73) Palladium-catalyzed convergent synthesis and properties of conjugated dendrimers based on triarylethene branching
Kenichiro Itami, Keisuke Tonogaki, Toshiki Nokami, Youichi Ohashi, Jun-ichi Yoshida
Angew. Chem. Int. Ed. 2006, 45, 2404-2409.
DOI: [10.1002/anie.200600063](https://doi.org/10.1002/anie.200600063)
Highlighted in Synfacts.
- (72) Palladium-catalyzed cross-coupling reactions of (2-pyridyl)allyldimethylsilanes with aryl iodides
Toshiki Nokami, Yutaka Tomida, Toshiyuki Kamei, Kenichiro Itami, Jun-ichi Yoshida
Org. Lett. 2006, 8, 729-731.
DOI: [10.1021/ol052961u](https://doi.org/10.1021/ol052961u)
The molecule ((2-pyridyl)allyldimethylsilane) became commercially available from Sigma-Aldrich.
- (71) Catalytic four-component assembly based on allenylboronate platform: New access to privileged allylic amine structures
Keisuke Tonogaki, Kenichiro Itami, Jun-ichi Yoshida
J. Am. Chem. Soc. 2006, 128, 1464-1465.
DOI: [10.1021/ja057778a](https://doi.org/10.1021/ja057778a)
Highlighted in Synfacts.
- (70) 2-Pyridylsilyl group: A useful multifunctional group in organic synthesis

- (69) Copper-catalyzed allylation of carbonyl derivatives using allyl(2-pyridyl)silanes

Toshiyuki Kamei, Kazuyoshi Fujita, Kenichiro Itami, Jun-ichi Yoshida

Org. Lett. 2005, 7, 4725-4728.

DOI: [10.1021/ol051925s](https://doi.org/10.1021/ol051925s)

The molecule ((2-pyridyl)allyldimethylsilane) became commercially available from Sigma-Aldrich.

- (68) Rapid synthesis of CDP840 with 2-pyrimidyl vinyl sulfide as a platform

Nobuhiro Muraoka, Masahiro Mineno, Kenichiro Itami, Jun-ichi Yoshida

J. Org. Chem. 2005, 70, 6933-6936.

DOI: [10.1021/jo0510437](https://doi.org/10.1021/jo0510437)

- (67) Versatile synthesis of 1,1-diaryl-1-alkenes using vinylboronate ester as a platform

Keisuke Tonogaki, Kazuya Soga, Kenichiro Itami, Jun-ichi Yoshida

Synlett 2005, 1802-1804.

DOI: [10.1055/s-2005-871539](https://doi.org/10.1055/s-2005-871539)

The molecule (vinylboronic acid pinacol ester) became commercially available from TCI & Sigma-Aldrich.

- (66) Iron-catalyzed cross-coupling of alkenyl sulfides with Grignard reagents

Kenichiro Itami, Shohei Higashi, Masahiro Mineno, Jun-ichi Yoshida

Org. Lett. 2005, 7, 1219-1222.

DOI: [10.1021/ol047504c](https://doi.org/10.1021/ol047504c)

- (65) "Cation pool" method based on C-C bond dissociation. Effective generation of monocations and dications

Masayuki Okajima, Seiji Suga, Kenichiro Itami, Jun-ichi Yoshida

J. Am. Chem. Soc. 2005, 127, 6930-6931.

DOI: [10.1021/ja050414y](https://doi.org/10.1021/ja050414y)

- (64) Triarylethene-based extended π -systems: Programmable synthesis and photophysical properties

Kenichiro Itami, Youichi Ohashi, Jun-ichi Yoshida

J. Org. Chem. 2005, 70, 2778-2792.

DOI: [10.1021/jo0477401](https://doi.org/10.1021/jo0477401)

Highlighted in "Heart Cut" of The American Chemical Society.

- (63) Pyrimidine-core extended π -systems: General synthesis and interesting fluorescent properties

Kenichiro Itami, Daisuke Yamazaki, Jun-ichi Yoshida

J. Am. Chem. Soc. 2004, 126, 15396-15397.

DOI: [10.1021/ja044923w](https://doi.org/10.1021/ja044923w)

- (62) Rapid construction of multisubstituted olefin structures using vinylboronate ester platform leading to highly fluorescent materials

Kenichiro Itami, Keisuke Tonogaki, Youichi Ohashi, Jun-ichi Yoshida

Org. Lett. 2004, 6, 4093-4096.

*Selected as "Hot Paper" of The American Chemical Society. Most-Accessed Articles.
The molecule (vinylboronic acid pinacol ester) became commercially available from TCI & Sigma-Aldrich.*

- (61) Catalytic carbometalation/cross-coupling sequence across alkynyl(2-pyridyl)silanes leading to a diversity-oriented synthesis of tamoxifen-type tetrasubstituted olefins
Toshiyuki Kamei, Kenichiro Itami, Jun-ichi Yoshida
Adv. Synth. Catal. 2004, 346, 1824-1835.
DOI: [10.1002/adsc.200404220](https://doi.org/10.1002/adsc.200404220)
- (60) The carbon-silicon bond cleavage of organosilicon compounds in supercritical water
Kenichiro Itami, Koji Terakawa, Jun-ichi Yoshida, Okitsugu Kajimoto
Bull. Chem. Soc. Jpn. 2004, 77, 2071-2080.
DOI: [10.1246/bcsj.77.2071](https://doi.org/10.1246/bcsj.77.2071)
"Selected Paper" of The Chemical Society of Japan.
- (59) Stereoselective synthesis of multisubstituted butadienes through directed Mizoroki-Heck reaction and homocoupling reaction of vinyl(2-pyridyl)silane
Kenichiro Itami, Yousuke Ushioji, Toshiki Nokami, Youichi Ohashi, Jun-ichi Yoshida
Org. Lett. 2004, 6, 3695-3698.
DOI: [10.1021/ol048620i](https://doi.org/10.1021/ol048620i)
The molecule (2-(dimethylvinylsilyl)pyridine) became commercially available from TCI & Sigma-Aldrich.
- (58) Sequential assembly strategy for tetrasubstituted olefin synthesis using vinyl 2-pyrimidyl sulfide as a platform
Kenichiro Itami, Masahiro Mineno, Nobuhiro Muraoka, Jun-ichi Yoshida
J. Am. Chem. Soc. 2004, 126, 11778-11779.
DOI: [10.1021/ja045858t](https://doi.org/10.1021/ja045858t)
Highlighted in Nature Chemical Biology.
- (57) Catalytic intermolecular Pauson-Khand-type reaction: Strong directing effect of pyridylsilyl and pyrimidylsilyl groups and isolation of Ru complexes relevant to catalytic reaction
Kenichiro Itami, Koichi Mitsudo, Kazuyoshi Fujita, Youichi Ohashi, Jun-ichi Yoshida
J. Am. Chem. Soc. 2004, 126, 11058-11066.
DOI: [10.1021/ja047484a](https://doi.org/10.1021/ja047484a)
Highlighted in Angew. Chem. Int. Ed.
- (56) Cationic carbohydroxylation of alkenes and alkynes using the cation pool method
Seiji Suga, Yasuhisa Kageyama, Govindarajulu Babu, Kenichiro Itami, Jun-ichi Yoshida
Org. Lett. 2004, 6, 2709-2711.
DOI: [10.1021/ol049049g](https://doi.org/10.1021/ol049049g)
- (55) Stereoselective synthesis of (Z)-1-silyl-2-stannylethene by palladium-catalyzed silastannylation of ethylene and its synthetic transformations
Masahiro Murakami, Takanori Matsuda, Kenichiro Itami, Shinji Ashida, Miki Terayama
Synthesis 2004, 1522-1526.

- (54) Aqueous photo-dimerization using 2-pyridylsilyl group as a removable hydrophilic group
Toshiki Nokami, Kenichiro Itami, Jun-ichi Yoshida
Chem. Lett. 2004, 33, 596-597.
DOI: [10.1246/cl.2004.596](https://doi.org/10.1246/cl.2004.596)
- (53) Phase tag: Free from solid phase synthesis (account in Japanese)
Kenichiro Itami, Jun-ichi Yoshida
Kagaku Frontier 2004, 14, 136-145.
- (52) Diversity-oriented synthesis of tamoxifen-type tetrasubstituted olefins
Kenichiro Itami, Toshiyuki Kamei, Jun-ichi Yoshida
J. Am. Chem. Soc. 2003, 125, 14670-14671.
DOI: [10.1021/ja037566i](https://doi.org/10.1021/ja037566i)
Highlighted in Nature Chemical Biology and Current Opinion in Chemical Biology.
- (51) Palladium-catalyzed rearrangement/arylation of 2-allyloxypyridine leading to the synthesis of *N*-substituted 2-pyridones
Kenichiro Itami, Daisuke Yamazaki, Jun-ichi Yoshida
Org. Lett. 2003, 5, 2161-2164.
DOI: [10.1021/ol0346234](https://doi.org/10.1021/ol0346234)
- (50) Efficient and rapid C-Si bond cleavage in supercritical water
Kenichiro Itami, Koji Terakawa, Jun-ichi Yoshida, Okitsugu Kajimoto
J. Am. Chem. Soc. 2003, 125, 6058-6059.
DOI: [10.1021/ja034227q](https://doi.org/10.1021/ja034227q)
- (49) 2-Pyridyldimethylsilane
Jun-ichi Yoshida, Kenichiro Itami
Electronic Encyclopedia of Reagents for Organic Synthesis, Wiley, online.
The molecule (2-(dimethylsilyl)pyridine) became commercially available from Sigma-Aldrich.
- (48) AgOAc-catalyzed aldehyde allylation using allyldimethyl(2-pyridyl)silane
Kenichiro Itami, Toshiyuki Kamei, Masahiro Mineno, Jun-ichi Yoshida
Chem. Lett. 2002, 1084-1085.
DOI: [10.1246/cl.2002.1084](https://doi.org/10.1246/cl.2002.1084)
The molecule (2-(allyldimethylsilyl)pyridine) became commercially available from Sigma-Aldrich.
- (47) A general and straightforward route toward diarylmethanes. Integrated cross-coupling reactions using (2-pyridyl)silylmethylstannane as an air-stable, storable, and versatile coupling platform
Kenichiro Itami, Masahiro Mineno, Toshiyuki Kamei, Jun-ichi Yoshida
Org. Lett. 2002, 4, 3635-3638.
DOI: [10.1021/ol026573t](https://doi.org/10.1021/ol026573t)
- (46) Tag strategy in separation and recovery
Jun-ichi Yoshida, Kenichiro Itami

Chem. Rev. 2002, 102, 3693-3716.

DOI: [10.1021/cr0103524](https://doi.org/10.1021/cr0103524)

- (45) A pyridylsilyl group expands the scope of catalytic intermolecular Pauson-Khand reactions

Kenichiro Itami, Koichi Mitsudo, Jun-ichi Yoshida

Angew. Chem. Int. Ed. 2002, 41, 3481-3484.

DOI: [10.1002/1521-3773\(20020916\)41:18<3481::AID-ANIE3481>3.0.CO;2-X](https://doi.org/10.1002/1521-3773(20020916)41:18<3481::AID-ANIE3481>3.0.CO;2-X)

Highlighted in Angew. Chem. Int. Ed. and Kagaku.

- (44) The use of hydrophilic groups in aqueous organic reactions

Kenichiro Itami, Jun-ichi Yoshida

Chem. Rec. 2002, 2, 213-224.

DOI: [10.1002/tcr.10021](https://doi.org/10.1002/tcr.10021)

- (43) Pyridylsilyl group-driven cross-coupling reactions

Kenichiro Itami, Koichi Mitsudo, Toshiki Nokami, Toshiyuki Kamei, Tooru Koike, Jun-ichi Yoshida

J. Organomet. Chem. 2002, 653, 105-113.

DOI: [10.1016/S0022-328X\(02\)01173-7](https://doi.org/10.1016/S0022-328X(02)01173-7)

A special issue on cross-coupling reactions

- (42) 2-Pyridyldimethylsilyl group as a removable hydrophilic group in aqueous organic reactions:

Formation of molecular aggregates and dramatic rate enhancement in Diels-Alder reactions

Kenichiro Itami, Toshiki Nokami, Jun-ichi Yoshida

Adv. Synth. Catal. 2002, 344, 441-451.

DOI: [10.1002/1615-4169\(200206\)344:3/4<441::AID-ADSC441>3.0.CO;2-7](https://doi.org/10.1002/1615-4169(200206)344:3/4<441::AID-ADSC441>3.0.CO;2-7)

- (41) Metal-catalyzed hydrosilylation of alkenes and alkynes using dimethyl(pyridyl)silane

Kenichiro Itami, Koichi Mitsudo, Akira Nishino, Jun-ichi Yoshida

J. Org. Chem. 2002, 67, 2645-2652.

DOI: [10.1021/jo0163389](https://doi.org/10.1021/jo0163389)

The molecule (2-(dimethylsilyl)pyridine) became commercially available from Sigma-Aldrich.

- (40) Silyl peroxides

Kohei Tamao, Jun-ichi Yoshida, Kenichiro Itami

Science of Synthesis 2002, Category 1, Vol. 4, 413-425.

- (39) [Bis(2-pyridyldimethylsilyl)methyl]lithium

Jun-ichi Yoshida, Kenichiro Itami

Electronic Encyclopedia of Reagents for Organic Synthesis, Wiley, online.

The molecule (bis[dimethyl(2-pyridyl)silyl]methane) became commercially available from TCI.

- (38) Use of molecular aggregates as nanoreaction sites: New synthetic organic chemistry in the aqueous phase (account in Japanese)

Jun-ichi Yoshida, Kenichiro Itami

Chemistry and Education 2002, 50, 121-124.

- (37) Automation in organic synthesis and development of new methodologies and strategies for automated synthesis (account in Japanese)
Jun-ichi Yoshida, Seiji Suga, Kenichiro Itami
Kagaku Kogyo 2002, 53, 6-12.
- (36) Diversity-oriented synthesis of multisubstituted olefins through the sequential integration of palladium-catalyzed cross-coupling reactions. 2-Pyridyldimethyl(vinyl)silane as a versatile platform for olefin synthesis
Kenichiro Itami, Toshiki Nokami, Yoji Ishimura, Koichi Mitsudo, Toshiyuki Kamei, Jun-ichi Yoshida
J. Am. Chem. Soc. 2001, 123, 11577-11585.
DOI: [10.1021/ja016790+](https://doi.org/10.1021/ja016790+)
Highlighted in Eur. J. Org. Chem.
The molecule (2-(dimethylvinylsilyl)pyridine) became commercially available from TCI & Sigma-Aldrich.
- (35) Unusual metal-dependent acceleration and deceleration in the metal-catalyzed hydrosilylation of olefins using pyridyldimethylsilanes
Kenichiro Itami, Koichi Mitsudo, Akira Nishino, Jun-ichi Yoshida
Chem. Lett. 2001, 1088-1089.
DOI: [10.1246/cl.2001.1088](https://doi.org/10.1246/cl.2001.1088)
- (34) Pyridylsilyl group as a multifunctional phase tag for solution-phase synthesis
Jun-ichi Yoshida, Kenichiro Itami
J. Synth. Org. Chem. Jpn. 2001, 59, 1086-1094.
DOI: [10.5059/yukigoseikyokaishi.59.1086](https://doi.org/10.5059/yukigoseikyokaishi.59.1086)
- (33) Silyl-substituted dithioles as candidates for new electron donors
Hongqi Li, Keiji Nishiwaki, Kenichiro Itami, Jun-ichi Yoshida
Bull. Chem. Soc. Jpn. 2001, 74, 1717-1725.
DOI: [10.1246/bcsj.74.1717](https://doi.org/10.1246/bcsj.74.1717)
- (32) Unusually accelerated silylmethyl transfer from tin in Stille coupling: Implication of coordination-driven transmetalation
Kenichiro Itami, Toshiyuki Kamei, Jun-ichi Yoshida
J. Am. Chem. Soc. 2001, 123, 8773-8779.
DOI: [10.1021/ja0160593](https://doi.org/10.1021/ja0160593)
- (31) Regioselective catalytic allylic alkylation directed by removable 2-PyMe₂Si group
Kenichiro Itami, Tooru Koike, Jun-ichi Yoshida
J. Am. Chem. Soc. 2001, 123, 6957-6958.
DOI: [10.1021/ja0157346](https://doi.org/10.1021/ja0157346)
- (30) Palladium-catalyzed cross-coupling reaction of alkenyldimethyl(2-pyridyl)silanes with organic halides: Complete switch from the carbometalation pathway to the transmetalation pathway
Kenichiro Itami, Toshiki Nokami, Jun-ichi Yoshida
J. Am. Chem. Soc. 2001, 123, 5600-5601.
DOI: [10.1021/ja015655u](https://doi.org/10.1021/ja015655u)

