Publication List

Kanako Nozawa-Kumada 2/2/2023

Original Articles

46. "Defluorinative Transformation of (2,2,2-Trifluoroethyl)arenes Catalyzed by the Phosphazene Base *t*-Bu-P2"
Masanori Shigeno,* Yoshiteru Shishido, Amane Soga, Kanako Nozawa-Kumada, Yoshinori Kondo*
J. Org. Chem. **2023**, *Just Accepted.*

45. "Antioxidant action of persulfides and polysulfides against free radical-mediated lipid peroxidation"
Takayuki Kaneko, Yuichiro Mita, Kanako Nozawa-Kumada, Masana Yazaki, Mieko Arisawa, Etsuo Niki, Noriko Noguchi, Yoshiro Saito*
Free Radical Research **2023**, *Just Accepted.*

44. "Transition-Metal-Free Intermolecular Hydrocarbonation of Styrenes Mediated by NaH/1,10-phenanthroline"
Kanako Nozawa-Kumada,* So Onuma, Kanako Ono, Tomohiro Kumagai, Yuki Iwakawa, Katsuhiko Sato, Masanori Shigeno, Yoshinori Kondo*
Chem. Eur. J. **2023**, *Just Accepted.*

43. "LiHMDS-mediated deprotonative coupling of toluenes with ketones"
Masanori Shigeno,* Akihisa Kajima, Eito Toyama, Toshinobu Korenaga, Hiroyuki Yamakoshi, Kanako Nozawa-Kumada, Yoshinori Kondo*
Chem. Eur. J. **2023**, *Just Accepted.*

42. "1,5-Double-Carboxylation of 2-Alkylheteroarenes Mediated by a Combined Brønsted Base System"
Masanori Shigeno,* Itsuki Tohara, Kanako Nozawa-Kumada, Yoshinori Kondo*
Synlett **2022**, *Just accepted.*

41. "Palladium-Catalyzed Borylative Cyclizations of α-(2-Bromoaryl) Ketones to Form 1,2-Benzoxaborinines"
Masanori Shigeno,* Yuto Iseya, Ryotaro Kume, Kanako Nozawa-Kumada, Yoshinori Kondo*
Org. Lett. **2022**, *24*, 7227–7231.

40. "Combined Brønsted Base-Promoted CO_2 Fixation into Benzylic C–H Bonds of Alkylarenes"
Masanori Shigeno,* Itsuki Tohara, Keita Sasaki, Kanako Nozawa-Kumada, Yoshinori Kondo*
Org. Lett. **2022**, *24*, 4825–4830.

39. "Copper-catalyzed aerobic benzylic C(sp^3)–H lactonization of 2-alkylbenzamides *via* N-centered radicals"
Kanako Nozawa-Kumada,* Kanako Ono, Satoshi Kurosu, Masanori Shigeno, Yoshinori Kondo*
Org. Biomol. Chem. **2022**, *20*, 5948–5952.
Invited contribution to a New Talent web themed issue

38. "Organic superbase *t*-Bu-P4-catalyzed demethylations of methoxyarenes"
Masanori Shigeno,* Kazutoshi Hayashi, Toshinobu Korenaga, Kanako Nozawa-Kumada, Yoshinori Kondo*
Org. Chem. Front. **2022**, *9*, 3656–3663.
Selected as a cover picture

37. "Direct C–H Carboxylation Forming Polyfunctionalized Aromatic Carboxylic Acids by Combined Brønsted Bases"
Masanori Shigeno,* Kazuya Hanasaka, Itsuki Tohara, Koki Izumi, Hiroyuki Yamakoshi, Eunsang Kwon, Kanako Nozawa-Kumada, Yoshinori Kondo*
Org. Lett. **2022**, *24*, 809–814.

36. "Rhodium-Catalyzed Synthesis of Unsymmetric Di(heteroaryl)ureas Involving an Equilibrium Shift"
Mieko Arisawa*, Taro Mizuno, Kanako Nozawa-Kumada, Kaori Itto-Nakama, Miyu Furuta, Saori Tanii
Org. Lett. **2021**, *23*, 9382–9386.

35. "Construction of 1,2,3-Benzodiazaborole by Electrophilic Borylation of Azobenzene and Nucleophilic Dialkylative Cyclization"
Masanori Shigeno,* Masaya Imamatsu, Yusuke Kai, Moe Kiriyama, Shintaro Ishida, Kanako Nozawa-Kumada, Yoshinori Kondo
Org. Lett. **2021**, *23*, 8023–8027.

