

# 略歴・研究業績

小室 貴士

## 【略歴】

### 学歴

1999年3月	名古屋大学理学部化学科 卒業
1999年4月	名古屋大学大学院理学研究科物質理学専攻 博士課程（前期課程） 入学
2001年3月	同 上 修了
2001年4月	名古屋大学大学院理学研究科物質理学専攻 博士課程（後期課程） 入学
2004年3月	同 上 修了

### 職歴

2004年4月1日～2004年8月31日	日本学術振興会特別研究員（所属：分子科学研究所）
2004年9月1日～2007年3月31日	東北大学大学院理学研究科化学専攻 助手
2007年4月1日～2021年3月31日	東北大学大学院理学研究科化学専攻 助教
2021年4月1日～現在	東北大学大学院理学研究科化学専攻 講師

## 【研究業績】

原著論文(査読有) (著者名, 題目, 掲載誌名, 卷, ページ, 年)

1. K. Sato, T. Komuro, H. Hashimoto, and H. Tobita, Bifunctional Rhodium Complex Featuring a Silyl-1,8-naphthyridine Si,N-Chelate Ligand: Cooperation of Metal and Pendant Base for Capture and Bond-weakening of BH<sub>3</sub>, *Chem. Lett.*, **49**, 1431–1434 (2020).
2. T. Kitano, T. Komuro, K. Sato, and H. Tobita, Synthesis of ruthenium–bis(silyl) chelate complexes without carbonyl ligands by reactions of a bis(allyl)ruthenium(II) complex with bis(hydrosilyl)xanthene and phosphines, *J. Organomet. Chem.*, **919**, 121316 (2020).
3. T. Komuro, T. Osawa, R. Suzuki, D. Mochizuki, H. Higashi, and H. Tobita, Silyl–pyridine–amine pincer-ligated iridium complexes for catalytic silane deuteration via room temperature C–D bond activation of benzene-d<sub>6</sub>, *Chem. Commun.*, **55**, 957–960 (2019).
4. T. Kitano, T. Komuro, and H. Tobita, Double and Single Hydroboration of Nitriles Catalyzed by a Ruthenium–Bis(silyl)xanthene Complex: Application to One-Pot Synthesis of Diarylamines and N-Arylimines, *Organometallics*, **38**, 1417–1420 (2019).
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6. I. Kusuma, T. Komuro, and H. Tobita, Diruthenium Complexes with a 1,8-Naphthyridine-based Bis(silyl) Supporting Ligand: Synthesis and Structures of Complexes Containing Ru<sup>II</sup><sub>2</sub>(μ-H)<sub>2</sub> and Ru<sup>I</sup><sub>2</sub> Cores, *Chem. Lett.*, **47**, 400–403 (2018).
7. T. Kitano, T. Komuro, R. Ono, and H. Tobita, Tandem Hydrosilylation/o-C–H Silylation of Arylalkynes Catalyzed by Ruthenium Bis(silyl) Aminophosphine Complexes, *Organometallics*, **36**, 2710–2713 (2017).

8. **T. Komuro**, T. Kitano, N. Yamahira, K. Ohta, S. Okawara, N. Mager, M. Okazaki, and H. Tobita, Directed *ortho*-C–H Silylation Coupled with *trans*-Selective Hydrogenation of Arylalkynes Catalyzed by Ruthenium Complexes of a Xanthene-Based *Si,O,Si*-Chelate Ligand, “Xantsil”, *Organometallics*, **35**, 1209–1217 (2016).
9. **T. Komuro**, T. Arai, K. Kikuchi, and H. Tobita, Synthesis of Ruthenium Complexes with a Nonspectator *Si,O,P*-Chelate Ligand: Interconversion between a Hydrido( $\eta^2$ -silane) Complex and a Silyl Complex Leading to Catalytic Alkene Hydrogenation, *Organometallics*, **34**, 1211–1217 (2015).
10. Y. Kanno, **T. Komuro**, and H. Tobita, Direct Conversion of a Si–C(aryl) Bond to Si–Heteroatom Bonds in the Reactions of  $\eta^3$ - $\alpha$ -Silabenzyl Molybdenum and Tungsten Complexes with 2-Substituted Pyridines, *Organometallics*, **34**, 3699–3705 (2015). (**ACS Editor’s Choice**)
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14. **T. Komuro**, Y. Kanno, and H. Tobita, Synthesis, Structure, and Reactions of a ( $\eta^3$ - $\alpha$ -silabenzyl)molybdenum Complex: A Synthetic Equivalent of Coordinatively Unsaturated Silyl Complex, *Organometallics*, **32**, 2795–2803 (2013).
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## 解説記事

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2. 小室 貴士, シリルキレート配位子を持つ金属錯体触媒を用いたC–H結合および小分子の変換に関する最近の展開, *Bull. Jpn. Soc. Coord. Chem.*, **70**, 36–39 (2017).
3. 小室 貴士, メタンの C–H ホウ素化, *Organometallic News* (有機金属ハイライト), No. 2, p. 73 (2016).

## 受賞（受賞年月, 受賞名称）

2018年3月, International Congress on Pure & Applied Chemistry (ICPAC) 2018 Lecture Award