- (29) Pyridyl group assisted deprotonation of a methyl group on silicon: Complex induced proximity effect and novel hydroxymethylation
Kenichiro Itami, Toshiyuki Kamei, Koichi Mitsudo, Toshiki Nokami, Jun-ichi Yoshida
J. Org. Chem. 2001, 66, 3970-3976.
DOI: [10.1021/jo015528g](https://doi.org/10.1021/jo015528g)
- (28) Directed intermolecular carbomagnesation across vinylsilane: 2-PyMe₂Si group as a removable directing group
Kenichiro Itami, Koichi Mitsudo, Jun-ichi Yoshida
Angew. Chem. Int. Ed. 2001, 40, 2337-2339.
DOI: [10.1002/1521-3773\(20010618\)40:12<2337::AID-ANIE2337>3.0.CO;2-Q](https://doi.org/10.1002/1521-3773(20010618)40:12<2337::AID-ANIE2337>3.0.CO;2-Q)
The molecule (2-(dimethylvinylsilyl)pyridine) became commercially available from TCI & Sigma-Aldrich.
- (27) Facile generation of [bis(2-pyridyldimethylsilyl)methyl]lithium and its reaction with carbonyl compounds. New method for the stereoselective synthesis of vinylsilanes
Kenichiro Itami, Toshiki Nokami, Jun-ichi Yoshida
Tetrahedron 2001, 57, 5045-5054.
DOI: [10.1016/S0040-4020\(01\)00348-9](https://doi.org/10.1016/S0040-4020(01)00348-9)
The molecule (bis[dimethyl(2-pyridyl)silyl]methane) became commercially available from TCI.
- (26) 2-Pyridyldimethylsilyl as a removable hydrophilic group in aqueous Diels-Alder reaction
Kenichiro Itami, Toshiki Nokami, Jun-ichi Yoshida
Angew. Chem. Int. Ed. 2001, 40, 1074-1076.
DOI: [10.1002/1521-3773\(20010316\)40:6<1074::AID-ANIE10740>3.0.CO;2-%23](https://doi.org/10.1002/1521-3773(20010316)40:6<1074::AID-ANIE10740>3.0.CO;2-%23)
- (25) Highly efficient carbopalladation across vinylsilane: Dual role of the 2-PyMe₂Si group as a directing group and as a phase tag
Kenichiro Itami, Koichi Mitsudo, Toshiyuki Kamei, Tooru Koike, Toshiki Nokami, Jun-ichi Yoshida
J. Am. Chem. Soc. 2000, 122, 12013-12014.
DOI: [10.1021/ja002582g](https://doi.org/10.1021/ja002582g)
The molecule (2-(dimethylvinylsilyl)pyridine) became commercially available from TCI & Sigma-Aldrich.
- (24) Palladium-catalysed asymmetric [4+2] cycloaddition of vinylallene with 1,3-diene
Masahiro Murakami, Ryo Minamida, Kenichiro Itami, Masaya Sawamura, Yoshihiko Ito
Chem. Commun. 2000, 2293-2294.
DOI: [10.1039/B007781J](https://doi.org/10.1039/B007781J)
- (23) [Bis(2-pyridyldimethylsilyl)methyl]lithium. New reagent for the stereoselective synthesis of vinylsilanes
Kenichiro Itami, Toshiki Nokami, Jun-ichi Yoshida
Org. Lett. 2000, 2, 1299-1302.
DOI: [10.1021/ol005735n](https://doi.org/10.1021/ol005735n)
The molecule (bis[dimethyl(2-pyridyl)silyl]methane) became commercially available from TCI.
- (22) New cycloaddition reactions mediated by transition metals (account in Japanese)
Masahiro Murakami, Kenichiro Itami, Yoshihiko Ito
Kikan Kagaku Sosetsu 2000, 47, 19-28.

- (21) Oxidation of 2-pyridyldimethylsilyl group to hydroxyl group by H₂O₂/KF. Implication of fluoride ion accelerated 2-pyridyl-silyl bond cleavage
Kenichiro Itami, Koichi Mitsudo, Jun-ichi Yoshida
J. Org. Chem. 1999, 64, 8709-8714.
DOI: [10.1021/jo990740u](https://doi.org/10.1021/jo990740u)
- (20) (2-Pyridyldimethylsilyl)methyl lithium as a novel hydroxymethylating reagent
Kenichiro Itami, Koichi Mitsudo, Jun-ichi Yoshida
Tetrahedron Lett. 1999, 40, 5537-5540.
DOI: [10.1016/S0040-4039\(99\)01028-X](https://doi.org/10.1016/S0040-4039(99)01028-X)
The molecule (2-(trimethylsilyl)pyridine) became commercially available from TCI & Sigma-Aldrich.
- (19) Facile generation of α -silyl carbanion of trimethylsilyl group assisted by intramolecular pyridyl group coordination
Kenichiro Itami, Koichi Mitsudo, Jun-ichi Yoshida
Tetrahedron Lett. 1999, 40, 5533-5536.
DOI: [10.1016/S0040-4039\(99\)01027-8](https://doi.org/10.1016/S0040-4039(99)01027-8)
The molecule (2-(trimethylsilyl)pyridine) became commercially available from TCI & Sigma-Aldrich.
- (18) Construction of eight-membered carbocycles by palladium-catalyzed [4+4] cycloaddition of vinylallenes
Masahiro Murakami, Kenichiro Itami, Yoshihiko Ito
Synlett 1999, 951-953.
DOI: [10.1055/s-1999-3087](https://doi.org/10.1055/s-1999-3087)
- (17) Catalytic asymmetric [4+1] cycloaddition of vinylallenes with carbon monoxide: Reversal of the induced chirality by the choice of metal
Masahiro Murakami, Kenichiro Itami, Yoshihiko Ito
J. Am. Chem. Soc. 1999, 121, 4130-4135.
DOI: [10.1021/ja9839365](https://doi.org/10.1021/ja9839365)
- (16) 2-Pyridylsilyl group as a multifunctional "phase tag" for solution phase synthesis
Jun-ichi Yoshida, Kenichiro Itami, Koichi Mitsudo, Seiji Suga
Tetrahedron Lett. 1999, 40, 3403-3406.
DOI: [10.1016/S0040-4039\(99\)00474-8](https://doi.org/10.1016/S0040-4039(99)00474-8)
- (15) Coordination modes and catalytic carbonylative [4+1] cycloaddition of vinylallenes
Masahiro Murakami, Kenichiro Itami, Yoshihiko Ito
Organometallics 1999, 18, 1326-1336.
DOI: [10.1021/om990028n](https://doi.org/10.1021/om990028n)
- (14) Nickel-catalyzed cross-coupling of dienyl phosphates with Grignard reagents in the synthesis of 2-substituted 1,3-dienes
A. Sofia E. Karlstrom, Kenichiro Itami, Jan-E. Bäckvall
J. Org. Chem. 1999, 64, 1745-1749.
DOI: [10.1021/jo982060h](https://doi.org/10.1021/jo982060h)

- (13) New cycloaddition reactions of conjugated allenes catalyzed by transition metal complexes (account in Japanese)
Masahiro Murakami, Kenichiro Itami, Minoru Ubukata, Itaru Tsuji, Yoshihiko Ito
J. Synth. Org. Chem. Jpn. 1998, 56, 406-412.
DOI: [10.5059/yukigoseikyokaishi.56.406](https://doi.org/10.5059/yukigoseikyokaishi.56.406)
- (12) Single-step construction of a nine-membered carbocycle by a new [4+4+1] cycloaddition
Masahiro Murakami, Kenichiro Itami, Yoshihiko Ito
Angew. Chem. Int. Ed. 1998, 37, 3418-3420.
DOI: [10.1002/\(SICI\)1521-3773\(19981231\)37:24<3418::AID-ANIE3418>3.0.CO;2-R](https://doi.org/10.1002/(SICI)1521-3773(19981231)37:24<3418::AID-ANIE3418>3.0.CO;2-R)
- (11) Rhodium-catalyzed intermolecular [4+2] cycloaddition of unactivated substrates
Masahiro Murakami, Minoru Ubukata, Kenichiro Itami, Yoshihiko Ito
Angew. Chem. Int. Ed. 1998, 37, 2248-2250.
DOI: [10.1002/\(SICI\)1521-3773\(19980904\)37:16<2248::AID-ANIE2248>3.0.CO;2-1](https://doi.org/10.1002/(SICI)1521-3773(19980904)37:16<2248::AID-ANIE2248>3.0.CO;2-1)
- (10) Chiral benzoquinones as new class of ligands for asymmetric catalysis: Synthesis and application to the palladium(II)-catalyzed 1,4-dialkoxylation of 1,3-dienes
Kenichiro Itami, Andreas Palmgren, Atli Thorarensen, Jan-E. Bäckvall
J. Org. Chem. 1998, 63, 6466-6471.
DOI: [10.1021/jo980561x](https://doi.org/10.1021/jo980561x)
- (9) Unsymmetrical functionalization of 1,3-cyclohexadienes: Palladium-catalyzed stereoselective 1,4-acyloxy-alkoxylation
Eike Hupe, Kenichiro Itami, Attila Aranyos, Kalman J. Szabo, Jan-E. Bäckvall
Tetrahedron 1998, 54, 5375-5384.
DOI: [10.1016/S0040-4020\(98\)00212-9](https://doi.org/10.1016/S0040-4020(98)00212-9)
- (8) Palladium-catalyzed intramolecular 1,4-dialkoxylation of cyclohexadienes: An efficient route to highly stereocontrolled oxygen heterocycles
Kenichiro Itami, Andreas Palmgren, Jan-E. Bäckvall
Tetrahedron Lett. 1998, 39, 1223-1226.
DOI: [10.1016/S0040-4039\(97\)10735-3](https://doi.org/10.1016/S0040-4039(97)10735-3)
- (7) Iridium-catalyzed [5+1] cycloaddition: Allenylcyclopropane as a five-carbon assembling unit
Masahiro Murakami, Kenichiro Itami, Minoru Ubukata, Itaru Tsuji, Yoshihiko Ito
J. Org. Chem. 1998, 63, 4-5.
DOI: [10.1021/jo9718859](https://doi.org/10.1021/jo9718859)
- (6) Palladium(II)-catalyzed asymmetric 1,4-oxidation of 2-phenyl-1,3-cyclohexadiene
Atli Thorarensen, Andreas Palmgren, Kenichiro Itami, Jan-E. Bäckvall
Tetrahedron Lett. 1997, 38, 8541-8544.
DOI: [10.1016/S0040-4039\(97\)10242-8](https://doi.org/10.1016/S0040-4039(97)10242-8)
- (5) Directed intermolecular [4+2] cycloaddition of unactivated 1,3-diene substrates with high regio- and stereoselectivities

Masahiro Murakami, Kenichiro Itami, Yoshihiko Ito

J. Am. Chem. Soc. 1997, 119, 7163-7164.

DOI: [10.1021/ja970626y](https://doi.org/10.1021/ja970626y)

- (4) Rhodium-catalyzed asymmetric [4+1] cycloaddition
Masahiro Murakami, Kenichiro Itami, Yoshihiko Ito

J. Am. Chem. Soc. 1997, 119, 2950-2951.

DOI: [10.1021/ja964259m](https://doi.org/10.1021/ja964259m)

- (3) Synthesis of (vinylallene)rhodium(III) complex of planar structure: Perfect $\pi \rightarrow \sigma$ conversion of 1,3-diene system
Masahiro Murakami, Kenichiro Itami, Yoshihiko Ito

J. Am. Chem. Soc. 1996, 118, 11672-11673.

DOI: [10.1021/ja962486i](https://doi.org/10.1021/ja962486i)

- (2) A study on rhodium-vinylallene complexes leading to a new reaction, rhodium-catalyzed carbonylative [4+1] cycloaddition
Masahiro Murakami, Kenichiro Itami, Yoshihiko Ito

Angew. Chem. Int. Ed. Engl. 1995, 34, 2691-2694.

DOI: [10.1002/anie.199526911](https://doi.org/10.1002/anie.199526911)

- (1) A remarkable effect of silyl substitution on electrocyclization of vinylallenes
Masahiro Murakami, Hideki Amii, Kenichiro Itami, Yoshihiko Ito

Angew. Chem. Int. Ed. Engl. 1995, 34, 1476-1477.

DOI: [10.1002/anie.199514761](https://doi.org/10.1002/anie.199514761)

Patents and patent application

- (96) TBA
JP-2024-42792
Kenichiro Itami, Kazuma Amaike, Daisuke Shimizu, Rikuo Tanase
- (95) TBA
JP-2024-31724
Kenichiro Itami, Kazuma Amaike, Yurina Kozu
- (94) TBA
JP-2023-022743
Kenichiro Itami, Kazuma Amaike, Ayaka Ueda
- (93) TBA
US-18/050,713
Kenichiro Itami, Hideto Ito, Tsukasa Sawafuji, Tadashi Haketa, Yusuke Takahashi, Shota Tanaka, Takuto Fukami
- (92) TBA
JP-2023-034740
Akiko Yagi, Takaku Yoshihara, Kenichiro Itami
- (91) TBA
JP-2022-505162
Kenichiro Itami, Hideto Ito, Kaho Matsushima, Kazuo Murakami, Hidefumi Nakatsuji, Shunsuke Ishida
- (90) TBA

- JP-2022-154208
Akiko Yagi, Takaku Yoshihara, Yoshifumi Toyama, Kenichiro Itami
- (89) TBA
- JP-2022-148563
Hideto Ito, Kenichiro Itami, Kanna Fujishiro, Yuta Morinaka, Yohei Ono, Tsuyoshi Tanaka
- (88) TBA
- JP-2022-072557, PCT/JP2023/016086
Toshinori Kinoshita, Yusuke Aihara, Ayato Sato, Shigeo Toh, Yasuomi Tada, Yosuke Toda, Kenichiro Itami, Kei Murakami, Bumpei Maeda, Kanna Goto
- (87) TBA
- PCT/JP2022/003669
Kenichiro Itami, Hideto Ito, Kaho Matsushima, Hidefumi Nakatsuji, Shunsuke Ishida, Sachie Okuda
- (86) TBA
- JP-2022-022329
Kenichiro Itami, Yuta Morinaka, Yasuhiro Takahashi, Yohei Ono, Tsuyoshi Tanaka
- (85) TBA
- JP-2022-019637, PCT/JP2023/004642
Kenichiro Itami, Kazuma Amaike, Erika Kato, Ayato Sato, Masayoshi Nakamura
- (84) TBA
- JP-2021-209457
Kenichiro Itami, Greco Miera Gonzalez, Yuta Morinaka, Yasuhiro Takahashi, Yohei Ono
- (83) TBA
- JP-2021-087900, PCT/JP2022/021418
Kenichiro Itami, Akiko Yagi, Ayato Sato, Keitaro Tanoi, Ryohei Sugita, Shinichi Yamashita
- (82) Compound, material for organic electroluminescent elements, organic electroluminescent element, and electronic device
[US-2023085328-A1](#)
Masato Mitani, Keita Seda, Taro Yamaki, Shota Tanaka, Tsukasa Sawato, Masatoshi Saito, Hiroaki Itoi, Tasuku Haketa, Kei Yoshida, Sayaka Mizutani, Kenichiro Itami, Kei Murakami, Satoshi Matsubara, Yoshito Koga
- (81) Compound, material for organic electroluminescent device, organic electroluminescent device and electronic apparatus
[JP-2023-67613 \(特開 2023-67613\)](#)
Tsukasa Sawato, Keita Seda, Tasuku Haketa, Yusuke Takahashi, Shota Tanaka, Takuto Fukami, Hideto Ito, Kenichiro Itami
- (80) Compound, material for organic electroluminescent device, organic electroluminescent device and electronic apparatus
[JP-2023-011408 \(特開 2023-011408\)](#)
Masato Mitani, Keita Seda, Taro Yamaki, Shota Tanaka, Tsukasa Sawato, Masatoshi Saito, Hiroaki Itoi, Tasuku Haketa, Kei Yoshida, Sayaka Mizutani, Kenichiro Itami, Kei Murakami, Satoshi Matsubara, Yoshito Koga
- (79) Fused ring compound, preparation thereof, and material for organic electroluminescent element
[JP-2022-080387 \(特開 2022-080387\)](#)
Yuta Morinaka, Tsuyoshi Tanaka, Kenichiro Itami, Takehisa Maekawa
- (78) Method for producing naphthylsilole, naphthylsilole containing heterocyclic group, and graphene nanoribbons containing heterocyclic group
[US-202300121865-A1](#)

