

平成24年度 研究業績

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1. 発表論文等 (査読付き論文, 著書, 総説等の発表状況)

- (1) Copper-Catalyzed Highly Selective Hydroboration of Allenes and 1,3-Dienes
Semba, K.; Shinomiya, M.; Fujihara, T.; Terao, J.; Tsuji, Y.*
Chem. Eur. J., **2013**, *19*, in press.
- (2) 7,7,8,8-Tetraaryl-o-quinodimethane Stabilized by Dibenzo-annulation: A Helical π -Electron System that Exhibits Electrochromic and Unique Chiroptical Properties
Suzuki, T.; Sakano, Y.; Iwai, T.; Iwashita, S.; Miura, Y.; Katoono, R.; Kawai, H.; Fujiwara, K.; Tsuji, Y.*; Fukushima, T. *Chem. Eur. J.*, **2013**, *19*, 117-123.
- (3) Copper-Catalyzed Silacarboxylation of Internal Alkynes by Employing Carbon Dioxide and Silylboranes
Fujihara, T.; Tani, Y.; Semba, K.; Terao, J.; Tsuji, Y.*
Angew. Chem. Int. Ed., **2012**, *51*, 11487-11490.
- (4) Palladium-Catalyzed Reduction of Acid Chlorides to Aldehydes with Hydrosilanes
Fujihara, T.; Cong, C.; Iwai, T.; Terao, J.; Tsuji, Y.* *Synlett*, **2012**, *23*, 2389-2392.
- (5) Carbon Dioxide as a Carbon Source in Organic Transformation: Carbon-Carbon Bond Forming Reactions by Transition-Metal Catalysis
Tsuji, Y.*; Fujihara, T. *Chem. Commun.*, **2012**, *48*, 9956-9964.
- (6) Palladium-Catalyzed Esterification of Aryl Halides Using Aryl Formates without the Use of External Carbon Monoxide
Fujihara, T.; Hosoki, T.; Katafuchi, Y.; Iwai, T.; Terao, J.; Tsuji, Y.*
Chem. Commun., **2012**, *48*, 8012-8014.
- (7) Nickel-Catalyzed Carboxylation of Aryl and Vinyl Chlorides Employing Carbon Dioxide
Fujihara, T.; Nogi, K.; Xu, T.; Terao, J.; Tsuji, Y.*
J. Am. Chem. Soc., **2012**, *134*, 9106-9109.
- (8) Synthesis of Insulated Pt-alkynyl Complex Polymer
Terao, J.; Masai, H.; Fujihara, T.; Tsuji, Y.* *Chem. Lett.*, **2012**, *41*, 652-653.
- (9) Copper-Catalyzed Highly Selective Semihydrogenation of Nonpolar Carbon-Carbon Multiple Bonds Using a Silane and an Alcohol
Semba, K.; Fujihara, T.; Xu, T.; Terao, J.; Tsuji, Y.*
Adv. Synth. Catal., **2012**, *354*, 1542-1550.

2. 学会発表等（国内外の招待講演および国際会議での発表状況）

- (1) Carbon Dioxide as a Carbon Source in Organic Transformation: Carbon-Carbon Bond Forming Reactions by Transition-Metal Catalysts
Tsuji, Y. 17th Malaysian Chemical Congress, Kuala Lumpur, Malaysia, October 15, 2012, （口頭発表、Keynote）.
- (2) Long-range Steric Effect in Homogeneous Nanosize Catalysis
Tsuji, Y. 1st International Conference on Emerging Advanced Nanomaterials, Brisbane, Australia, October 24, 2012, （口頭発表）.
- (3) 触媒有機化学－高選択性をいかに達成するか：そのケーススタディ（招待講演）
辻 康之、名古屋工業大学 特別講演，2月10日2012年（口頭発表）.
- (4) 触媒的官能基付加を基軸とする高効率変換反応の開発
辻 康之、第44回有機合成セミナー「新製品創出のための有機合成」
大阪市立工業研究所，大阪，10月30日(2012)（口頭発表）.
- (5) Transition-metal Catalyzed Carboxylation Employing Carbon Dioxide (Invited)
Tsuji, Y. The 7th International Conference on Cutting-edge Organic Chemistry in Asia
December 12, 2012, Nanyang Technological University, Singapore（口頭発表）.
- (6) Copper-Catalyzed Hydroboration of Alkynes Employing Carbon Dioxide and Hydrosilane, Fujihara, T.; Xu, T.; Semba, K.; Terao, J.; Tsuji, Y. The 18th International Symposium on Homogeneous Catalysis (ISHC-18), P109, Toulouse (France), July 10 (2012).（ポスター発表）.
- (7) Copper-Catalyzed Silacarboxylation of Alkynes Using Carbon Dioxide and Silylboranes
Tani, Y.; Semba, K.; Fujihara, T.; Terao, J.; Tsuji, Y. The 18th International Symposium on Homogeneous Catalysis (ISHC-18), P111, Toulouse (France), July 10 (2012).（ポスター発表）.
- (8) Nickel-Catalyzed Carboxylation of Aryl Chlorides and Vinyl Chlorides with CO₂
Nogi, K.; Xu, T.; Fujihara, T.; Terao, J.; Tsuji, Y. The 18th International Symposium on Homogeneous Catalysis (ISHC-18), P112, Toulouse (France), July 12 (2012).（ポスター発表）.

3. 特許

4. 学会・シンポジウム等の開催状況

5. 受賞等

6. 新聞報道等

7. 国民との科学・技術対話

8. 領域内の共同研究の準備・実施状況とその成果

北海道大学鈴木孝紀研究室と共同研究を行い共著の論文を発表した（上記の発表論文の2）*Chem. Eur. J.*, **2013**, 19, 117-123.）。