

研究期間全年度 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) Iron-Catalyzed Sulfonyl Radical Formations from Sulfonylhydrazides and Oxidative Addition to Alkenes
Taniguchi, T.*; Idota, A.; Ishibashi, H. *Org. Biomol. Chem.* **2011**, *9*, 3151-3153.
- (2) A Mild Oxidative Aryl Radical Addition into Alkenes Using Aerobic Oxidation of Arylhydrazines
Taniguchi, T.*; Zaimoku, H.; Ishibashi, H. *Chem. Eur. J.* **2011**, *17*, 4307-4312.
- (3) Iron-Mediated One-Pot Formal Nitrocyclization onto Unactivated Alkenes
Taniguchi, T.*; Fujii, T.; Ishibashi, H. *Org. Biomol. Chem.* **2011**, *9*, 653.
- (4) Iron-Catalyzed Oxidative Addition of Alkoxy carbonyl Radical to Alkenes with Carbazates and Air
Taniguchi, T.*; Sugiura, Y.; Zaimoku, H.; Ishibashi, H. *Angew. Chem. Int. Ed.* **2010**, *49*, 10154-10157.
- (5) Iron-Mediated Radical Halo-Nitration of Alkenes
Taniguchi, T.*; Fujii, T.; Ishibashi, H. *J. Org. Chem.* **2010**, *75*, 8126-8132.
- (6) Asymmetric Synthesis of 2,3-Dihydro-4-pyranones by Reaction of Chiral 3-Alkoxy cyclobutanone and Aldehyde
Negishi, S.; Ishibashi, H.; Matsuo, J.* *Org. Lett.* **2010**, *12*, 4984-4987.
- (7) Titanium(IV) Chloride-Mediated Carbon-Carbon Bond-Forming Reaction Between 3,3-Dialkyl cyclobutanones and Aldehydes
Matsuo, J.*; Kawano, M.; Okuno, R.; Ishibashi, H. *Org. Lett.* **2010**, *12*, 960-962.
- (8) Asymmetric Reduction of Aliphatic Ketones and Acyl Silanes Using Chiral *anti*-Pentane-4-diol and A Catalytic Amount of 2,4-Dinitrobenzenesulfonic Acid
Matsuo, J.*; Hattori, Y.; Hashizume, M.; Ishibashi, H. *Tetrahedron* **2010**, *66*, 6062-6069 .
- (9) A New Synthesis of 2,3-Di- or 2,3,3-Trisubstituted 2,3-Dihydro-4-pyridones by Reaction of 3-Ethoxycyclobutanones and *N-p*-Toluenesulfonyl Imines Using Titanium(IV) Chloride: Synthesis of (±)-Bremazocine
Matsuo, J.*; Okado, R.; Ishibashi, H. *Org. Lett.* **2010**, *12*, 3266-3268.
- (10) An Efficient Procedure for Preparation of 2-Monoalkyl or 2-Monoaryl-3-ethoxycyclobutanones
Matsuo, J.*; Okuno, R.; Takeuchi, K.; Kawano, M.; Ishibashi, H. *Tetrahedron Lett.* **2010**, *51*, 3736-3737.
- (11) Brønsted Acid-Catalyzed Asymmetric Reduction of Ketones and Acyl Silanes Using Chiral *anti*-Pentane-2,4-diol
Matsuo, J.*; Hattori, Y.; Ishibashi, H. *Org. Lett.* **2010**, *12*, 2294-2297.

- (12) Identification of Stemonamide Synthetic Intermediates as a Novel Potent Anti-Cancer Drug with an Apoptosis-Inducing Ability
Li, Y.-Y.; Wang, Y.-Y.; Taniguchi, T.; Kawakami, T.; Baba, T.; Ishibashi, H.; Mukaida, N.*
Int. J. Cancer **2010**, *127*, 474-484.
- (13) Trialkylamine-Mediated Intramolecular Acylation of Alkenes with Carboxylic Acid Chlorides
Matsuo, J.*; Hoshikawa, T.; Sasaki, S.; Ishibashi, H. *Chem. Pharm. Bull.* **2010**, *58*, 591-592.
- (14) Intramolecular Formal [4+2] Cycloaddition of 3-Ethoxycyclobutanones and Alkenes
Matsuo, J.*; Sasaki, S.; Hoshikawa, T.; Ishibashi, H. *Chem. Commun.* **2010**, 934-936.
- (15) Iron-Mediated Radical Nitro-Cyclization Reaction of 1,6-Diene
Taniguchi, T.; Ishibashi, H.* *Org. Lett.* **2010**, *12*, 124-126.
- (16) Iron-Catalyzed Redox Radical Cyclizations of 1,6-Dienes and Enynes
Taniguchi, T.; Goto, N.; Nishibata, A.; Ishibashi, H.* *Org. Lett.* **2010**, *12*, 112-115.
- (17) Water in Amine-Mediated Single Electron Transfer Reaction of *N*-Allylic Trichloroacetamides
Taniguchi, T.; Sasaki, M.; Ishibashi, H.* *Heterocycles* **2010**, *80*, 657-662.

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) Synthetic Study of Actinophyllic Acid
Zaimoku, H., Taniguchi, T., Ishibashi, H., 8th AFNC International Medicinal Chemistry Symposium, Tokyo, Japan, 2011.11.28-12.2（口頭発表）.

3. 特許

光学活性アルコールの製造方法

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特願 2010-090198，2010.4.9

5. 受賞等

- (1) 石橋弘行
日本薬学会賞 日本薬学会第 132 年会、2012.3.28.
- (2) 橋本卓磨（学士 4 年）
優秀ポスター賞 平成 23 年度有機合成化学北陸セミナー、2011.10.7
- (3) 杉浦祐基（修士 1 年）
大学院優秀発表賞 日本薬学会北陸支部第 122 回例会，2010.11.21