- Kenichiro Itami, Hideto Ito, Kaho Matsushima, Kazuo Murakami, Hidefumi Nakatsuji, Shunsuke Ishida
- (77) Naphthyl silole production method, naphthyl silole having heterocyclic group, and graphene nanoribbons having heterocyclic group
[EP-4116308-A1](#)
 Kenichiro Itami, Hideto Ito, Kaho Matsushima, Kazuo Murakami, Hidefumi Nakatsuji, Shunsuke Ishida
- (76) Compound, material for organic electroluminescent device, organic electroluminescent device and electronic apparatus
[JP-2022-066695 \(特開 2022-066695\)](#)
 Keita Seta, Masakazu Funahashi, Hiroshi Yamamoto, Kei Murakami, Kenichiro Itami
- (75) Naphthyl silole production method, naphthyl silole having heterocyclic group, and graphene nanoribbons having heterocyclic group
[EP-4116308-A1](#)
 Kenichiro Itami, Hideto Ito, Kaho Matsushima, Kazuo Murakami, Hidefumi Nakatsuji, Shunsuke Ishida
- (74) Plant growth regulator
[US-2021235697-A1](#)
 Naoyuki Uchida, Shinya Hagihara, Kenichiro Itami, Rie Iwasaki, Keiko Torii
- (73) Solid of naphthyl benzosilol compound and its manufacturing method
[JP-2021-011471 \(特開 2021-011471\)](#)
 Kenichiro Itami, Hideto Ito, Hidefumi Nakatsuji
- (72) Fused ring compound, preparation thereof, and material for organic electroluminescent element
 JP-2020-557789 (再表 2020/111140)
 Yuta Morinaka, Tsuyoshi Tanaka, Kenichiro Itami, Takehisa Maekawa, Hideto Ito
- (71) Curved aromatic compound and method for producing the same
[JP-2020-196682 \(特開 2020-196682\)](#)
 Kenichiro Itami, Yasutomo Segawa, Kenta Kato, Takuma Kawada, Taito Hatakeyama
- (70) Method of producing condensed ring compound
[JP-2020-158411 \(特開 2020-158411\)](#)
 Yuta Morinaka, Tsuyoshi Tanaka, Kenichiro Itami, Takehisa Maekawa, Hideto Ito
- (69) Pollen tube growth regulator
[JP-2020-147524 \(特開 2020-147524\)](#)
 Tetsuya Higashiyama, Kumi Tokita, Kenichiro Itami, Ayaka Ueda, Hiroyuki Kitano, Hideto Ito, Ayato Sato
- (68) Material for light-emitting element and light-emitting element
[JP-2020-136358 \(特開 2020-136358\)](#)
 Kenichiro Itami, Yasutomo Segawa, Motoaki Usui, Yoshiaki Tsubata, Yoshihiko Akino
- (67) Method for producing annular compound
[JP-2020-132541 \(特開 2020-132541\)](#)
 Kenichiro Itami, Yasutomo Segawa, Motoaki Usui, Yoshiaki Tsubata
- (66) Carbon nanobelt and production method therefor
[US-2019375692-A1](#)
 Kenichiro Itami, Yasutomo Segawa, Guillaume Povie, Yuhei Miyauchi, Taishi Nishihara
- (65) Flowering season regulators, agrochemical compositions, and methods of regulating the flowering season of plants
 JP-2019-534010 (再表 2019/026575)

- Norihito Nakamichi, Takahiro Uehara, Junichiro Yamaguchi, Hiromi Matsuo, Ayato Sato, Kenichiro Itami, Toshinori Kinoshita, Katsuhiko Shiratake, Michitaka Notaguchi
- (64) Photothermal conversion element
[JP-2019-193418 \(特開 2019-193418\)](#)
 Kenichiro Itami, Yuhei Miyauchi, Taishi Nishihara, Akira Takakura, Takahiro Yamamoto, Satoru Konabe
- (63) Plant growth regulator
 JP-2019-504659 (再表 2018/164214)
 Naoyuki Uchida, Shinya Hagihara, Kenichiro Itami, Rie Iwasaki, Keiko Torii
- (62) Organic electroluminescent devices containing dinaphthotetraphenylene compounds
[JP-2019-091748 \(特開 2019-091748\)](#)
 Yuta Morinaka, Tsuyoshi Tanaka, Kenichiro Itami, Kei Murakami, Yoshito Koga
- (61) Organic electroluminescent device including polycyclic aromatic compound as component
[JP-2019-004058 \(特開 2019-004058\)](#)
 Yuta Morinaka, Tsuyoshi Tanaka, Kenichiro Itami, Hideto Ito, Yasutomo Segawa, Yuta Yano
- (60) Water-soluble warped nano graphene compound and use therefor
[JP-2018-154577 \(特開 2018-15457\)](#)
 Kenichiro Itami, Yasutomo Segawa, Hsing-An Lin, Tetsuya Higashiyama, Yoshikatsu Sato, Keiko Kuwata, Kenta Kato
- (59) Carbon nanobelt and production method therefor
[JP-2018-131441 \(特開 2018-131441\)](#)
 Kenichiro Itami, Yasutomo Segawa, Guillaume Povie, Yuhei Miyauchi, Taishi Nishihara
- (58) Material for resistance change element containing cycloparaphenylene-halogen molecular composite
[JP-2018-035083 \(特開 2018-035083\)](#)
 Kenichiro Itami, Hirotoshi Sakamoto, Noriaki Ozaki
- (57) Easily decomposable lignin generator
[JP-2018-008900 \(特開 2018-008900\)](#)
 Shinya Hagiwara, Naoyuki Uchida, Jumpei Suzuki, Kenichiro Itami
- (56) Plant growth regulator
 JP-2018-526434 (再表 2018/008717)
 Naoyuki Uchida, Shinya Hagihara, Asraa Ziadi, Hiroe Kato, Ayato Sato, Kenichiro Itami, Keiko Torii
- (55) Triarylene compounds and their production methods
 JP-2018-521145 (再表 2017/209297)
 Kenichiro Itami, Kei Murakami, Yoshito Koga, Takeshi Kaneda, Yutaro Saito
- (54) Method for producing sulfonimidized aromatic compound
[JP-2017-218443 \(特開 2017-218443\)](#)
 Kenichiro Itami, Kei Murakami, Eri Ito, Takahiro Kawakami, Tomohiro Fukushima
- (53) Thiophene ring-condensed aromatic compound and manufacturing method therefor
[JP-2017-218381 \(特開 2017-218381\)](#)
 Kenichiro Itami, Yasutomo Segawa, Lin Qui Meng
- (52) Polysubstituted aromatic compounds and their production methods
 JP-2017-520793 (再表 2016/190374)
 Junichiro Yamaguchi, Kenichiro Itami, Shin Suzuki
- (51) Compound having g turn structure and LSD1 inhibitor using the same
[JP-2017-178811 \(特開 2017-178811\)](#)

- Kenichiro Itami, Junichiro Yamaguchi, Misaho Araki, Takayoshi Suzuki, Yukihiro Ito, Yasusuke Ota, Toshiyuki Sakai, Yoshihiro Sowa, Shin Miyamura
- (50) Palladium complex, coupling reaction using the palladium complex and method for producing organic alkyne compound using the coupling reaction
[JP-2017-160140 \(特開 2017-160140\)](#)
 Junichiro Yamaguchi, Kenichiro Itami, Ryosuke Takise, Kazumasa Kumazawa
- (49) Production method for bi(hetero)aryl(thio)ether compound
[JP-2017-160139 \(特開 2017-160139\)](#)
 Junichiro Yamaguchi, Kenichiro Itami, Ryosuke Takise
- (48) Cross-coupling method and method for producing organic compounds using the cross-coupling method
 JP-2016-573412 (再表 2016/125845)
 Kenichiro Itami, Kei Murakami, Takahiro Kawakami, Djamaladdin G. Musaev, Brandon E. Haines
- (47) Manufacturing method of bipyridyl compound
[JP-2017-132738 \(特開 2017-132738\)](#)
 Kenichiro Itami, Kei Murakami, Takeshi Kaneda, Shuya Yamada
- (46) Cross-coupling method and method for producing organic compounds using the cross-coupling method
 JP-2016-544219 (再表 2016/027809)
 Kenichiro Itami, Junichiro Yamaguchi, Kei Muto
- (45) Fluorescent probe and screening method of striga germination adjustment material using the same
[JP-2017-014152 \(特開 2017-014152\)](#)
 Shinya Hagiwara, Yuichiro Tsuchiya, Masahiko Yoshimura, Kenichiro Itami, Toshinori Kinoshita
- (44) Cyclopolyarylene compound and manufacturing method therefor
[JP-2017-001962 \(特開 2017-001962\)](#)
 Kenichiro Itami, Yasutomo Segawa, Akiko Yagi, Keishu Okada
- (43) Cyclopolyarylene metal complex
[US-20160168179-A1](#)
 Kenichiro Itami, Yasutomo Segawa, Natsumi Kubota
- (42) Polysubstituted aromatic compound and manufacturing method therefor
[JP-2016-216421 \(特開 2016-216421\)](#)
 Junichiro Yamaguchi, Kenichiro Itami, Shin Suzuki
- (41) Latent heat storage material
[JP-2016-190894 \(特開 2016-190894\)](#)
 Ai Nishida, Nobutaka Honma, Takehiko Nakajima, Michihiro Mizoshita, Kenichiro Itami
- (40) Organic photoelectric conversion element and organic thin film solar cell including same
[JP-2016-162982 \(特開 2016-162982\)](#)
 Atsushi Wakamiya, Kenichiro Itami, Yasutomo Segawa, Hidetaka Nishimura, Takao Fujikawa, Naoki Maruyama, Yasujiro Murata
- (39) Cyclopolyarylene metal complex
[JP-2016-113401 \(特開 2016-113401\)](#)
 Kenichiro Itami, Yasutomo Segawa, Natsumi Kubota
- (38) Compound having helix structure and organic nanotube using the same
[JP-2016-056247 \(特開 2016-056247\)](#)
 Hideto Ito, Kenichiro Itami, Kaho Maeda
- (37) Plant circadian rhythm regulating agent
[JP-2016-040231 \(特開 2016-040231\)](#)

- Norito Nakamichi, Junichiro Yamaguchi, Kenichiro Itami, Takahiro Uehara, Kyosuke Omatsu, Yukino Furukawa, Toshinori Kinoshita, Takashi Ooi, Ayato Sato
- (36) Cyclic compound containing functional group or containing no functional group, and method for producing same
[US-9266909-B2](#)
 Kenichiro Itami, Yasutomo Segawa, Haruka Omachi, Sanae Matsuura, Yusuke Nakanishi, Yuuki Ishii
- (35) Carbon nanoring and method for producing a ring-shaped compound suitable as a starting material for production of the same
[EP-2546219-A4](#)
 Kenichiro Itami, Yasutomo Segawa, Shinpei Miyamoto, Haruka Omachi, Sanae Matsuura, Petr Senel
- (34) Ligand, nickel complex comprising the ligand, and reaction using the nickel complex
[US-20160074853-A1](#)
 Kenichiro Itami, Junichiro Yamaguchi, Ryosuke Takise, Eva Koch
- (33) Ligand, nickel complex comprising the ligand, and reaction using the nickel complex
[JP-2015-187092 \(特開 2015-187092\)](#)
 Kenichiro Itami, Junichiro Yamaguchi, Ryosuke Takise, Eva Koch
- (32) Carbon nanoring, method for producing same, compound suitable as starting material for producing the carbon nanoring, and method for producing the compound
[US-9029551-B2](#)
 Kenichiro Itami, Yasutomo Segawa, Haruka Omachi, Sanae Matsuura, Katsuma Matsui
- (31) Plant growth regulator comprising compound having bulky substituent
[JP-2015-089886 \(特開 2015-089886\)](#)
 Kenichiro Itami, Toshinori Kinoshita, Shinya Hagiwara, Koji Takahashi, Masahiko Yoshimura, Hua Zhang, Nils Schroeder
- (30) Plant growth regulator comprising compound having substituent coordinating to zinc
[JP-2015-089885 \(特開 2015-089885\)](#)
 Kenichiro Itami, Toshinori Kinoshita, Shinya Hagiwara, Koji Takahashi, Masahiko Yoshimura
- (29) Carbon nanocages and intermediates thereof, and methods for their production
 JP-2015-502708 (再表 2014/132467)
 Kenichiro Itami, Yasutomo Segawa, Katsuma Matsui
- (28) Coupling method and method for producing aromatic group substituted heterocyclic compounds using the coupling method
 JP-2014-560631 (再表 2014/122811)
 Kenichiro Itami, Junichiro Yamaguchi, Kazuma Amaike, Kei Muto, Ryosuke Takise
- (27) Cyclic compounds containing or not containing functional groups and their production methods
 JP-2014-503546 (再表 2013/133386)
 Kenichiro Itami, Yasutomo Segawa, Haruka Omachi, Sanae Matsuura, Yusuke Nakanishi, Yuuki Ishii
- (26) Method for producing phenyl-substituted heterocyclic derivative
[EP-2774923-B1](#)
 Kenichiro Itami, Junichiro Yamaguchi, Kei Muto
- (25) Production method for phenyl-substituted heterocyclic derivatives
 JP-2013-541690 (再表 2013/065463)
 Kenichiro Itami, Junichiro Yamaguchi, Kei Muto
- (24) Method for producing polycyclic aromatic compound substituted by aryl group

- [US-9056822-B2](#)
Kenichiro Itami, Kenji Mochida, Katsuaki Kawasumi, Yasutomo Segawa, Tomonori Kajino
- (23) Production method for polycyclic aromatic compounds substituted with aryl groups
JP-2013-519551 (再表 2012/169635)
Kenichiro Itami, Kenji Mochida, Katsuaki Kawasumi, Yasutomo Segawa, Tomonori Kajino
- (22) Cyclopolyarylene compound and method of manufacturing same
[US-2014066661-A1](#)
Kenichiro Itami, Yasutomo Segawa, Akiko Yagi
- (21) Cyclopolyarylene compound and method of manufacturing same
JP-2013-503623 (再表 2012/121370)
Kenichiro Itami, Yasutomo Segawa, Akiko Yagi
- (20) Verfahren zur herstellung einer mit einer arylgruppe substituierten polycyclischen aromatischen verbindung
[EP-2730554-A4](#)
Kenichiro Itami, Kenji Mochida, Katsuaki Kawasumi, Yasutomo Segawa, Tomonori Kajino
- (19) Method for producing phenyl-substituted heterocyclic derivative
[EP-2774923-A1](#)
Kenichiro Itami, Junichiro Yamaguchi, Kei Muto
- (18) Carbon nanotube manufacturing method
[EP-2684844-A1](#)
Kenichiro Itami, Yasutomo Segawa, Hisanori Shinohara, Ryo Kitaura
- (17) Carbon nanotube manufacturing method
[US-9527737-B2](#)
- (16) Carbon nanotube manufacturing method
JP-2013-503617 (再表 2012/121354)
Kenichiro Itami, Yasutomo Segawa, Hisanori Shinohara, Ryo Kitaura
- (15) Carbon nanoring and method for producing a ring-shaped compound suitable as a starting material for production of the same
[US-2013324768-A1](#)
Kenichiro Itami, Yasutomo Segawa, Shinpei Miyamoto, Haruka Omachi, Sanae Matsuura, Petr Senel
- (14) Carbon nanoring and method for producing a ring-shaped compound suitable as a starting material for production of the same
JP-2012-504485 (再表 2011/111719)
Kenichiro Itami, Yasutomo Segawa, Shinpei Miyamoto, Haruka Omachi, Sanae Matsuura, Petr Senel
- (13) Method of manufacturing phenyl substitution heterocyclic derivative by coupling process using nickel catalyst
[JP-2012-096999 \(特開 2012-096999\)](#)
Kenichiro Itami, Junichiro Yamaguchi, Jerome Canivet, Ikuya Ban
- (12) Carbon nanoring and method for producing a ring-shaped compound suitable as a starting material for production of the same
JP-2011-553904 (再表 2011/099588)
Kenichiro Itami, Yasutomo Segawa, Haruka Omachi, Sanae Matsuura, Katsuma Matsui
- (11) Nitrogen-containing heterocyclic compound and method for preparing the same
[JP-2011-178752 \(特開 2011-178752\)](#)
Kenichiro Itami, Junichiro Yamaguchi, Debashis Mandal, Atsushi Yamaguchi

- (10) Fullerene derivative, and process for producing the same
[JP-2011-051930 \(特開 2011-051930\)](#)
Kenichiro Itami, Masakazu Nambo
- (9) Compound containing a plurality of olefin bonds and method of selectively manufacturing it
[JP-2005-289987 \(特開 2005-289987\)](#)
Junichi Yoshida, Kenichiro Itami
- (8) Multi-substituted butadiene and selective method for producing the same
[JP-2005-255562 \(特開 2005-255562\)](#)
Junichi Yoshida, Kenichiro Itami
- (7) Multi-substituted pyrimidine and method for selectively producing the same
[JP-2005-255561 \(特開 2005-255561\)](#)
Junichi Yoshida, Kenichiro Itami
- (6) Polysubstituted olefin and method for selectively producing the same
[JP-2005-232036 \(特開 2005-232036\)](#)
Junichi Yoshida, Kenichiro Itami
- (5) Method for breaking carbon-silicon bond by supercritical fluid
[JP-2004-323436 \(特開 2004-323436\)](#)
Junichi Yoshida, Kenichiro Itami, Okitsugu Kajimoto
- (4) 2-pyridylsilane, its production and intermediate, and production of alcohol from 2-pyridylsilane
[US-6548673-B1](#)
Junichi Yoshida, Kenichiro Itami, Seiji Suga
- (3) 2-pyridylsilane, processes for producing and using the same
[US-2003139600-A1](#)
Junichi Yoshida, Kenichiro Itami, Seiji Suga
- (2) Production of 2-pyridylsilane derivative
[JP-2000-256371 \(特開 2000-256371\)](#)
Junichi Yoshida, Kenichiro Itami, Seiji Suga
- (1) 2-pyridylsilane, its production and intermediate, and production of alcohol from 2-pyridylsilane
[JP-2000-256370 \(特開 2000-256370\)](#)
Junichi Yoshida, Kenichiro Itami, Seiji Suga

Plenary, keynote, and invited lectures (460)

