

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-Mediated C-H/C-H Biaryl Coupling of Benzoic Acid Derivatives and 1,3-Azoles
Nishino, M.; Hirano, K.*; Satoh, T.; Miura, M.*
Angew. Chem. Int. Ed. **2013**, Early View.
- (2) Regioselective and Stereospecific Copper-Catalyzed Aminoboration of Styrenes with Bis(pinacolato)diboron and *O*-Benzoyl-*N,N*-dialkylhydroxylamines
Matsuda, N.; Hirano, K.*; Satoh, T.; Miura, M.*
J. Am. Chem. Soc. **2013**, ASAP.
- (3) Synthesis of highly substituted isocoumarins by rhodium-catalyzed annulation of readily available benzoic acids
Unoh, Y.; Hirano, K.; Satoh, T.*; Miura, M.*
Tetrahedron **2013**, in press.
- (4) Synthesis of *N*-Vinylcarbazoles via Dehydrogenative Coupling of *N*-H Carbazoles with Alkenes under Palladium Catalysis
Takeda, D.; Hirano, K.; Satoh, T.*; Miura, M.*
Org. Lett. **2013**, *15*, 1242-1245.
- (5) Rhodium- and Iridium-Catalyzed Dehydrogenative Cyclization through Double C-H Bond Cleavages To Produce Fluorene Derivatives
Itoh, M.; Hirano, K.; Satoh, T.*; Shibata, Y.; Tanaka, K.; Miura, M.*
J. Org. Chem. **2013**, *78*, 1365-1370.
- (6) Regioselective C-H Bond Cleavage/Alkyne Insertion under Ruthenium Catalysis
Hashimoto, Y.; Hirano, K.; Satoh, T.*; Kakiuchi, F.; Miura, M.*
J. Org. Chem. **2013**, *78*, 638-646.
- (7) Copper-Catalyzed Electrophilic Amination of Arylsilanes with Hydroxylamines
Miki, Y.; Hirano, K.*; Satoh, T.; Miura, M.*
Org. Lett. **2013**, *15*, 172-175.
- (8) Copper-Catalyzed Amination of Ketene Silyl Acetals with Hydroxylamines: Electrophilic Amination Approach to α -Amino Acids
Matsuda, N.; Hirano, K.*; Satoh, T.; Miura, M.*
Angew. Chem. Int. Ed. **2012**, *51*, 11827-11831.

- (9) Copper-Mediated Oxidative Direct C-C (Hetero)Aromatic Cross-Coupling
Hirano, K.*; Miura, M.*
Chem. Commun. **2012**, 48, 10704-10714.
- (10) Synthesis of Phenanthridines and Related Compounds by Palladium-Catalyzed Direct Coupling via C-H and N-H Bond Cleavages
Takeda, D.; Hirano, K.; Satoh, T.*; Miura, M.*
Heterocycles **2012**, 86, 487-496.
- (11) Copper-Mediated and Copper-Catalyzed Cross-Coupling of Indoles and 1,3-Azoles: Double C-H Activation
Nishino, M.; Hirano, K.*; Satoh, T.; Miura, M.*
Angew. Chem. Int. Ed. **2012**, 51, 6993-6997.
- (12) A Concise Access to (Polyfluoroaryl)allenes by Cu-Catalyzed Direct Coupling with Propargyl Phosphates
Nakatani, A.; Hirano, K.*; Satoh, T.; Miura, M.*
Org. Lett. **2012**, 14, 2586-2589.
- (13) Synthesis of Fluorene Derivatives through Rhodium-Catalyzed Dehydrogenative Cyclization
Morimoto, K.; Itoh, M.; Hirano, K.; Satoh, T.*; Shibata, Y.; Tanaka, K.; Miura, M.*
Angew. Chem. Int. Ed. **2012**, 51, 5359-5362.
- (14) Dehydrogenative Synthesis of C3-Azolyindoles via Copper-Promoted Annulative Direct Coupling of *o*-Alkynylanilines
Oda, Y.; Matsuyama, N.; Hirano, K.*; Satoh, T.; Miura, M.*
Synthesis **2012**, 44, 1515-1520.

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) 遷移金属触媒を用いる直接的芳香族カップリング
三浦雅博, 有機反応懇談会／有機合成化学協会関西支部, 関西大学千里山キャンパス, 2012.8.3（招待講演）.
- (2) Development of Direct Aromatic Coupling by Transition Metal Catalysis
Miura, M., IBS (Institute of Basic Science) Symposium, Seoul, Korea, 2012.9.6（招待講演）.
- (3) Copper-Catalyzed Aromatic Amination via C-H Bond Cleavage
Miura, M., 17th Malaysian Chemical Congress, Putra World Trade Center, Kuala Lumpur, Malaysia, October 15-17（招待講演）.

- (4) Copper-Mediated C-H/C-H Coupling of Indoles and Azoles
Nishino, M.; Hirano, K.; Satoh, T.; Miura, M., The 12th International Kyoto Conference on New Aspects of Organic Chemistry, Kyoto, 2012.11.12-16 (ポスター発表) .
- (5) Ruthenium-Catalyzed Hydroarylation of Alkynes
Hashimoto, Y.; Hirano, K.; Satoh, T.; Kakiuchi, F.; Miura, M., The 12th International Kyoto Conference on New Aspects of Organic Chemistry, Kyoto, 2012.11.12-16 (ポスター発表) .
- (6) Transition Metal Catalyzed Aromatic Couplings for Construction pi-Conjugated Systems
Miura, M., The 7th International Forum on Chemistry of Functional Organic Chemicals, Tokyo University, 2012.11.18-19 (招待講演) .
- (7) 遷移金属触媒を用いる直接的芳香族カップリングの新展開
三浦雅博, 日本化学会第 93 春季年会, 滋賀, 2013.3.22-25 (受賞講演) .

3. 特許

なし

4. 学会・シンポジウム等の開催状況

- (1) 日本化学会第 93 春季年会, 滋賀, 2012.3.22-25 (三浦雅博, 実行委員・プログラム委員長)

5. 受賞等

- (1) 三浦雅博, 日本化学会学術賞, 2013.3.23

6. 新聞報道等

なし

7. 国民との科学・技術対話

- (1) 大阪大学工学部一日体験化学教室「高校生および引率の教諭、参加 160 名、2012 年 8 月 8 日 (水) 8 時 30 分～16 時 00 分、アンケート有」(分担参加)

8. 領域内の共同研究の準備・実施状況とその成果

- (1) 共同研究先：慶応義塾大学, 垣内史敏 (A01 班, 公募班員)
共同研究内容：ルテニウム触媒を用いたアルケニル化反応
共同研究成果：論文発表 1 件, 国際会議発表 1 件