34. "Regio- and Stereoselective Hydroiodination of Internal Alkynes with *ex Situ* Generated HI"
Kanako Nozawa-Kumada,* Koto Noguchi, Tomoya Akada, Masanori Shigeno, Yoshinori Kondo*
Org. Lett. **2021**, *23*, 6659–6663.
Selected as a cover picture

33. "Chemical reduction of Ag+ to Ag employing organic electron donors: evaluation of the effect of Ag+-mediated cytosine–cytosine base pairing on the aggregation of Ag nanoparticles"
Takenori Dairaku,* Rika Kawai, Kanako Nozawa-Kumada, Kentaro Yoshida, Tetsuya Ono, Yoshinori Kondo, Jiro Kondo, Akira Ono, Yoshiyuki Tanaka, Yoshitomo Kashiwagi*
Dalton Trans. **2021**, *50*, 12208–12214.

32. "KO-*t*-Bu Catalyzed Thiolation of *β*-(Hetero)arylethyl Ethers via MeOH Elimination/hydrothiolation"
Masanori Shigeno,* Yoshiteru Shishido, Kazutoshi Hayashi, Kanako Nozawa-Kumada, Yoshinori Kondo*
Eur. J. Org. Chem. **2021**, 3932–3935.

31. "Copper-catalyzed aerobic double functionalization of benzylic C(sp^3)–H bonds for the synthesis of 3-hydroxyisoindolinones"
Kanako Nozawa-Kumada,* Yuta Matsuzawa, Kanako Ono, Masanori Shigeno, Yoshinori Kondo*
Chem. Commun. **2021**, *57*, 8604–8607.

30. "Effect of cytosine–Ag^+–cytosine base pairing on the redox potential of the Ag^+/Ag couple and the chemical reduction of Ag^+ to Ag by tetrathiafulvalene"
Takenori Dairaku,* Rika Kawai, Teppei Kanaba, Tetsuya Ono, Kentaro Yoshida, Hajime Sato, Kanako Nozawa-Kumada, Yoshinori Kondo, Jiro Kondo, Akira Ono, Yoshiyuki Tanaka,* Yoshitomo Kashiwagi*
Dalton Trans. **2021**, *50*, 7633–7639.

29. "Catalytic amide base system generated *in situ* for 1,3-diene formation from allylbenzenes and carbonyls"
Masanori Shigeno,* Akihisa Kajima, Kunihito Nakaji, Kanako Nozawa-Kumada, Yoshinori Kondo*
Org. Biomol. Chem. **2021**, *19*, 983–987.
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28. "Di-*tert*-butyl Peroxide (DTBP)-Mediated Oxysilylation of Unsaturated Carboxylic Acids for the Synthesis of Silyl Lactones"
Kanako Nozawa-Kumada,* Takuto Ojima, Moeto Inagi, Masanori Shigeno, Yoshinori Kondo*
Org. Lett. **2020**, *22*, 9591–9596.

27. "Catalytic C(sp^2)–C(sp^3) Bond Formation of Methoxyarenes by the Organic Superbase *t*-Bu-P4"
Masanori Shigeno,* Kazutoshi Hayashi, Kanako Nozawa-Kumada, Yoshinori Kondo*
Org. Lett. **2020**, *22*, 9107–9113.

26. "NaH-Mediated Direct C–H Arylation in the Presence of 1,10-Phenanthroline"
Kanako Nozawa-Kumada,* Yuki Iwakawa, So Onuma, Masanori Shigeno, Yoshinori Kondo*
Chem. Commun. **2020**, *56*, 7773–7776.

25. "Direct C-2 carboxylation of 3-substituted-indoles using a combined Brønsted base consisting of LiO-*t*-Bu/CsF/18-crown-6"
Masanori Shigeno,* Itsuki Tohara, Kanako Nozawa-Kumada, Yoshinori Kondo*
Eur. J. Org. Chem. **2020**, 1987–1991.

24. "Transition-Metal-Free Trifluoromethylation of Benzyl Bromides Using Trifluoromethyltrimethylsilane and CsF in 1,2-Dimethoxyethane"
Kanako Nozawa-Kumada,* Sayuri Osawa, Takuto Ojima, Koto Noguchi, Masanori Shigeno, Yoshinori Kondo*
Asian. J. Org. Chem. **2020**, *9*, 765–768.
Invited contribution to a special issue: 100th Annual Meeting of the Chemical Society of Japan

23. "Copper-Catalyzed Oxidative Benzylic C(sp^3)–H Cyclization for the Synthesis of *β*-Lactams"
Kanako Nozawa-Kumada,* Satoshi Saga, Yuta Matsuzawa, Masahito Hayashi, Masanori Shigeno, Yoshinori Kondo*
Chem. Eur. J. **2020**, *26*, 4496–4499.