- (460) "Toward unexplored "carbon" functions", Special Lecture, Tosoh Cooperation, Ayase, Kanagawa, Japan, May 28th, 2025.
- (459) "Crafting super molecules: Creativity is just connecting things" The Public Lecture Series, The Carbon to Metal Coating Institute (C2MCI), Queen's University, Kingston Frontenac Public Library (public lecture), Kingston, Canada, May 21st, 2025.
- (458) "Toward unexplored "carbon" functions" The Annual General Meeting, The Carbon to Metal Coating Institute (C2MCI), Queen's University (keynote lecture), Kingston, Canada, May 21st, 2025.
- (457) "Toward unexplored "carbon" functions" JACS & JACS Au Summit: Global Trends in Chemistry and Materials Science (keynote lecture), Suzuki Umetaro Hall, RIKEN, Wako, April 22nd, 2025.
- (456) "Toward chemistry for space science" The 2nd Space Utilization Workshop, RIKEN, Wako, April 18th, 2025.
- (455) "Toward unexplored "carbon" functions" CSRS Research Report & Strategic Programs Kickoff Meeting, Suzuki Umetaro Hall, RIKEN, Wako, April 17th, 2025.
- (454) "Toward unexplored "carbon" functions" PRI Kickoff and CPR Farewell Symposium, RIKEN, March 26th, 2025.
- (453) "Connect-and-expand toward big unsolved" The Aida-Itami Brain-storming Meeting, The University of Tokyo, March 10th, 2025.
- (452) "Toward unexplored "carbon" functions" Institute of Chemistry, Academia Sinica, Taipei, Taiwan, November 13th, 2024.
- (451) "Toward unexplored "carbon" functions" The Chemistry Seminar, The University of Tokyo, Komaba, October 22nd, 2024.
- (450) "Toward unexplored "carbon" functions" The Tohoku-branch of the Society of Synthetic Organic Chemistry, Japan, Tohoku University, October 19th, 2024.
- (449) "Toward unexplored "carbon" functions" The Waseda Special Lecture, Waseda University, September 25th, 2024.
- (448) "Toward unexplored "carbon" functions" The 125th CEMS Colloquium, Center for Emergent Matter Science (CEMS), Okochi-Hall, RIKEN, Wako, July 31st, 2024.
- (447) "Passion-oriented and unplanned 19 years in Nagoya" The Farewell Lecture, Noyori Conference Hall, Nagoya University, February 19th, 2024.
- (446) "Molecular nanocarbon synthesis and beyond" The 15th International Kyoto Conference on New Aspects of Organic Chemistry (IKCOC-15), November 8-11th, 2023.
- (445) "Molecular nanocarbon science: Toward untapped fields with untapped molecules" Konika Minolta, Hachioji, Tokyo, November 14th, 2023.
- (444) "Molecular nanocarbon science: Toward untapped fields with untapped molecules" Advanced Materials Development Laboratory, Sumitomo Chemical, Tsukuba, November 13th, 2023.
- (443) "Molecular nanocarbon synthesis and beyond" Institute of Chemistry, Academia Sinica, Taiwan, November 7th, 2023.
- (442) "Catalyst-enabled molecular nanocarbon synthesis and nanocarbon biology" The Organic Synthesis Lecture, Department of Chemistry, University of California, Irvine, California, USA, October 19th, 2023.
- (441) "Synthesis of carbon nanorings and carbon nanobelts" The Organic Synthesis Lecture, Department of Chemistry, University of California, Irvine, California, USA, October 18th, 2023.
- (440) "Molecular nanocarbon synthesis and beyond" The Okamoto PRESTO Alumni Meeting, National Museum of Nature and Science, Ueno, Tokyo, Japan, October 6th, 2023.

- (439) "Catalyst-enabled molecular nanocarbon synthesis and nanocarbon biology" The Job Lecture, Department of Chemistry, Memorial University of Newfoundland, St. John's, NL, Canada, July 13th, 2023.
- (438) "Crafting super molecules: Creativity is just connecting things" The Job Lecture (public lecture), Department of Chemistry, Memorial University of Newfoundland, St. John's, NL, Canada, July 12th, 2023.
- (437) "Synthesis of carbon nanorings and carbon nanobelts" The Job Lecture, Department of Chemistry, Memorial University of Newfoundland, St. John's, NL, Canada, July 12th, 2023.
- (436) "Molecular nanocarbon synthesis and beyond" The 39th Biennial Meeting of the Spanish Royal Society of Chemistry (plenary lecture), The Auditorium – Palacio de Congresos de Zaragoza, Zaragoza, Spain, July 27th, 2023.
- (435) "Toward molecular nanocarbon biology" The Kawagishi specially promoted research project meeting, The Ocean, Hamanako, Shizuoka, Japan, June 1st, 2023.
- (434) "Molecular nanocarbon synthesis and beyond" The Kickoff Symposium of SKCM² (Hiroshima Univ WPI), International Institute for Sustainability with Knotted Chiral Meta Matter (SKCM²), Hiroshima International Conference Center, Hiroshima, Japan, March 21st, 2023.
- (433) "Toward molecular nanocarbon biology" The Paul G. Gassman Lecture, Department of Chemistry, University of Minnesota, Minneapolis, Minnesota, USA, March 16th, 2023.
- (432) "Catalyst-enabled molecular nanocarbon synthesis" The Paul G. Gassman Lecture, Department of Chemistry, University of Minnesota, Minneapolis, Minnesota, USA, March 15th, 2023.
- (431) "Synthesis of carbon nanorings and carbon nanobelts" The Paul G. Gassman Lecture, Department of Chemistry, University of Minnesota, Minneapolis, Minnesota, USA, March 14th, 2023.
- (430) "Molecular nanocarbon science: Toward unexplored fields with unexplored molecules" Special Seminar, Tosoh Corporation, Nanyo, Yamaguchi, Japan, December 16th, 2022.
- (429) "Synthesis of carbon nanorings and carbon nanobelts" Frontiers of EOC: Organic Conjugated Materials (celebrating the 60th anniversary of institute of elemento-organic chemistry), Nankai University, China, November 16th, 2022 (online).
- (428) "Molecular nanocarbon science: From precise synthesis to nanocarbon biology" Special Seminar, Takeda Pharmaceutical Company Limited, November 6th, 2022 (online).
- (427) "Catalyst-enabled molecular nanocarbon synthesis and nanocarbon biology" The Reben Benjamin Sandin Lecture (Lecture 2), Department of Chemistry, University of Alberta, Edmonton, Alberta, Canada, November 1st, 2022.
- (426) "Synthesis of carbon nanorings and carbon nanobelts" The Reben Benjamin Sandin Lecture (Lecture 1), Department of Chemistry, University of Alberta, Edmonton, Alberta, Canada, October 31st, 2022.
- (425) "Toward super molecules: Virtue-creating synthetic chemistry and the power of interdisciplinary research" Japan Society of Physics and Chemistry Education (Tokai Block), Shin-Sakae, Nagoya, October 19th, 2022.
- (424) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" Nagoya University - Jilin University Online Program, Summer Lecture Series, August 4th, 2022 (online).
- (423) "Molecular nanocarbons: Exploring new fields with new molecules" The GTR Lecture, Nagoya University, July 20th, 2022 (online).
- (422) "Molecular nanocarbon synthesis and beyond" The 19th International Symposium on Novel Aromatic Compounds (ISNA19) (plenary lecture), University of Warsaw, Poland, July 6th, 2022.
- (421) "Molecular nanocarbons: Diverse structures, diversity-oriented synthesis, and diverse applications" The 2nd IRTG Joint Symposium (University of Münster and Nagoya University), Münster University, Germany, July 1st, 2022.

- (420) "Virtue-creating synthetic chemistry and the power of interdisciplinary research" The SSH Special Lecture, Meiwa High School, Nagoya, June 21st, 2022.
- (419) "Molecular nanocarbons: Diverse structures, diversity-oriented synthesis, and diverse applications" The 105th Canadian Chemistry Conference and Exhibition, "Diversity and Innovation in Chemistry" (plenary lecture), Calgary TELUS Convention Centre, Calgary, Alberta, Canada, June 17th, 2022.
- (418) "Molecular nanocarbon synthesis and beyond" The 241st ECS Meeting, Nano Chemistry in Japan, Vancouver Convention Center, June 3rd, 2022 (online).
- (417) "Molecular nanocarbons: From precise synthesis to nanocarbon biology" Special Seminar, Department of Chemistry, Indian Institute of Technology Kanpur, India, May 26th, 2022 (online).
- (416) "A decade of ITbM 1.0" The ITbM Workshop (ITbM 2.0 Kickoff Meeting), Nagoya University, May 16th, 2022.
- (415) "Creation of new molecular nanocarbons and applications to materials and biology" The Fine Chemicals Japan 2022 (plenary lecture), Tokyo Big Site, April 20th, 2022.
- (414) "Molecular nanocarbon synthesis and beyond" The ChemSoc (Chemical Society) Lecture, School of Chemistry, University of New South Wales (UNSW) Sydney, Australia, April 7th, 2022 (online).
- (413) "Molecular nanocarbons: From precise synthesis to nanocarbon biology" The 142nd Annual Meeting of the Pharmaceutical Society of Japan (plenary lecture), March 26th, 2022 (online).
- (412) "Toward making unique bioactive molecules" The Chemical Society Meeting, Symposium in Memory of Daisuke Uemura, March 23rd, 2022 (online).
- (411) "Virtue-creating synthetic chemistry and the power of interdisciplinary research" The SSH Special Lecture, Asahigaoka High School, Nagoya, March 14th, 2022.
- (410) "Molecular nanocarbon synthesis and beyond" PNU BK4/BRL International Symposium on Polymer Chemistry, Department of Chemistry, Pusan National University, Korea, March 4th, 2022 (online).
- (409) "Nanocarbon biology" JST Workshop on Life Science and Nanotechnology, January 20th, 2022 (online).
- (408) "Molecular nanocarbon science powered by synthetic chemistry" IRTG 2678 Block Course, Functional pi-Systems: Activation, Interaction, Application (IRTG 2678), Münster University, Germany, January 13th, 2022 (online).
- (407) "Creation of new forms of nanocarbons enabled by C-H activation" The International Chemical Congress of Pacific Basin Societies 2021 (Pacifichem 2021), Recent Advances in C-H Functionalization, December 18th, 2021 (online).
- (406) "Molecular nanocarbon synthesis and beyond" 2021 Materials Research Society - Taiwan International Conference (2021 MRSTIC), November 13-17th, 2021 (virtual conference).
- (405) "Virtue-creating synthetic chemistry and the power of interdisciplinary research" The 80th Anniversary of Toyota-Nishi High School (plenary lecture), November 6th, 2021.
- (404) "Synthesis of new molecular nanocarbons toward nanocarbon-initiated breeding" The 38th Annual Meeting of the Japanese Society for Plant Biotechnology (online), September 9th, 2021.
- (403) "Molecular nanocarbon science powered by synthetic chemistry" EPK Symposium (celebrating E. Peter Kündig's 75th birthday), University of Geneva (online), September 3rd, 2021.
- (402) "Making transformative molecules by interdisciplinary approach" Nagoya University Executive Training Program, Nagoya University, July 28th, 2021.
- (401) "Molecular nanocarbon science powered by synthetic chemistry" ETN CHAIR - C-H Activation for Industrial Renewal - Summer School (online), June 23rd, 2021.
- (400) "Molecular nanocarbon science powered by synthetic chemistry" The Toray Seminar (online), April 16th, 2021.

- (399) "Molecular nanocarbon science powered by synthetic chemistry" The Organic Chemistry and Chemical Biology Colloquium, Department of Chemistry, University of Oxford, UK (online), January 28th, 2021.
- (398) "Making new forms of carbon" The University of Tokyo WISE Program (online), January 20th, 2021.
- (397) "Crazy molecular nanocarbon science including biology" ITbM Workshop, Nagoya University (online), January 18th, 2021.
- (396) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" Chiba University Leading Graduate Program (online), November 27th, 2020.
- (395) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" The 111th Alumni Association of Nagoya University Medical School, Nagoya Kanko Hotel, November 7th, 2020.
- (394) "Precision synthesis of molecular nanocarbons" The 10th CSJ Chemistry Festa (online), October 22nd, 2020.
- (393) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" The 39th Kanazawa Kidney Seminar (online), October 10th, 2020.
- (392) "Exploring chronobiology by synthetic chemistry" Nagoya University GTR Retreat (online), September 25th, 2020.
- (391) "Making beautiful and crazy molecules" Ina Chemical Biology Seminar, Shinshu University (online), July 29th, 2020.
- (390) "Toward making beautiful and crazy molecules" Radiation-driven Biotechnology Seminar (online), June 11th, 2020.
- (389) "Toward making beautiful and crazy molecules" Chem-Station Virtual Symposium (online), May 1st, 2020.
- (388) "Creating new value enabled by interdisciplinary team" Central Japan Quality Control Association, Wink Aichi, Nagoya, February 6th, 2020.
- (387) "Making transformative molecules by interdisciplinary approach" Nagoya University Executive Training Program, Nagoya University, February 5th, 2020.
- (386) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" The Manager Forum, Nagoya Trade & Industry Center, Nagoya Castle Hotel, Nagoya, January 15th, 2020.
- (385) "Making new forms of nanocarbons" The 6th CSRS-ITbM Joint Workshop, Suzuki Umetaro Hall, RIKEN, Wako, Saitama, January 8th, 2020.
- (384) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" The Mitsubishi Chemicals Special Lecture, Mitsubishi Chemicals, Yokohama, December 9th, 2019.
- (383) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" The 130th Sci-tech Salon, Komaba Faculty House, The University of Tokyo, Komaba, Tokyo, October 6th, 2019.
- (382) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" The Academic Night (Kickoff Lecture), Nagoya Innovators Garage, Nadia Park, Sakae, Nagoya, September 26th, 2019.
- (381) "Making new forms of nanocarbons" The 75th CEMS Colloquium, Center for Emergent Matter Science (CEMS), RIKEN, Wako, Saitama, September 18th, 2019.
- (380) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" The Premium Lecture, Medical School, Nagoya University, September 5th, 2019.
- (379) "Combating Striga: Return the pink field back to green by molecules and solve the food crisis in Africa" Africa-Japan Ministerial Dialogue Meeting on STI for SDGs, PACIFICO Yokohama, Yokohama, August 28th, 2019.

- (378) "Toward transformative bio-molecules" The 2nd Workshop on Tidal Power, Prime Central Tower, Nagoya, August 22nd, 2019.
- (377) "Making new forms of nanocarbons" The 18th International Symposium on Novel Aromatic Compounds (ISNA-18), Sapporo Convention Center, Hokkaido, July 22nd, 2019.
- (376) "Making new forms of nanocarbons" The 20th European Symposium in Organic Chemistry (ESOC), Vienna, Austria, July 15th, 2019.
- (375) "Creation of new forms of nanocarbons enabled by C-H activation" The 47th Naito Conference on C-H bond activation and transformation, CHÂTERAISÉ Gateaux Kingdom SAPPORO, Hokkaido, July 3rd, 2019.
- (374) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" The 62nd Annual Meeting of the Japanese Society of Nephrology, Nagoya Congress Center, Aichi, June 22nd, 2019.
- (373) "Changing the world with molecules: Creativity is just connecting things" The Special Lecture, Kariya Highschool, Aichi, June 12th, 2019.
- (372) "Changing the world with molecules: Creativity is just connecting things" The Special Lecture at the Global Leader Program, Gifu Highschool, Gifu, June 11th, 2019.
- (371) "Making new forms of carbon: Creativity is just connecting things" The 29th Banyu Fukuoka Symposium, Kyushu University, Fukuoka, May 25th, 2019.
- (370) "Crafting super molecules: Creativity is just connecting things" The Public Lecture at the 70th Anniversary of Gifu University, Gifu University Satellite Campus, Gifu, May 10th, 2019.
- (369) "Crafting super molecules: Creativity is just connecting things" The Chunichi Cultural Center, April 14th, 2019.
- (368) "Unlimited possibility of molecular nanocarbons" The 7th International Symposium on π -System Figuration, Osaka University, Osaka, March 29th, 2019.
- (367) "Toward making transformative molecules: Creativity is just connecting things" The 1st ICRéDD International Symposium, Hokkaido University, Sapporo, March 12th, 2019.
- (366) "Unlimited possibility of molecular nanocarbons" JST President Lecture, Tokyo, January 23, 2019.
- (365) "Synthetic chemistry meets plant biology and chronobiology" The 1st International Symposium on Chemical Communication (ISCC2019), "Frontier Research on Chemical Communications", Hitotsubashi Hall, National Center of Sciences Building, Tokyo, January 10th, 2019.
- (364) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" The 7th WPI Science Symposium, Nagoya University, December 27th, 2018.
- (363) "Synthetic chemistry meets plant biology and chronobiology" A*STAR, Singapore, December 18th, 2018.
- (362) "Controlled synthesis of molecular nanocarbons" The 10th Singapore International Chemistry Conference (SICC10), Singapore, December 17th, 2018.
- (361) "Making new forms of nanocarbons" The Netherlands Scholar Award for Supramolecular Chemistry 2018, Rijksuniversiteit Groningen, The Netherlands, December 7th, 2018.
- (360) "Making new forms of nanocarbons" The Netherlands Scholar Award for Supramolecular Chemistry 2018, Radboud University Nijmegen, The Netherlands, December 6th, 2018.
- (359) "Making new forms of nanocarbons" The Netherlands Scholar Award for Supramolecular Chemistry 2018, Eindhoven University of Technology, The Netherlands, December 5th, 2018.
- (358) "Synthetic chemistry meets plant biology and chronobiology" CHAIN Conference 'Chemistry for the future - Chemistry for Life', Hotel NH Eindhoven Conference Center, The Netherlands, December 3rd, 2018.
- (357) "Precise synthesis of graphene nanoribbons by living APEX polymerization" The 27th Polymer Materials Forum, The Society of Polymer Science, Funabori, November 21st, 2018.

- (356) "Molecules that change world" The 5th HIRAI Pitch, Cabinet Office, Government of Japan, Tokyo, November 14th, 2018.
- (355) "Exploring plant and animal biology by synthetic chemistry" Nagasaki University Special Lecture, Nagasaki University, October 31st, 2018.
- (354) "Molecular nanocarbon science" Nagasaki University Special Lecture, Nagasaki University, October 30th, 2018.
- (353) "Crafting super molecules: Unlimited possibility enabled by interdisciplinary approach" The 15th Highschool Chemistry Grand Contest, Nagoya City University, October 28th, 2018.
- (352) "Creating powerful molecules" Kobe University Special Lecture, Kobe University, Hyogo, October 18th, 2018.
- (351) "Making new forms of nanocarbons" 2018 International Institute for Nanotechnology Symposium, Hilton Orrington Hotel, Evanston, IL, USA, September 27th, 2018.
- (350) "Exploring molecular nanocarbon science" The Third International Symposium on the Synthesis and Application of Curved Organic π -Molecules & Materials (CURO- π^3), Oxford University, UK, September 5-7th, 2018.
- (349) "Molecular chronobiology enabled by synthetic chemistry" The 13th Annual Meeting of Japanese Society for Chemical Biology, M&D Tower, Tokyo Medical and Dental University, Tokyo, June 13th, 2018
- (348) "Exploring molecular nanocarbon science" The Fusion Conference: The 2nd From Carbon-Rich Molecules to Carbon-Based Materials Conference, Nassau, Bahamas, June 7-10th, 2018.
- (347) "Toward making molecules for future" NHK Cultural Center, NHK Nagoya Center, May 23rd, 2018.
- (346) "Change the world with molecules" Kansai Tachibanakai, Kyoto University, May 12th, 2018.
- (345) "Exploring molecular nanocarbon science" The Guthikonda Lecture, Department of Chemistry, Stanford University, April 25th, 2018.
- (344) "Exploring molecular nanocarbon science" The Rowland Pettit Centennial Visiting Professorship, Department of Chemistry, The University of Texas at Austin, April 20th, 2018.
- (343) "Recent progress of the Institute of Transformative Bio-Molecules" The Ariyama Symposium, The Noyori Conference Hall, Nagoya University, March 27th, 2018.
- (342) "Making a new form of carbon" The 3rd FoS Club Meeting, The Noyori Conference Hall, Nagoya University, March 24th, 2018.
- (341) "Synthesis, properties and applications of molecular nanocarbons" The CSJ Award for Creative Work (Chemical Society of Japan), The 98th Annual Meeting of the Chemical Society of Japan, Nippon University, Funabashi, March 21st, 2018.
- (340) "Exploring molecular nanocarbon science" The 54th Fullerenes-Nanotubes-Graphenes General Symposium, The University of Tokyo, March 12th, 2018.
- (339) "Food innovation (what are new crops?)" Nobel Prize Dialogue Tokyo 2018, Pacifico Yokohama, Yokohama, March 11th, 2018.
- (338) "Exploring molecular nanocarbon science" JSPS Core-to-Core Joint Symposium, University of Münster, Münster, Germany, February 2nd, 2018.
- (337) "Exploring molecular nanocarbon science" Jan-Erling Bäckvall 70th Anniversary Symposium, The Royal Swedish Academy of Sciences, Stockholm, Sweden, January 24th, 2018.
- (336) "Exploring molecular nanocarbon science" CEMS International Symposium on Supramolecular Chemistry and Functional Materials 2018, Ito International Research Center, The University of Tokyo, Tokyo, January 9-10th, 2018.
- (335) "Recent progress in molecular nanocarbon science" Tokai Conference in Shizuoka 2017, B-nest Shizuoka City Industry-University Exchange Center, Shizuoka, December 9th, 2017.

- (334) "Making game-changing molecules" Nagoya University Alumni Meeting, Nagoya University, December 5th, 2017.
- (333) "Exploring molecular nanocarbon science" ACS on Campus, Nagoya University, November 29th, 2017.
- (332) "Molecular nanocarbon science enabled by catalysis" Annual Academic Committee Meeting, State Key Lab of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, November 24th, 2017.
- (331) "Molecular nanocarbon science with carbon nanobelts, tubes, ribbons and saddles" The 5th International Symposium on Transformative Bio-Molecules (ISTbM-5), Institute of Transformative Bio-Molecules, Nagoya University, November 20-21st, 2017.
- (330) "Molecular nanocarbon science enabled by catalysis" Synthetic Organic Chemistry Workshop, The Society of Synthetic Organic Chemistry, Nagai Memorial Hall, Shibuya, November 15th, 2017.
- (329) "Changing the world with molecules" Jishukan Highschool, Aichi, October 27th, 2017.
- (328) "Changing the world with molecules" Handa Highschool, Handa, Aichi, October 26th, 2017.
- (327) "Changing the world with molecules" Takamatsu Daiichi Highschool, Takamatsu, October 25th, 2017.
- (326) "Making a new form of carbon: recent progress in molecular nanocarbon science" The 7th Chemistry Festa, The Chemical Society of Japan, Tower Hall Funabashi, October 17th, 2017.
- (325) "Synthesis of game-changing molecules at the interface of synthetic chemistry, nanocarbon science and life science" The Japan Neurosurgical Society Meeting, Nagoya Congress Center, Nagoya, October 13th, 2017.
- (324) "Synthesis of game-changing molecules at the interface of synthetic chemistry, nanocarbon science and life science" Toyota Technological Institute, Aichi, September 5th, 2017.
- (323) "Recent progress in molecular nanocarbon science" The 10th ChemBio Hybrid Lecture, Department of Chemistry & Biotechnology, The University of Tokyo, Takeda Hall, Tokyo, September 30th, 2017.
- (322) "Making the impossible possible by molecules" ITbM Consortium Workshop, Nagoya University, September 29th, 2017.
- (321) "Making structurally uniform nanocarbons and a new form of carbon" The 1st International Symposium on Catalysis for Sustainable Chemical Synthesis, Joint Symposium of FRAIS/Nagoya IAR, Albert-Ludwigs-Universitat Freiburg, Freiburg, Germany, September 25th, 2017.
- (320) "C-H activation meets plant biology and chronobiology" The ICI Distinguished Lecturer 2017, Department of Chemistry, University of Calgary, Canada, September 22nd, 2017.
- (319) "Making structurally uniform nanocarbons and a new form of carbon" The ICI Distinguished Lecturer 2017, Department of Chemistry, University of Calgary, Canada, September 20th, 2017.
- (318) "Making structurally uniform nanocarbons and a new form of carbon" The Angewandte Chemie Symposium at 150th Anniversary of the Gesellschaft Deutscher Chemiker (GDCh), September 11th, 2017.
- (317) "Synthetic chemistry meets plant biology and chronobiology" Universities of Freiburg-Strasbourg-Nagoya Interdisciplinary and International Summer School, Nagoya University, September 1, 2017.
- (316) "Making game-changing molecules" Asashi Kids Newspaper Forum, Nagoya University, August 26th, 2017.
- (315) "Merging synthetic chemistry, plant biology and animal biology" Mini-symposium of Scientific Research on Innovative Areas "Determining Principles in the Birth of New Plant Species", Nagoya University, August 22nd, 2017.
- (314) "Synthesis of game-changing molecules" Yomiuri Techno Forum Gold Medal Lecture, Yomiuri Shimbun Osaka Building, Osaka, August 5th, 2017.

- (313) "Molecular nanocarbon science enabled by rapid synthesis catalysts" Summer School of Coordination Chemistry, Nishiura Onsen, Aichi, August 2nd, 2017.
- (312) "Merging synthetic chemistry, plant biology and animal biology" IoC-IPMB-ITbM Joint Symposium on New Frontiers by Fusing Chemistry and Biology, Ta-shue Chou Memorial Hall, Institute of Chemistry, Academia Sinica, Taiwan, July 13-14th, 2017.
- (311) "Changing the world with molecules" Special Lecture for Nambu Junior Highschool, Nagoya University, July 10th, 2017.
- (310) "Carbon nanorings, belts, ribbons and saddles" The 12th International Symposium on Macrocyclic and Supramolecular Chemistry (ISMSC), Royal Society of Chemistry, Cambridge, UK, July 2-6th, 2017.
- (309) "Creation of molecular nanocarbons by metal catalysis" The 19th IUPAC International Symposium on Organometallic Chemistry Directed Towards Organic Synthesis (OMCOS-19), Jeju Convention Center, Korea, June 25-29th, 2017.
- (308) "Changing the world with molecules" Kanuma Highschool, Kanuma, Tochigi, June 19th, 2017.
- (307) "Synthesis of game-changing molecules at the interface of synthetic chemistry, nanocarbon science and life science" Sumitomo Dainippon Pharma, June 14th, 2017.
- (306) "Synthesis of game-changing molecules at the interface of synthetic chemistry, nanocarbon science and life science" Nippon Soda Co., Odawara, June 12th, 2017.
- (305) "Synthesis of game-changing molecules" Yomiuri Techno Forum Gold Medal Lecture, Japan Press Center, Tokyo, May 20th, 2017.
- (304) "Synthesis of game-changing molecules" Special Lecture, Gifu University, Gifu, May 15th, 2017.
- (303) "Making structurally uniform nanocarbons and a new form of carbon" Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Prague, April 26th, 2017.
- (302) "Making structurally uniform nanocarbons and a new form of carbon" Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, Poland, April 24th, 2017.
- (301) "Exploring the power of molecules by rapid synthesis catalysts" University of California, Davis, April 21st, 2017.
- (300) "Exploring the power of molecules by rapid synthesis catalysts" Bristol-Myers Seminar, University of California, Berkeley, April 18th, 2017.
- (299) "Exploring the power of molecules by interdisciplinary research" Special Lecture for Freshman, Nagoya University, April 11th, 2017.
- (298) "Exploring molecular nanocarbon science by rapid synthesis catalysts" Hiratsuka Symposium, Kanagawa University, Hiratsuka, March 4th, 2017.
- (297) "Making game-changing molecules" Kyowa Kirin, Shizuoka, February 20th, 2017.
- (296) "Making game-changing molecules" Taisho Pharmaceutical, Saitama, February 6th, 2017.
- (295) "CPP and related carbon nanorings" Fuji Film S-Seminar, Center of Synthetic Organic Chemistry, Fuji Film, Kanagawa, January 17-18th, 2017.
- (294) "C-H coupling catalysts" Fuji Film S-Seminar, Center of Synthetic Organic Chemistry, Fuji Film, Kanagawa, January 17-18th, 2017.
- (293) "Making game-changing molecules" Fuji Film S-Seminar, Center of Synthetic Organic Chemistry, Fuji Film, Kanagawa, January 17-18th, 2017.
- (292) "Making game-changing molecules" WPI Open Lecture, Ministry of Education, Culture, Sports, Science, and Technology, Japan, December 17th, 2016.
- (291) "Exploring the power of molecules by rapid synthesis catalysts" Memorial Symposium on 25 Years of Banyu Symposia, The University of Tokyo, December 3rd, 2016.

- (290) "Synthetic chemistry meets plant biology and chronobiology" The 39th Annual Meeting of The Molecular Biology Society of Japan, Pacifico Yokohama, Kanagawa, November 30th – December 2nd, 2016.
- (289) "Rapid synthesis catalysts meet plant biology and chronobiology" Cold Spring Harbor Asia Conference: Latest Advances in Plant Development and Environmental Response, Awaji Yumebutai International Conference Center, Hyogo, November 29th – December 2nd, 2016.
- (288) "Functional molecules by rapid synthesis catalysts" The 1st ITbM-IoC Joint Workshop, Nagoya University, November 15-17th, 2016.
- (287) "Generation of nanocarbon molecules and biofunctional molecules by rapid synthesis catalysts" The JSPS 116 Committee Symposium on Functional Chemistry, Sakata-Hirata Hall, Nagoya University, November 15-17th, 2016.
- (286) "Synthetic chemistry meets plant biology and chronobiology" Japanese Society for Chronobiology, Nagoya University, Nagoya, November 12th, 2016.
- (285) "Making game-changing molecules" Tosoh Tokyo Research Center, Ayase, Kanagawa, November 7th, 2016.
- (284) "Exploring nanocarbon materials and plant biology by C-H activation" The Holger Erdtman Lecture, KTH, Sweden, October 31st, 2016.
- (283) "Exploring molecular nanocarbon science by rapid synthesis catalysts" Molecular Architectonics Meeting, Chikushi Hall, Chikushi Campus, Kyushu University, October 20-21st, 2016.
- (282) "The power of molecules" Organic Materials Research Center, Toyota Motor Corporation, Toyoda, September 30th, 2016.
- (281) "Exploring molecular nanocarbon science and new biofunctional molecules by rapid synthesis catalysts" Department of Chemistry, Graduate School of Science, Hokkaido University, September 27th, 2016.
- (280) "The power of molecules" The Nagase Prize, Toshin Frontier Sallon Science Seminar, Imperial Hotel Tokyo, Tokyo, September 23rd, 2016.
- (279) "APEX: A new way to rapidly synthesize nanographenes and a new form of carbon" The 2nd International Symposium on the Synthesis and Application of Curved Organic π -Molecules and Materials (CURO- π), University of Oregon, Eugene, Oregon, USA, September 12-14th, 2016.
- (278) "Exploring nanocarbon materials and plant biology by C-H activation" University of Nevada Seminar, Department of Chemistry, University of Nevada, Reno, USA, September 9th, 2016.
- (277) "Exploring nanocarbon materials and plant biology by C-H activation" Treat B. Johnson Lecture, Department of Chemistry, Yale University, USA, September 7th, 2016.
- (276) "Exploring molecular nanocarbon science enabled by rapid synthesis catalysts" Sumitomo Chemical, Advanced Materials Development Laboratory, Tsukuba, August 24th, 2016.
- (275) "Generation of new biofunctional molecules and nanocarbon molecules by rapid synthesis catalysts" Chugai Pharmaceutical Co. Ltd., Kamakura Research Center, Kanagawa, August 2nd, 2016.
- (274) "Generation of nanocarbon molecules and biofunctional molecules by rapid synthesis catalysts" Department of Chemistry, Tohoku University, Sendai, August 1st, 2016
- (273) "Creation of biofunctional molecules and nanocarbon molecules by rapid synthesis catalysts" Summer Symposium of the Japan Society for Process Chemistry, Nagoya Congress Center, Nagoya, July 28-29th, 2016.
- (272) "Making game-changing molecules" Science Colloquium, Graduate School of Science, Nagoya University, Nagoya, July 22nd, 2016.
- (271) "Creation of molecular nanocarbons by C-H functionalization" The 3rd EOC Symposium, Nankai University, Tianjin, China, July 15-17th, 2016.

- (270) "Creating game-changing molecules through merging synthetic chemistry, plant biology and chronobiology" Medicinal Chemistry Seminar, Yatsugatake Royal Hotel, Yamanashi, July 13-15th, 2016.
- (269) "Generation of new biofunctional molecules and nanocarbon molecules by rapid synthesis catalysts" Central Pharmaceutical Research Institute, Japan Tobacco Inc., Takatsuki, Osaka, July 4th, 2016.
- (268) "Plant and animal biology accelerated by C-H activation catalysts" Medicinal Chemistry Meeting, XIV Tateshina, Nagano, June 30th – July 1st, 2016.
- (267) "APEX: A new way to rapidly synthesize nanographenes and a new form of carbon" 2016 Japan-USA Seminar on Polymer Synthesis: Polymer Synthesis for a Sustainable Future, Hilton Niseko Village, Niseko, Hokkaido, June 24-28th, 2016.
- (266) "Accelerated discovery of functional molecules by C-H functionalization" The 1st CCHF-ITbM-IBS Joint Workshop on C-H Functionalization, Nagoya University, June 16-17th, 2016.
- (265) "The power of synthetic chemistry: Providing 'solutions' by molecules" Opening Ceremony of Integrated Research Consortium on Chemical Sciences, Nagoya University, June 22nd, 2016.
- (264) "C-H activation exploring nanocarbon materials and plant biology" College of Chemistry & Materials Science, Northwest University, Xi'an, China, June 15th, 2016.
- (263) "C-H activation exploring nanocarbon materials and plant biology" Frontier Institute of Science and Technology, Xi'an Jiaotong University, Xi'an, China, June 14th, 2016.
- (262) "C-H activation exploring nanocarbon materials and plant biology" School of Chemistry & Chemical Engineering, Shaanxi Normal University, Xi'an, China, June 13th, 2016.
- (261) "Exploring the power of molecules by interdisciplinary research" ITbM Lecture to High School Students, Nagoya University, Nagoya, May 28th, 2016.
- (260) "The power of synthetic chemistry" JCIA Symposium 2016, Japan Chemical Industry Association, Palace Hotel Tokyo, Tokyo, May 26th, 2016.
- (259) "Toward transformative molecules" Yomiuri Science-Technology Forum, Yomiuri Shimbun, Tokyo, May 25th, 2016.
- (258) "Exploring molecular nanocarbon science by rapid synthesis catalysts" Tosoh Corporation, Nanyo Center, Yamaguchi, May 20th, 2016.
- (257) "Creation of new biofunctional molecules by rapid synthesis catalysts" The 25th French-Japanese Symposium on Medicinal and Fine Chemistry, Keio Plaza Hotel Tama, Tama, Tokyo, May 15-18th, 2016.
- (256) "Be unique" G7 Science and Technology Symposium, International Congress Center, Tsukuba, May 15th, 2016.
- (255) "C-H activation exploring nanocarbon materials and plant biology" The 7th SFB Symposium in Münster, University of Münster, Germany, April 22nd, 2016.
- (254) "The power of C-H activation in plant biology" Syngenta Research Center, Stein, Switzerland, April 21st, 2016.
- (253) "Generation of new biofunctional molecules and nanocarbon molecules by rapid synthesis catalysts" Taoka Chemicals, Osaka, April 15th, 2016.
- (252) "Generation of new biofunctional molecules and nanocarbon molecules by rapid synthesis catalysts" Organic and Medicinal Chemistry Seminar, Tsukuba University, Tsukuba, April 13th, 2016.
- (251) "Rapid synthesis catalysts meet plant biology and chronobiology" IIS Seminar, International Institute for Integrative Sleep Science, Tsukuba University, Tsukuba, April 13th, 2016.
- (250) "The power of molecules" Institute for Advanced Research, Nagoya University, April 12th, 2016.