22. "Super Electron Donor-mediated Reductive Desulfurization Reactions"
Kanako Nozawa-Kumada,* Shungo Ito, Koto Noguchi, Masanori Shigeno, Yoshinori Kondo*
Chem. Commun. **2019**, *55*, 12968–12971.

21. "Deprotonative Coupling of Pyridines with Aldehydes Catalyzed by an HMDS-amide Base Generated *in Situ*"
Masanori Shigeno,* Kunihito Nakaji, Akihisa Kajima, Kanako Nozawa-Kumada, Yoshinori Kondo*
Chem. Pharm. Bull. **2019**, *67*, 1179–1182.

20. "Tetramethylammonium Fluoride Tetrahydrate-Mediated Transition Metal-Free Coupling of Aryl Iodides with Unactivated Arenes in Air"
Kanako Nozawa-Kumada,* Kosuke Nakamura, Satoshi Kurosu, Yuki Iwakawa, Charline Denneval, Masanori Shigeno, Yoshinori Kondo*
Chem. Pharm. Bull. **2019**, *67*, 1042–1045.

19. "Catalytic Amination of β-(Hetero)arylethyl Ethers by Phosphazene Base *t*-Bu-P4"
Masanori Shigeno,* Ryutaro Nakamura, Kazutoshi Hayashi, Kanako Nozawa-Kumada, Yoshinori Kondo*
Org. Lett. **2019**, *21*, 6695–6699.

18. "Organic Superbase *t*-Bu-P4 Catalyzes Amination of Methoxy(hetero)arenes"
Masanori Shigeno,* Kazutoshi Hayashi, Kanako Nozawa-Kumada, Yoshinori Kondo*
Org. Lett. **2019**, *21*, 5505–5508.

17. "Catalytic Alkynylation of Polyfluoroarenes by Amide Base Generated In Situ"
Masanori Shigeno,* Takuya Okawa, Masaya Imamatsu, Kanako Nozawa-Kumada, Yoshinori Kondo*
Chem. Eur. J. **2019**, *25*, 10294–10297.
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16. "Double-Carboxylation of Two C–H Bonds in 2-Alkylheteroarenes Using LiO-*t*-Bu/CsF"
Masanori Shigeno,* Keita Sasaki, Kanako Nozawa-Kumada, Yoshinori Kondo*
Org. Lett. **2019**, *21*, 4515–4519.

15. "Peroxydisulfate-Mediated Transition-Metal-Free Oxidative C(sp^3)–H Bond Lactonization"
Kanako Nozawa-Kumada,* Satoshi Kurosu, Masanori Shigeno, Yoshinori Kondo*
Asian J. Org. Chem. **2019**, *8*, 1080–1083.
Invited contribution to a special issue: Heterocyclic Chemistry
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14. "Catalytic Amide–Base System of TMAF and $N(TMS)_3$ for Deprotonative Coupling of Benzylic C(sp^3)–H Bonds with Carbonyls"
Masanori Shigeno,* Kunihito Nakaji, Kanako Nozawa-Kumada, Yoshinori Kondo*
Org. Lett. **2019**, *21*, 2588–2592.

13. "Phosphazene Base *t*-Bu-P4-Catalyzed Methoxy−Alkoxy Exchange Reaction on (Hetero)arenes"
Masanori Shigeno,* Kazutoshi Hayashi, Kanako Nozawa-Kumada, Yoshinori Kondo*
Chem. Eur. J. **2019**, *25*, 6077–6081.
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12. "Direct Carboxylation of Electron-Rich Heteroarenes Promoted by LiO-*t*Bu with CsF and [18]Crown-6"
Masanori Shigeno,* Kazuya Hanasaka, Keita Sasaki, Kanako Nozawa-Kumada, Yoshinori Kondo*
Chem. Eur. J. **2019**, *25*, 3235–3239.
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11. "Catalytic Deprotonative α-Formylation of Heteroarenes by an Amide Base Generated in Situ from TMAF and $N(TMS)_3$"
Masanori Shigeno,* Yuki Fujii, Akihisa Kajima, Kanako Nozawa-Kumada, Yoshinori Kondo*
Org. Process Res. Dev. **2019**, *23*, 443–451.