- (249) "Creation of biofunctional molecules and nanocarbon molecules by rapid synthesis catalysts" ICIQ Lecture, Institute of Chemical Research of Catalonia, Tarragona, Spain, April 7th, 2016.
- (248) "Generation of new bio-functional molecules and molecular nanocarbons by C-H activation" The 16th Bristol Synthesis Meeting, University of Bristol, Bristol, UK, April 5th, 2016.
- (247) "Single-molecule carbon nanotubes, nanoribbons, and a new form of carbon" Japan-US Joint Symposium "Nanocarbon Minisymposium in Honor of ACS President Donna Nelson" The 96th Chemical Society of Japan Annual Meeting, Doshisha University, Kyoto, March 26th, 2016.
- (246) "Creation of biofunctional molecules and nanocarbon molecules by rapid synthesis catalysts" The Ta-shue Chou Lectureship Award Symposium, Institute of Chemistry, Academia Sinica, Taiwan, March 18th, 2016.
- (245) "Creation of biofunctional molecules and nanocarbon molecules by rapid synthesis catalysts" National Chiao-Tung University, Hsinchu, Taiwan, March 16th, 2016.
- (244) "Synthesis of molecular nanocarbons powered by catalysis" Department of Chemistry, National Cheng Kung University, Tainan, Taiwan, March 15th, 2016.
- (243) "Single-molecule carbon nanotubes, nanoribbons, and a new form of carbon" MANA International Symposium 2016, Tsukuba International Congress Center, March 9th, 2016.
- (242) "New biofunctional molecules by rapid synthesis catalysts" The Symposium on Chemical Biology of Natural Products, Kyoto University, Kyoto, February 23rd, 2016.
- (241) "Single-molecule carbon nanotube, nanoribbon, and a new form of carbon" AIMR International Symposium 2016, Advanced Institute for Materials Science, Tohoku University, Sendai, February 21-24th, 2016.
- (240) "Single-molecule carbon nanotubes, nanoribbons, and a new form of carbon" The 5th International Conference on MEXT Project of Integrated Research on Chemical Synthesis, Nagoya University, January 30th, 2016.
- (239) "Creation of new carbon materials by C-H functionalization" The 3rd CCHF Virtual Symposium on C-H Functionalization, NSF Center for Selective C-H Functionalization, January 19th, 2016.
- (238) "Exploring biofunctional molecules and nanocarbon molecules by rapid synthesis catalysts" IMS Colloquium, Institute for Molecular Science, Okazaki, Aichi, January 15th, 2016.
- (237) "Exploring biofunctional molecules and nanocarbon molecules by rapid synthesis catalysts" Frontier Seminar, Hotel New Otani Tokyo, January 7th, 2016.
- (236) "Exciting progress of ITbM" The 2nd CSRS-ITbM Joint Workshop, RIKEN, Wako, January 7th, 2016.
- (235) "Materials- and biology-oriented C-H activation" Pacifichem Symposium on C-H Functionalization, Hawaii, USA, December 15-20th, 2015.
- (234) "Synthesis of 1D, 2D, 3D molecular nanocarbons" Pacifichem Symposium on Chemistry of Nanocarbons, Hawaii, USA, December 15-20th, 2015.
- (233) "Showing the power of molecules by interdisciplinary research" ITbM Lecture to High School Students, Nagoya University, Nagoya, December 12th, 2015.
- (232) "Maximizing the power of molecules by interdisciplinary research" SSH Special Lecture, Handa High School, Aichi, Japan, December 5th, 2015.
- (231) "Single-molecule carbon nanotubes, nanoribbons, and a new form of carbon" R. C. Fuson Visiting Professor Lecture, University of Illinois at Urbana-Champaign, Illinois, USA, November 16th, 2015.
- (230) "Synthesis and discovery of bio-functional molecules by C-H activation" R. C. Fuson Visiting Professor Lecture, University of Illinois at Urbana-Champaign, Illinois, USA, November 16th, 2015.
- (229) "Catalyst-enabling plant/animal biology and nanocarbon science" Special Lecture of Ajinomoto Institute for Innovation, Kawasaki, Kanagawa, October 22nd, 2015.

- (228) "Rapid discovery of functional molecules by C-H activation" The 5th Chemistry Festa, Tower Hall Funabashi, Tokyo, October 13th, 2015
- (227) "Synthesis of 1D, 2D, 3D molecular nanocarbons" The 3rd Erlangen Symposium on Synthetic Carbon Allotropes, Universität Erlangen-Nürnberg, Erlangen, Germany, October 4-7th, 2015.
- (226) "Making transformative bio-molecules by chemistry-biology Mix-Lab" Opening Lecture at Aichi Science Festival, Nagoya University, September 19th, 2015.
- (225) "Synthesis and discovery of bio-functional molecules by C-H activation" Kumiai Chemical Special Lecture, Kakegawa, Shizuoka, September 11th, 2015.
- (224) "Power of molecules: Merging synthetic chemistry and plant/animal biology" Kumiai Chemical Special Lecture, Kakegawa, Shizuoka, September 11th, 2015.
- (223) "Mix is the key! Maximizing the power of molecules by interdisciplinary research" Seminar of Interactive Materials Science Cadet Program, Osaka University, Shiga, August 30th, 2015.
- (222) "Power of molecules: Merging synthetic chemistry, biology, and materials science" The Chemistry Grand Prix Special Lecture, Nagoya University, August 22nd, 2015.
- (221) "Catalyst-enabling nanocarbon science & plant/animal biology" The Arthur C. Cope Scholar Award, Boston Convention & Exhibition Center, Boston, USA, August 18th, 2015.
- (220) "Single-molecule carbon nanotubes, nanoribbons, and a new form of carbon" CREATE Symposium on Chirality, Queen's University, Kingston, Canada, August 13-14th, 2015.
- (219) "Materials- and biology-oriented C-H activation" The 62nd Gordon Research Conference on Organic Reactions and Processes, Bates College, Maine, USA, July 19-24th, 2015.
- (218) "Synthesis of 1D, 2D, 3D molecular nanocarbons" The 16th International Symposium on Novel Aromatic Compounds (ISNA-16), Madrid, Spain, July 5- 9th, 2015.
- (217) "Materials- and biology-oriented C-H activation" National Organic Chemistry Symposium (NOS), University of Maryland, June 28th – July 2nd, 2015.
- (216) "Mix is the key! Maximizing the power of molecules by interdisciplinary research" Synthetic Organic Chemistry Seminar, Mie, Japan, June 19-20th, 2015.
- (215) "Power of molecules: Merging synthetic chemistry, biology, and materials science" Super Science Special Lecture, Okazaki High School, Okazaki, Aichi, June 15th, 2015.
- (214) "Catalysis for carbon materials and plant/animal biology" Gifu Pharmaceutical University, Gifu, Japan, June 12th, 2015.
- (213) "Catalysis for carbon materials and plant/animal biology" Organoelement Chemistry Seminar, Kyoto University, Uji, Japan, June 8th, 2015.
- (212) "Materials- and biology-oriented C-H activation" RSC Organic Chemistry Symposium, Kyoto, Japan, June 5th, 2015.
- (211) "Showing the power of molecules by interdisciplinary research" ITbM Lecture to High School Students, Nagoya University, Nagoya, May 30th, 2015.
- (210) "C-H activation catalysis for plant/animal biology and nanocarbon science" Ono Pharmaceutical, Minase, Osaka, May 15th, 2015.
- (209) "Catalysis for carbon materials and plant/animal biology" Okayama University, Okayama, Japan, May 13th, 2015.
- (208) "Catalysis for carbon materials and plant/animal biology" Chiba University, Chiba, Japan, May 8th, 2015.
- (207) "Nanocarbon science and plant/animal biology Enabled by Molecule-Connecting Catalysts" Seminar of Kyoto University Kokakai, Shinagawa, Japan, April 24th, 2015.
- (206) "C-H activation catalysis for carbon materials and plant/animal biology" The Swiss Chemical Society Lectureship, Université de Geneve, Switzerland, April 17th, 2015.

- (205) "C-H activation catalysis for carbon materials and plant/animal biology" The Swiss Chemical Society Lectureship, Ecole Polytechnique Fédérale de Lausanne, Switzerland, April 16th, 2015.
- (204) "C-H activation catalysis for carbon materials and plant/animal biology" The Swiss Chemical Society Lectureship, Universität Bern, Switzerland, April 15th, 2015.
- (203) "C-H activation catalysis for carbon materials and plant/animal biology" The Swiss Chemical Society Lectureship, Universität Basel, Switzerland, April 14th, 2015.
- (202) "C-H activation catalysis for carbon materials and plant/animal biology" The Swiss Chemical Society Lectureship, Université de Neuchâtel, Switzerland, April 13th, 2015.
- (201) "Materials- and biology-oriented C-H activation" ETH Zurich, Switzerland, April 10th, 2015.
- (200) "Catalysis for carbon materials and plant/animal biology" Princeton University, April 7th, 2015.
- (199) "Catalysis for carbon materials and plant/animal biology" Harvard University, April 6th, 2015.
- (198) "Catalysis for carbon materials and plant/animal biology" The MBLA 10th Anniversary Symposium, Funabashi, Chiba, March 29th, 2015.
- (197) "C-H activation for plant/animal biology and carbon materials" Wuhan University, Wuhan, China, March 18th, 2015.
- (196) "C-H activation catalysts accelerating plant/animal biology and materials science" Takeda Pharmaceutical, Osaka, Japan, March 11th, 2015.
- (195) "Catalysis for carbon materials and plant/animal biology" Department of Chemistry, Seoul National University, Korea, February 3rd, 2015.
- (194) "Catalysis for carbon materials and plant/animal biology" 2015 IBS-KAIST&ITbM Joint Symposium, KAIST, Korea, February 2nd, 2015.
- (193) "A new journey with ITbM" The 1st CSRS-ITbM Joint Workshop, Nagoya University, Nagoya, January 7th, 2015.
- (192) "C-H activation catalysts for plant/animal biology and nanocarbon science" The 5th Symposium of Integrated Research on Chemical Synthesis, Nagoya University, Nagoya, December 19th, 2014.
- (191) "Catalysis for carbon materials and plant/animal biology" Department of Chemistry, Graduate School of Science, The University of Tokyo, Japan, December 11-12th, 2014.
- (190) "Catalysis for materials science and advanced biology" University of Shizuoka, Shizuoka, December 5th, 2014.
- (189) "A new journey with ITbM" University of Shizuoka, Shizuoka, December 5th, 2014.
- (188) "Catalysis for carbon materials and plant/animal biology" The 18th IRTG Joint Symposium and Core-to-Core Seminar, Munster, November 27-29th, 2014.
- (187) "The power of molecules and making molecules" SSH Lecture, Suwa Seiryō High School, Nagano, November 22nd, 2014.
- (186) "Exploring nanocarbon materials science and advanced biology by C-H functionalization" The Murai Symposium, Nara, October 30-31st, 2014.
- (185) "Catalyst-enabling molecular nanocarbon chemistry" International Symposium on the Synthesis and Application of Curved Organic π -Molecules and Materials, Uji, Kyoto, October 19-21st, 2014.
- (184) "Future materials science" The 11th Science and Technology in Society Forum (STS forum), Kyoto, October 5-7th, 2014.
- (183) "Toward molecular nanocarbon science" The Fusion Conference "From Carbon-Rich Molecules to Carbon-Based Materials, Mazagan Beach Resort, Morocco, September 22-25th, 2014.
- (182) "Catalysis for materials science and advanced biology" The Otsuka Symposium, September 16-17th, 2014.
- (181) "Toward molecular nanocarbon science" The 4th Young Researcher Meeting of Fullerene-Nanotube-Graphene Society, Nagoya, September 2nd, 2014.

- (180) "C-H coupling for synthetic bio-molecules and nanocarbons" Astellas Pharma Inc., Ibaraki, Japan, June 17th, 2014.
- (179) "C-H coupling for advanced biology and materials" The 3rd Frontier Chemistry Center International Symposium, Hokkaido University, Sapporo, Japan, June 13-14th, 2014.
- (178) "C-H coupling: An emerging tool for discovering synthetic bio-molecules" The International Symposium on Chemical Biology of Natural Products: Target ID and Regulation of Bioactivity, Nagoya, Japan, May 28-29th, 2014.
- (177) "C-H coupling catalysts: Enabling tools for advanced biology and materials" The IGER International Symposium on Chemical Science in Asia: Facilitating Singapore-Japan Scientific Interchange, Nagoya, Japan, May 26-28th, 2014.
- (176) "Catalysis and C-H activation for advanced biology and materials science" The 49th EUCHEM Conference on Stereochemistry "Bürgenstock Conference", Seehotel Waldstätterhof Brunnen, Brunnen, Switzerland, May 4-9th, 2014.
- (175) "C-H coupling for synthetic bio-molecules and nanocarbons" Wuhan University Special Lecture, Wuhan University, Wuhan, China, April 21st, 2014.
- (174) "Catalyst-enabling chemistry toward transformative molecules" Nankai University Lectureship on Organic Chemistry, Nankai University, Tianjin, China, April 18th, 2014.
- (173) "Toward molecular nanocarbon science" The 94th Annual Meeting of the Chemistry Society of Japan, Nagoya, Japan, March 30th, 2014.
- (172) "Catalyst-enabling chemistry toward transformative molecules" Aldrich Lecture, Emory University, Atlanta, USA, March 22nd, 2014.
- (171) "C-H coupling for synthetic bio-molecules and nanocarbons" Advances in C-H Functionalization, The 247th ACS National Meeting, Dallas, Texas, USA, March 16-20th, 2014.
- (170) "ITbM: A merger of synthetic chemistry, plant/animal biology, and theoretical chemistry" The Ariyama Symposium, Nagoya University, Japan, March 11th, 2014
- (169) "A journey toward transformative molecules: Creating value by synthetic chemistry" SSH Special Lecture, Handa Space Science Museum, Aichi, Japan, February 8th, 2014.
- (168) "Synthetic chemistry: Connect molecules, create values" The Cutting-Edge Academic Forum, Chubu University, Nagoya, Japan, January 29th, 2014.
- (167) "Toward molecular nanocarbon science" The Japanese Research Association for Organic Electronics Materials, Shinjuku, Japan, January 23rd, 2014
- (166) "Catalyst-enabling chemistry toward transformative molecules" Novartis Chemistry Lecture, Boston College, USA, January 15th, 2014.
- (165) "Catalyst-enabling chemistry toward transformative molecules" Novartis Chemistry Lecture, Novartis Cambridge, USA, January 14th, 2014.
- (164) "Catalyst-enabling chemistry toward transformative molecules" Novartis Chemistry Lecture, Harvard University, USA, January 13th, 2014.
- (163) "Catalyst-enabling chemistry toward transformative molecules" Novartis Chemistry Lecture, Novartis Emeryville, USA, January 10th, 2014.
- (162) "Catalyst-enabling chemistry toward transformative molecules" Novartis Chemistry Lecture, GNF, USA, January 8th, 2014.
- (161) "Catalyst-enabling chemistry toward transformative molecules" Novartis Chemistry Lecture, The Scripps Research Institute, USA, January 7th, 2014.
- (160) "Toward innovative material ITAMIN" The 3rd WPI Joint Symposium, Sendai, Japan, December 14th, 2013.

- (159) "Catalyst-enabling chemistry toward transformative molecules" International Symposium on Catalysis and Fine Chemicals 2013, Keynote Lecture, Renmin University, Beijing, China, December 2nd, 2013.
- (158) "Catalyst-enabling chemistry toward transformative molecules" Cambridge Catalysis Symposium, University of Cambridge, UK, November 22nd, 2013.
- (157) "Catalyst-enabling chemistry toward transformative molecules" Novartis Chemistry Lecture, Horsham, UK, November 21st, 2013.
- (156) "Catalyst-enabling chemistry toward transformative molecules" Novartis Chemistry Lecture, Basel, Switzerland, November 20th, 2013.
- (155) "A journey toward transformative molecules: Creating value by synthetic chemistry" Academic Lecture, Nagoya University Homecoming Day, Japan, October 19th, 2013.
- (154) "Controlled bottom-up synthesis of molecular nanocarbons" UK-Japan Workshop on Organic-Inorganic Framework Materials, Kyoto University iCeMS, Kyoto, Japan, October 10-11th, 2013.
- (153) "A journey toward transformative molecules: New challenges in ITbM" Special Lecture, RIKEN Center for Sustainable Resource Science Symposium, Iino Conference Center, Tokyo, Japan, October 10th, 2013.
- (152) "Catalyst-enabling chemistry toward transformative molecules" JCO-2013 Symposium (Plenary Lecture), French Chemical Society, Paris, France, September 24-26th, 2013.
- (151) "Catalyst-enabling chemistry toward transformative molecules" Mukaiyama Award, The 30th Synthetic Organic Chemistry Seminar, Kurashiki, Okayama, Japan, September 18-19th, 2013.
- (150) "Catalysis and synthesis for transformative molecules" ACP Award Lecture, Shanghai Institute of Organic Chemistry, China, September 2nd, 2013.
- (149) "Catalysis and synthesis for transformative molecules" ACP Award Lecture, Wuhan University, China, August 30th, 2013.
- (148) "Toward transformative arene-assembled molecules" Asian Rising Star Award Lecture, The 15th Asian Chemical Congress, Resorts World Sentosa Convention Centre, Singapore, August 20th, 2013.
- (147) "A journey toward transformative molecules: Breakthrough in arene-assembling chemistry" Special Lecture, Department of Chemistry, Faculty of Science, Kanagawa University, Japan, July 26th, 2013.
- (146) "Organic synthesis: Connect molecules, create values" Aichi Science and Mathematics Education Promotion Project "Seminar for the pursuit of knowledge", Aichi Prefecture Education Center, Japan, July 25th, 2013.
- (145) "A journey toward transformative molecules: Breakthrough in arene-assembling chemistry" I²CNER Seminar, WPI-I²CNER, Kyushu University, Japan, July 19th, 2013.
- (144) "A journey toward transformative molecules: Breakthrough in arene-assembling chemistry" Invited Lecture, The 46th Meeting for Young Organometallic Chemists Summer School, Miyagi Zao Royal Hotel, Japan, July 8-10th, 2013.
- (143) "Organic synthesis: Connect molecules, create values", Ichinomiya High School, Aichi, Japan, July 4th, 2013.
- (142) "Toward transformative arene-assembled molecules" The 14th Tetrahedron Symposium, Vienna, Austria, June 25-28th, 2013.
- (141) "A journey toward transformative molecules: Breakthrough in arene-assembling chemistry" Japan Association for Chemical Innovation, The Advanced Chemistry/Materials Technology Subcommittee, New Materials Symposium, Japan, June 17th, 2013.
- (140) "Nagoya University Institute of Transformative Bio-Molecules" RaQualia Pharma Seminar, RaQualia Pharma, Japan, June 12th, 2013.

- (139) "A journey toward transformative molecules: Breakthrough in arene-assembling chemistry" RaQualia Pharma Seminar, RaQualia Pharma, Japan, June 12th, 2013.
- (138) "Toward transformative molecules by C-H coupling" Canadian Chemistry Conference & Exhibition, Quebec, Canada, May 26-29th, 2013.
- (137) "Toward transformative arene-assembled molecules" Stockholm University Special Lecture, Stockholm, Sweden, May 22nd, 2013.
- (136) "Toward transformative arene-assembled molecules" International Symposium "Templates in Chemistry – Present and Future", Bonn, Germany, May 16-17th, 2013.
- (135) "Toward transformative molecules: Catalyst-enabling synthetic chemistry" Munster University Special Lecture, Munster, Germany, May 14th, 2013.
- (134) "Toward transformative molecules: Catalyst-enabling synthetic chemistry" The 1st International Symposium on Transformative Bio-Molecules, Nagoya, Japan, April 18-19th, 2013.
- (133) "Development and evolution of Nagoya University, Graduate School of Science, Department of Chemistry" The 7th Alumni Meeting of Department of Chemistry, Graduate School of Science, Nagoya University, Japan, April 6th, 2013.
- (132) "Connect molecules, create value: Toward transformative molecules" Special Program Lecture, The 93rd Annual Meeting of the Chemistry Society of Japan Special Program "A New Paradigm for "MONODUKURI": Initiated with Innovative Synthetic Transformations", Ritsumeikan University, Kusatsu, Shiga, Japan, March 22nd, 2013.
- (131) "A journey toward transformative molecules" Teijin 21st Century Forum, Fuji Institute of Education and Training, Shizuoka, Japan, January 26-27th, 2013.
- (130) "Toward controlled synthesis of carbon nanotubes and nanographenes" International Symposium on Frontiers of Macrocyclic and Supramolecular Chemistry, Tsinghua University, Beijing, China, December 20-22nd, 2012.
- (129) "Synthesis of cycloparaphenylenes directed towards controlled synthesis of carbon nanotubes" Tokuyama Foundation Results Presentation, Japan, December 13-14th, 2012.
- (128) "Toward controlled synthesis of carbon nanotubes and nanographenes" 2012 Japan-USA Seminar on Polymer Synthesis: Advances at the Interface of Sustainability and Polymer Synthesis, Santa Barbara, California, USA, December 1-5th, 2012.
- (127) "Organic synthesis: Connect molecules, create values" 2012 Synthetic Organic Chemistry Autumn Seminar of The Society of Synthetic Organic Chemistry, Japan, The Pharmaceutical Society of Japan Nagai Memorial Hall, Shibuya, Tokyo, Japan, November 20-21st, 2012.
- (126) "Chemistry of Nagoya University" Nagoya University Homecoming Day, Japan, October 20, 2012.
- (125) "Toward transformative molecules by C-H coupling" The 1st Symposium of C-H Activation, Peking University, Beijing, China, October 5-8th, 2012.
- (124) "Connect molecules and create values through coupling: New reactions, catalysts, bioactive compounds, and nanocarbons" Advanced Catalytic Transformation Symposium, Tokyo Institute of Technology, Ookayama, Tokyo, Japan, September 21st, 2012.
- (123) "Toward transformative arene-assembling chemistry" The 70th Anniversary Symposium of the Society of Synthetic Organic Chemistry, Japan, Shizuoka Convention & Art Center "GRANSHIP", Shimizu, Shizuoka, Japan, September 5-7th, 2012.
- (122) "Chemistry of Nagoya University" Nagoya University Open Campus, Japan, August 10th, 2012.
- (121) "Arene assembly through C-H coupling: New catalysts and applications" The 7th Asian European Symposium on Metal-Mediated Efficient Organic Synthesis, ICIQ, Tarragona, Spain, July 22-25th, 2012.
- (120) "Organic synthesis: Connect molecules, create values" Nagoya University's Lecture at Kawaijuku Educational Institution, Kawaijuku Chikusa School, Japan, July 15th, 2012.

- (119) "Organic synthesis: Connect molecules, create values" Koei Chemical Company Special Seminar, Koei Chemical Company Limited, Sodegaura, Chiba, Japan, June 20th, 2012.
- (118) "Challenges in arene-assembling chemistry" The 7th International Conference on Advancing the Chemical Sciences (ISACS 7), University of Edinburgh, UK, June 12-15th, 2012.
- (117) "Chemistry of Nagoya University" Nagoya University Graduate School Orientation Meeting, Nagoya University, Japan, June 9th, 2012.
- (116) "Organic synthesis: Connect molecules, create values" The 23rd Banyu Sendai Symposium, Sendai International Center, Sendai, Japan, June 2nd, 2012.
- (115) "Innovative arene-assembled materials through green chemical processes", German Innovation Award Presentation, Hotel New Otani, Tokyo, Japan, May 18th, 2012.
- (114) "Organic synthesis: Connect molecules, create values" Ministry of Finance Special Presentation, Nagoya University, Japan, May 15th, 2012.
- (113) "Recent advances in C-H functionalization" Wuhan University Special Lecture, Wuhan University, Wuhan, China, April 23rd, 2012.
- (112) "Organic synthesis: Connect molecules, create values" Shionogi Special Seminar, Shionogi & Co., Ltd., Osaka, Japan, March 16th, 2012.
- (111) "Challenges in arene-assembling chemistry" Ehime University, Matsuyama, Ehime, Japan, March 14th, 2012.
- (110) "Toward controlled synthesis of carbon nanotubes" Grant-in-Aid for Scientific Research on Innovative Areas, "Emergence of Highly Elaborated π -Space and Its Function" Open Symposium, Matsuyama, Japan, March 13-14th, 2012.
- (109) "Challenges in arene-assembling chemistry" Department of Applied Chemistry, School of Engineering, The University of Tokyo Symposium, Hongo, Tokyo, Japan, March 3rd, 2012.
- (108) "Challenges in arene-assembling chemistry" Harvard University, USA, February 3rd, 2012.
- (107) "Challenges in arene-assembling chemistry" Novartis-MIT Lecture in Organic Chemistry, Massachusetts Institute of Technology, USA, February 2nd, 2012.
- (106) "Challenges in arene-assembling chemistry" Boston College, USA, February 1st, 2012.
- (105) "Challenges in arene-assembling chemistry" Osaka University, Japan, January 26-27th, 2012.
- (104) "Chemistry of Nagoya University" Department of Chemistry Orientation Meeting, Nagoya University, Japan, December 21st, 2012.
- (103) "Catalytic C-H bond functionalization: Emerging tools for pharmaceuticals, natural products, and organic materials" The 6th International Conference on Cutting-Edge Organic Chemistry in Asia (ICCEOCA-6), The Chinese University of Hong Kong, December 11-15th, 2011.
- (102) "Toward controlled synthesis of carbon nanotubes and nanographenes" Japan Society for the Promotion of Science University-Industry Research Cooperation Committee (The 181st Committee on Multifunctional Molecular Electronics) Research Meeting, Museum & Centennial Hall, Tokyo Institute of Technology, Japan, December 7-8th, 2011.
- (101) "Direct arylation of polycyclic aromatic hydrocarbons" The 11th Tateshina Conference on Organic Chemistry, Japan, November 11-13th, 2011.
- (100) "New aspects in arene-assembling chemistry: New reactions, catalysts, pharmaceuticals, natural products, and nanocarbons" The 7th International BASF Boron Conference, Roppongi Academy Hills, Tokyo, Japan, November 9-10th, 2011.
- (99) "Organic synthesis: Connect molecules, create values; Architect on the Nano-scale" The Chemistry Society of Japan Tokai Branch "Invitation to Chemistry "super organic materials", Nagoya University Noyori Conference Hall, Japan, November 5th, 2011.

- (98) "Organic synthesis: Connect molecules, create values" Japan-Singapore Chemicals R&D Conference 2011 "Innovation for Sustainable Growth", A*Star, Biopolis, Singapore, October 20-21st, 2011.
- (97) "Challenges in arene-assembling chemistry" Toray Special Seminar, Toray Pharmaceutical Research Laboratory, Fujisawa, Japan, October 11th, 2011.
- (96) "Challenges in arene-assembling chemistry" ETH Seminar of Organic Chemistry, ETH Zurich, Switzerland, September 26th, 2011.
- (95) "Toward controlled synthesis of carbon nanotubes" Nozoe Memorial Award Lecture, The 22nd Symposium on Physical Organic Chemistry, International Congress Center, Tsukuba, Japan, September 22nd, 2011.
- (94) "Synthesis and properties of multisubstituted olefins and fullerenes" Wuhan University Special Lecture, Wuhan University, China, September 8th, 2011.
- (93) "Challenges in arene-assembling chemistry" Wuhan University Special Lecture, Wuhan University, China, September 5th, 2011.
- (92) "Toward controlled synthesis of carbon nanotubes and graphenes: New strategy and catalysts for arene assembly" The 1st Symposium on "New Frontiers in Organic Chemistry: Towards Cleaner, Greener Chemical Processes" Beijing Chateau Laffitte Hotel, Beijing, China, September 1-4th, 2011.
- (91) "Chemistry of Nagoya University" Nagoya University Open Campus, Japan, August 10th, 2011.
- (90) "Toward controlled synthesis of carbon nanotubes and graphenes" The 14th International Symposium on Novel Aromatic Compounds (ISNA-14), University of Oregon, Eugene, Oregon, USA, July 24-29th, 2011.
- (89) "Chemistry of Nagoya University" Nagoya University Graduate School Orientation Meeting, Nagoya University, Japan, June 18th, 2011.
- (88) "Toward controlled synthesis of nanocarbons" The 11th IRTG Munster-Nagoya Joint Symposium, University of Munster, Germany, May 9-10th, 2011.
- (87) "Challenges in arene-assembling chemistry" The 5th Mitsui Chemicals International Symposium on Catalysis Science (MICS2011), Kazusa Academia Hall, Kisarazu, Chiba, Japan, March 9-10th, 2011.
- (86) "Connect molecules, create values by cross-coupling: Architect on the nano-scale, Nobel Prize in Chemistry and the future" The 11th Science Cafe in Nagoya by the Science Council of Japan, Daitec Sakae, Nagoya, Japan, February 26th, 2011.
- (85) "Challenges in arene-assembling chemistry" The 1st International Conference on MEXT Project of Integrated Research on Chemical Synthesis "Advanced Chemical Methodology for Creating Materials", Catalysis Research Center, Hokkaido University, Japan, January 24-25th, 2011.
- (84) "C-H bond arylation of arenes through Rh, Ir, Cu, Pd, and Ni catalysis" The International Chemical Congress of Pacific Basin Societies (Pacifichem 2010), #1964, Honolulu, USA, December 19th, 2010.
- (83) "Molecular catalysis for nanocarbon chemistry" The International Chemical Congress of Pacific Basin Societies (Pacifichem 2010), #16, Honolulu, USA, December 15th, 2010.
- (82) "3D organic architectural chemistry" JST-PRESTO Structure Control and Function Final Symposium, Tokyo Garden Palace, Ochanomizu, Tokyo, Japan, December 9th, 2010.
- (81) "Cycloparaphenylenes: Synthesis, structures, and properties" The 10th IRTG Münster-Nagoya Joint Seminar, University of Münster, Germany, November 30th, 2010.
- (80) "Cycloparaphenylenes: Synthesis, structures, and properties" The 10th Tateshina Conference on Organic Chemistry, Tateshina Forum, Nagano, Japan, November 12-14th, 2010.

- (79) "Cycloparaphenylenes: Synthesis, structures, and properties" Hangzhou Symposium on Supramolecular Systems and Biomaterials, Zhejiang University, Hangzhou, China, October 31st, 2010.
- (78) "Challenges in arene-assembling chemistry" The 20th Symposium on Optically Active Compounds, Tokyo, Japan, October 29th, 2010.
- (77) "Cycloparaphenylenes: Synthesis, structures, and properties" International Symposium on Polyaromatics, National Taiwan University, Taiwan, October 9th, 2010.
- (76) "Challenges in arene-assembling chemistry" Sumitomo Chemicals Special Lecture, Sumitomo Chemical Company IT-Related Chemicals Research Laboratory, Osaka, Japan, September 30th, 2010.
- (75) "Challenges in arene-assembling chemistry" JAI Seminar in Aichi, Abo Hall, Nagoya, Japan, September 28th, 2010.
- (74) "Cycloparaphenylenes: Synthesis, structures, and properties" China-Japan Symposium on Catalytic Organic Synthesis, Nankai University, Tianjin, China, September 25th, 2010.
- (73) "Have we gone the right path in the last 10 years" Noyori Forum 10th Anniversary Lecture, Hotel Pacific Tokyo, Japan, September 4th, 2010.
- (72) "Cycloparaphenylenes: Synthesis, structures, and properties" New Directions for the Electron State Theory Symposium, Okazaki Conference Center, Aichi, Japan, August 10th, 2010.
- (71) "Challenges in arene-assembling chemistry" The 42nd Meeting for Young Structural Organic Chemists, Hotel Honnoji, Kyoto, Japan, August 6th, 2010.
- (70) "Chemical synthesis of aromatic carbon nanorings" Japan-China Joint Symposium on Functional Supramolecular Architectures, Jilin University, Changchun, China, July 25th, 2010.
- (69) "Challenges in arene-assembling chemistry" The 12th Belgian Organic Synthesis Symposium (BOSS-12), University of Namur, Namur, Belgium, July 14th, 2010.
- (68) "Benzene and me" Meiwa High School Special Lecture, Meiwa High School, Nagoya, Japan, June 21st, 2010.
- (67) "Challenges in arene-assembling chemistry" The 3rd Annual Symposium of Nagoya University Global COE in Chemistry 3rd Annual Symposium, R-04, Nagoya University, Japan, June 16th, 2010.
- (66) "Benzene and me" Okazaki North High School Special Lecture, Nagoya University, Japan, June 4th, 2010.
- (65) "Chemical synthesis of sidewall segments of carbon nanotubes" The 6th Asian-European Symposium on Metal Mediated Efficient Reactions, Nanyang Technological University, Singapore, June 8th, 2010.
- (64) "Chemical synthesis of sidewall segments of carbon nanotubes: Cycloparaphenylenes and related carbon nanorings" The 93rd Canadian Chemistry Conference and Exhibition, Toronto, Canada, May 31st, 2010.
- (63) "Challenges in arene-assembling chemistry" The 10th Convention on Pharmaceutical Ingredients (CPhI), Tokyo Bigsight, Japan, April 21st, 2010.
- (62) "Challenges in arene-assembling chemistry" Special Lecture in Peking University, China, April 9th, 2010.
- (61) "Challenges in arene-assembling chemistry" Special Lecture in Wuhan University, China, April 8th, 2010.
- (60) "Challenges in arene-assembling chemistry" Special Lecture in University of Sciences and Technology, China, April 7th, 2010.
- (59) "Benzene and me; Challenge to Become a Nano-scale Architect" SSH Natural Science Seminar, Nagoya University, Japan, December 19th, 2009.