10. "Construction of Biaryl Scaffolds from Iodoarenes and C-H Heteroarenes Using an Amide Base Generated *in Situ* from Aminosilane and Fluoride Anion"
Masanori Shigeno,* Yusuke Kai, Tetsuya Yamada, Kazutoshi Hayashi, Kanako Nozawa-Kumada, Charline Denneval, Yoshinori Kondo*
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9. "Generation and Characterization of Anti-phenyl Sulfate Monoclonal Antibodies and a Potential Use for Phenyl Sulfate Analysis in Human Blood"
   Yoshitomi Kanemitsu, Hiroki Tsukamoto*, Yotaro Matsumoto, Kanako Nozawa-Kumada, Yoshinori Kondo, Takaaki Abe, Yoshihisa Tomioka*
   Biol. Pharm. Bull. **2018**, *41*, 1170–1177.
8. "Super Electron Donor-mediated Reductive Transformation of Nitrobenzenes: A Novel Strategy to Synthesize Azobenzenes and Phenazines"
   Kanako Nozawa-Kumada, Erina Abe, Shungo Ito, Masanori Shigeno, Yoshinori Kondo*
   Org. Biomol. Chem. **2018**, *16*, 3095–3098.
7. "Deprotonative Silylation of Aromatic C−H Bonds Mediated by a Combination of Trifluoromethyltrialkylsilane and Fluoride"
   Kanako Nozawa-Kumada, Sayuri Osawa, Midori Sasaki, Isabelle Chataigner, Masanori Shigeno, Yoshinori Kondo*
   J. Org. Chem. **2017**, *82*, 9487–9496.
6. "Highly Chemoselective DMPU-Mediated Trialkylsilylation of Terminal Alkynes Using Trifluoromethyltrialkylsilane"
   Kanako Nozawa-Kumada, Moeto Inagi, Yoshinori Kondo*
   Asian J. Org. Chem. **2017**, *6*, 63–66.
5. "Development of Madelung-Type Indole Synthesis Using Copper-Catalyzed Amidation/Condensation Strategy"
   Masahiro Abe, Charline Denneval, Kanako Nozawa-Kumada, Yoshinori Kondo*
   Heterocycles **2016**, *92*, 900–909.
   Highlighted in *Synfacts* **2016**, *12*, 574.

4. "Copper-Catalyzed sp^3 C–H Aminative Cyclization of 2-Alkyl-*N*-arylbenzamides: An Approach for the Synthesis of *N*-Aryl-isoindolinones"
   Kanako Nozawa-Kumada, Jun Kadokawa, Takehiro Kameyama, Yoshinori Kondo*
   Org. Lett. **2015**, *17*, 4479–4481.
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3. "Efficient Use of a Surfactant for Copper-Catalyzed Coupling Reaction of Arylboronic Acids with Imidazoles in Water"
   Kiyofumi Inamoto,* Kanako Nozawa, Jun Kadokawa, Yoshinori Kondo*
   Tetrahedron **2012**, *68*, 7794–7798.
2. "Palladium-Catalyzed C-H Cyclization in Water: A Milder Route to 2-Arylbenzothiazoles"
   Kiyofumi Inamoto,* Kanako Nozawa, Yoshinori Kondo*
   Synlett **2012**, *23*, 1678–1682.
1. "Micellar System in Copper-Catalysed Hydroxylation of Arylboronic Acids: Facile Access to Phenols"
   Kiyofumi Inamoto,* Kanako Nozawa, Misato Yonemoto, Yoshinori Kondo*
   Chem. Commun. **2011**, *47*, 11775–11777.

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2. "Combined Brønsted-Base-Mediated Direct C-H Carboxylation of Heteroarenes with CO_2"
   Masanori Shigeno,* Keita Sasaki, Kazuya Hanasaka, Itsuki Tohara, Kanako Nozawa-Kumada, Yoshinori Kondo*
   Heterocycles **2021**, *103*, 592–608.
1. "C–H Functionalization by Transition-metal-catalyst or *in Situ* Generated Base"
   Kanako Nozawa-Kumada*
   Yakugaku Zasshi **2019**, *139*, 1243–1251.

Misc

4. “銅触媒を用いた sp^3 炭素－水素結合官能基化による複素環骨格構築法の開発”
   熊田 佳菜子
   細胞 **2022**, *54*, 39–41.
3. “ラジカル機構で銅への酸化的付加を進行させる！臭化アリールの CF_3 化反応”
   熊田 佳菜子
   ファルマシア **2019**, *55*, 250.
2. “‘‘Transient directing group’’ が可能にする究極の直截的 $C(sp^3)$–H アリール化反応”
   熊田 佳菜子
   有機合成化学協会誌 (Review de Debut) **2019**, *77*, 69–70.
1. “非天然型アミノ酸の直截的な合成！δ 位選択的なC–H 結合アルキル化反応”
   熊田 佳菜子
   化学 **2018**, *73*, 63–64.