- (58) "Molecular catalysis for nanocarbon chemistry" International Symposium on Catalysis and Fine Chemicals 2009, December 15th, 2009.
- (57) "Molecular catalysis for nanocarbon chemistry" China-Japan Symposium on Advanced Organic Chemistry, November 29th, 2009.
- (56) "Challenges in arene-assembling chemistry" The 6th Catalysis Sagami Seminar, Kanagawa, Japan, November 19th, 2009.
- (55) "New catalysis leading to privileged organic structures" IRTG Munster-Nagoya Meeting, Nagoya University, Japan, September 28th, 2009.
- (54) "Challenges in arene-assembling chemistry" Kyoto University Organic Chemistry Seminar, Kyoto, Japan, September 17th, 2009.
- (53) "Challenges in arene-assembling chemistry" Sumitomo Chemicals Special Seminar, Sumitomo Chemicals, Japan, September 14th, 2009.
- (52) "Challenges in arene-assembling chemistry" The 55th Organic Chemistry Research Meeting (Shirasagi Seminar), Japan, September 7th, 2009.
- (51) "Programmed synthesis of tetraarylthiophenes through sequential C-H bond arylation" Grant-in-Aid for Scientific Research on Priority Areas "Chemistry of Concerto Catalysis" International Symposium, Japan, August 28th, 2009.
- (50) "Challenges in arene-assembling chemistry" The 21st Banyu Sapporo Symposium, Sapporo, Japan, July 4th, 2009.
- (49) "Challenges in arene-assembling chemistry" Rising Organic Chemists in Catalysis Meeting (ROCCAT), Munster, Germany, June 18th, 2009.
- (48) "Challenges in arene-assembling chemistry" Kyoto University GCOE "Integrated Materials Science" Seminar, Kyoto University, Japan, May 30th, 2009.
- (47) "Challenges in arene-assembling chemistry" Teijin Pharma Special Seminar, Teijin Pharma, Japan, May 12th, 2009.
- (46) "Arene-assembly based on catalytic direct functionalization of C-H bonds" Division of Organometallic Chemistry, The Kinki Chemical Society Meeting, 4th Regular Meeting of 2007, Osaka Science & Technology Center, Japan, February 2nd, 2009.
- (45) "Catalytic direct functionalization of arene compounds and fullerene" Ministry of Education, Culture, Sports, Science and Technology Special Funds for Education and Research, Joint Project of Chemical Synthesis Core Research Institutions, The 4th Symposium on Materials Science "The Link Between Synthetic Chemistry and Nanochemistry", Nagoya University, Japan, January 24th, 2009.
- (44) "Catalytic direct functionalization of unsaturated organic molecules" 13th Symposium of High-tech Research Center Okayama University of Science, Japan, December 11th, 2008.
- (43) "Carbon-hydrogen bond functionalization through concerto molecular catalysis" Grant-in-Aid for Scientific Research on Priority Areas "Chemistry of Concerto Catalysis" International Symposium, Osaka University, Japan, December 3rd, 2008.
- (42) "Catalytic direct functionalization of unsaturated organic molecules" Organic Synthetic Chemistry Symposium of Autumn 2008, The Pharmaceutical Society of Japan Nagai Memorial Hall, Shibuya, Tokyo, Japan, November 19th, 2008.
- (41) "Catalytic direct functionalization of arene compounds and fullerene" Molecular Catalysis Seminar "Strategy for Dissecting Bonds Between Multiple-Bonds and New Approaches for Transformation Reactions", Tokyo University of Agriculture and Technology, Japan, November 15th, 2008.
- (40) "Functionalization of unsaturated organic molecules through metal catalysis: Alkenes, arenes, and fullerenes" Merck-Banyu Lecture, University of Chicago, USA, October 27th, 2008.

- (39) "Functionalization of unsaturated organic molecules through metal catalysis: Alkenes, arenes, and fullerenes" Merck-Banyu Lecture, The Scripps Research Institute, USA, October 24th, 2008.
- (38) "Functionalization of unsaturated organic molecules through metal catalysis: Alkenes, arenes, and fullerenes" Merck-Banyu Lecture, Stanford University, USA, October 22nd, 2008.
- (37) "Functionalization of unsaturated organic molecules through metal catalysis: Alkenes, arenes, and fullerenes" Merck-Banyu Lecture, University of California, Berkeley, USA, October 21st, 2008.
- (36) "Functionalization of unsaturated organic molecules through metal catalysis: Alkenes, arenes, and fullerenes" Merck-Banyu Lecture, Harvard University, USA, October 17th, 2008.
- (35) "Functionalization of unsaturated organic molecules through metal catalysis: Alkenes, arenes, and fullerenes" Merck-Banyu Lecture, MRL-Boston, Merck, USA, October 16th, 2008.
- (34) "Functionalization of unsaturated organic molecules through metal catalysis: Alkenes, arenes, and fullerenes" Merck-Banyu Lecture, Princeton University, USA, October 14th, 2008.
- (33) "Functionalization of unsaturated organic molecules through metal catalysis: Alkenes, arenes, and fullerenes" Merck-Banyu Lecture, MRL-Rahway, Merck, USA, October 13th, 2008.
- (32) "Arene-assembly based on C-H bond functionalization" The 102nd Catalysis Meeting of the Catalysis Society of Japan, Nagoya University, Japan, September 25th, 2008.
- (31) "Catalytic direct functionalization of unsaturated organic molecules" Kwansei Gakuin University, Japan, August 26th, 2008.
- (30) "Catalytic direct functionalization of aromatics and nanocarbons" The 91st Canadian Chemistry Conference and Exhibition, Shaw Conference Centre, Edmonton, Canada, May 24th, 2008.
- (29) "Catalytic direct functionalization of unsaturated organic molecules" Kyoto University, Japan, May 13th, 2008.
- (28) "Catalytic direct functionalization of unsaturated organic molecules" The 18th Banyu Fukuoka Symposium, Centennial Hall Kyushu University School of Medicine, Japan, May 10th, 2008.
- (27) "Innovation of synthetic chemistry towards new creation" Nagoya University Open Seminar, Japan, March 24th, 2008.
- (26) "Catalytic direct functionalization of unsaturated organic molecules" Grant-in-Aid for Scientific Research on Priority Areas "Synergistic Effects for Creation of Functional Molecules" The 3rd Young Colloquium, Osaka University, Osaka University Nakanoshima Center, Japan, March 15th, 2008.
- (25) "Catalytic direct functionalization of unsaturated organic molecules: To become an irreplaceable craftsman in "monodukuri" Tokyo Institute of Technology, Japan, January 15th, 2008.
- (24) "Catalytic direct functionalization of aromatics" 2007 Workshop on Organometallic Chemistry, RIKEN, Wako, Japan, November 8-9th, 2007.
- (23) "Catalytic direct functionalization of unsaturated organic molecules" The 2nd Forum for Inter-University Research, Nagoya University, Japan, November 2-3rd, 2007.
- (22) "Creation of privileged structures based on catalytic direct functionalization of olefins and aromatics" National Taiwan University, Taiwan, September 21st, 2007.
- (21) "Creation of privileged structures based on catalytic direct functionalization of olefins and aromatics" National Tsing-Hua University, Taiwan, September 20th, 2007.
- (20) "Creation of privileged structures based on catalytic direct functionalization of olefins and aromatics" National Taiwan Normal University, Taiwan, September 19th, 2007.
- (19) "Catalytic direct functionalization of aromatics: Arenes, heteroarenes, and fullerenes" The 4th IRTG Münster-Nagoya Joint Seminar, University of Münster, Germany, September 6th, 2007.
- (18) "Creation of functional materials based on catalytic direct C-H bond functionalization" Nagoya University Global COE Kick-off Meeting, Japan, August 24th, 2007.

- (17) "Catalytic direct C-H bond functionalization: To become an irreplaceable craftsman in "monodukuri" The 42nd Meeting for Young Organic Chemists, Gifu, Japan, July 12-14th, 2007.
- (16) "Creation of privileged organic structures based on catalytic C-H bond functionalization" McGill University, Canada, June 22nd, 2007.
- (15) "Creation of privileged organic structures based on catalytic C-H bond functionalization" Universite de Montreal, Canada, June 21st, 2007.
- (14) "Creation of privileged organic structures based on catalytic C-H bond functionalization" University of Ottawa, Canada, June 20th, 2007.
- (13) "Creation of privileged organic structures based on catalytic C-H bond functionalization" Queen's University, Canada, June 18th, 2007.
- (12) "Creation of privileged organic structures based on catalytic C-H bond functionalization" University of Toronto, Canada, June 15th, 2007.
- (11) "Catalytic direct C-H bond functionalization: To become an irreplaceable craftsman in "monodukuri" Japan Advanced Institute of Science and Technology, Japan, June 1st, 2007.
- (10) "Creation of functional materials based on catalytic C-H bond functionalization" The 3rd IRTG Münster-Nagoya Joint Seminar, Nagoya University, Japan, April 19-20th, 2007.
- (9) "Catalytic direct C-H bond functionalization" Kyushu University Special Seminar, February 16th, 2007.
- (8) "Creation of functional materials based on catalytic direct C-H bond functionalization" Takasago Special Seminar, Takasago International Corporation, Japan, January 31st, 2007.
- (7) "Development of molecular catalyst directed towards organic architectural chemistry" The 2nd Kyoto University Organic Chemistry COE Joint Symposium, "Diversity and Prospects of Precision Organic Synthesis", Kyoto University, Japan, December 15th, 2006.
- (6) "Direct C-H arylation of heteroarenes and arenes via metal catalysis" The 10th International Kyoto Conference on New Aspects of Organic Chemistry (IKCOC-10), Kyoto, Japan, November 13-17th, 2006.
- (5) "Creation of functional materials based on molecular catalytic chemistry" Forum of Inter-University Research, Kyoto, Japan, September 1st, 2006.
- (4) "Programmed molecular construction methods based on precision molecular catalysts" Mitsui Chemicals Special Seminar, Mitsui Chemicals, Inc. Catalysis Science Laboratory, Sodegaura, Chiba, Japan, August 28th, 2006.
- (3) "Targeting olefins, arenes, and their assemblies" International Conference on Biodiversity and Natural Products, Kyoto, Japan, July 24th, 2006.
- (2) "Creation of functional materials based on catalytic C-H functionalization" Nagoya University 21COE Results Report Meeting, Nagoya University, Japan, July 7th, 2006.
- (1) "Programmed molecular construction methods based on precision molecular Catalysts" Nagoya University Chemistry Seminar, Nagoya University, Japan, May 26th, 2006.

Alumni in academia (52)

- | | |
|----------------------|--|
| (52) Bumpei Maeda | Assistant Professor, Keio University, Japan |
| (51) Ayaka Ueda | Designated Assistant Professor, Nagoya University, Japan |
| (50) Yota Sakakibara | Assistant Professor, Kwansei Gakuin University, Japan |
| (49) Usami Atsushi | Designated Assistant Professor, Nagoya University, Japan |
| (48) Kwan Yin Cheung | Assistant Professor, National Sun Yat-sen University, Taiwan |
| (47) Hayato Yamada | Designated Assistant Professor, Nagoya University, Japan |
| (46) Wataru Matsuoka | Assistant Professor, Hokkaido University, Japan |

- (45) Kenta Kato Assistant Professor, Waseda University, Japan
(current: company)
- (44) Kei Murakami Associate Professor (PI), Kwansei Gakuin University, Japan
- (43) Chaolumen Designated Professor, Inner Mongolia University, China
- (42) Yuanming Li Professor, Fuzhou University, China
- (41) Masahiko Yoshimura Designated Assistant Professor, Kyoto University, Japan
- (40) Nobuhiko Mitoma Designated Assistant Professor, Nagoya University, Japan
(current: company)
- (39) Maciej Krzeszewski Senior Scientist, Polish Academy of Sciences, Poland
- (38) Kazuma Amaike Designated Assistant Professor, Nagoya University, Japan
(current: Staff scientist, RIKEN, Japan)
- (37) Yutaro Saito Assistant Professor, The University of Tokyo, Japan
- (36) Gregory Perry Lecturer, University of Manchester, UK
(current: Lecturer (PI), University of Southampton, UK)
- (35) Aki Miura Designated Assistant Professor, Nagoya University, Japan
- (34) Takayuki Nakamuro Designated Assistant Professor, The University of Tokyo, Japan
(current: Designated Associate Professor, The University of Tokyo)
- (33) Hirotooshi Sakamoto Designated Lecturer, Nagoya University, Japan
(current: Designated Lecturer, Kyoto University)
- (32) Yuhei Miyauchi Professor, Kyoto University, Japan
- (31) Hsing-An Lin Assistant Professor, Shanghai University, China
- (30) Feijiu Wang Assistant Professor, Nanjing University, China
- (29) Shinya Hagihara Team Director (PI), RIKEN, CSRS, Japan
- (28) Asraa Ziadi Assistant Professor, Nagoya University, Japan
(current: company)
- (27) Jiao Jiao Lecturer, Xi'an Jiaotong University, China
(current: Associate Professor, Xi'an Jiaotong University, China)
- (26) Noriaki Ozaki Assistant Professor, Yokohama City University, Japan
(current: company)
- (25) Tomohiro Fukushima Assistant Professor, Hokkaido University, Japan
(current: Lecturer, Hokkaido University, Japan)
- (24) Takehisa Maekawa Designated Assistant Professor, Nagoya University, Japan
(current: Research Associate, Academia Sinica, Taiwan)
- (23) Liu Hong Associate Professor, Jiangnan University, China
- (22) Lingkui Meng Associate Professor, Huazhong University of Science and Technology, China
- (21) Hua Zhang Associate Professor, South-Central University for Nationalities in Wuhan, China
- (20) Takuya Kuwabara Assistant Professor, Chuo University, Japan
(current: Lecturer (PI), Ochanomizu University, Japan)
- (19) Akiko Yagi Assistant Professor, Nagoya University, Japan
(current: Professor, Nagoya University, Japan)
- (18) Kei Muto Assistant Professor, Waseda University, Japan
(current: Associate Professor, Nagoya University, Japan)
- (17) Junichiro Yamaguchi Associate Professor (PI), Waseda University, Japan
(current: Professor, Waseda University, Japan)
- (16) Taishi Nishihara Designated Assistant Professor, Nagoya University, Japan

- (current: Associate Professor (PI), Tokyo University of Science, Japan)
- (15) Hiroshi Ueno Assistant Professor, Nagoya University, Japan
(current: Assistant Professor, Tohoku University, Japan)
- (14) Hiroyuki Tanaka Designated Assistant Professor, Nagoya University, Japan
(current: Designated Associate Professor, Kyoto University)
- (13) Eiji Yamaguchi Assistant Professor, Gifu Pharmaceutical University, Japan
(current: Associate Professor, Gifu Pharmaceutical University, Japan)
- (12) Yasutomo Segawa Designated Associate Professor, Nagoya University, Japan
(current: Associate Professor (PI), Institute for Molecular Science)
- (11) Anna Junker Assistant Professor (PI), University of Münster, Germany
(current: Professor, University of Tübingen, Germany)
- (10) Katsuaki Kawasumi Assistant Professor, Okayama University, Japan
(current: company)
- (9) Hideto Ito Lecturer, Nagoya University, Japan
(current: Associate Professor, Nagoya University, Japan)
- (8) Haruka Omachi Assistant Professor, Nagoya University, Japan
(current: Associate Professor (PI), Wakayama Medical University, Japan)
- (7) Masakazu Nambo Designated Assistant Professor, Nagoya University, Japan
(current: Designated Associate Professor, Nagoya University, Japan)
- (6) Jean Bouffard Associate Professor (PI), Ewha Womans University, Korea
(current: Professor, Ewha Womans University, Korea)
- (5) Jérôme Canivet Permanent CNRS researcher (PI), IRCELYON, CNRS, France
- (4) Olivier Coutelier Assistant Professor, University of Paul Sabatier and CNRS, France
- (3) Toshiyuki Kamei Assistant Professor, Nara National College of Technology, Japan
(current: Professor, Nara National College of Technology)
- (2) Toshiki Nokami Assistant Professor, Kyoto University, Japan
(current: Professor, Tottori University, Japan)
- (1) Koichi Mitsudo Assistant Professor, Okayama University, Japan
(current: Associate Professor, Okayama University, Japan)