

1. Naoya Noguchi, Toshiro Takao, "Preparation of a Series of Heterobimetallic Complexes Containing Bridging Ethylidyne Ligands by the Reaction of Diruthenium Bis(μ -ethylidyne) Complex with 3d Metal Carbonyls: Alkylidyne–Alkylidyne Coupling Reaction at the Ru₂Fe Site", *J. Organomet. Chem.*, **1026**, 123497 (2025). (DOI: 10.1016/j.jorgancem.2024.123497) 12/30
2. Toshiro Takao, Shinji Matsuzawa, Masahiro Nagaoka, "Synthesis of Bimetallic Dinuclear Hydrido Complexes of Re and Rh/Ir Supported by a Direct M-M' Bond: The Role of the M-M' Bond in the Site Exchange of Hydrides", *Inorg. Chem.*, **63**(46), 22214–22226 (2024). (DOI: 10.1021/acs.inorgchem.4c03837) 11/7
3. Toshiro Takao, Shu Egawa, Takayuki Ochi, Takeshi Fukuyama, "Synthesis of a 50-electron Triangular Ruthenium Cluster Containing a μ_3 -Methylidyne Ligand via the Fragmentation of the Ru₂ Skeleton", *J. Organomet. Chem.*, **1013**, 123157 (2024). (DOI: 10.1016/j.jorgancem.2024.123157) 4/29
4. Toshiro Takao, Taiki Taniguchi, Yohei Tsurumaki, "Skeletal Rearrangement of a μ - η^2 : η^4 -Hexatrienyl Ligand at a Diruthenium Site via a μ - η^5 -Ruthenacyclohexadienyl Inter-mediate", *Organometallics*, **43**(8), 866–878 (2024). (DOI: 10.1021/acs.organomet.4c00050) 4/9
5. Toshiro Takao, Ryuichi Shimogawa, Ryosuke Fujita, Shu Egawa, "Synthesis of Diruthenium μ - η^4 - α -Diimine Complex via Dehydrogenative Coupling of Cyclic Amines and Its Role in Dehydrogenative Oxidation of Pyrrolidine", *Dalton Trans.*, **52**, 16737-16753 (2023). (DOI: 10.1039/d3dt03187) 10/18
6. Toshiro Takao, Taichi Monoe, Ryuichi Shimogawa, Keigo Nakamura, "Heterobimetallic Trihydrido Complex of Ruthenium and Rhodium Supported by Cyclopentadienyl Groups with Different Steric Demands", *Organometallics*, **42**(15), 2087-2101 (2023). (DOI: 10.1021/acs.organomet.3c00254) 7/20
7. Ryuichi Shimogawa, Yuki Muroi, Naoya Noguchi, Gen-ichi Konishi, Toshiro Takao, Hiroharu Suzuki, "Photo-Induced Reaction of Cp*Ru(μ -H)₄RuCp* with Arenes Resulting in Irreversible Formation of μ - η^2 : η^2 -Cyclohexadiene Complexes", *Organometallics*, **41**(23), 3750-3761 (2022). (DOI: 10.1021/acs.organomet.2c00499) 11/11
8. Toshiro Takao, Yuta Takahashi, Masataka Kai, "Formation of an Azaruthenacyclopentadiene Skeleton via Ammonia Activation by an Electron-Deficient Ru₃ Cluster", *Chem. Eur. J.*, **28**, e20220031 (2022). (DOI: 10.1002/chem.202200327)
https://onlinelibrary.wiley.com/share/author/T9FSACGD5FEQU7AWTFHP?target=_10.1002/chem.202200327 3/29
9. Toshiro Takao, Akiko Inagaki, "Mono- and Bis-cyclopentadienyl Complexes of Ruthenium and Osmium", G. Parkin, K. Meyer, D. O'Hare Eds. *Comprehensive Organometallic Chemistry IV*, Vol. 7, pp 294-443, Elsevier (2022). (DOI: 10.1016/B978-0-12-820206-7.00143-8) 8/1

10. Toshiro Takao, Koichi Seki, "C-C Bond Formation Between the μ -Alkylidyne Ligands in a Diruthenium Bis(μ -alkylidyne) Complex; σ - and π -Aromaticity of the Ru₂C₂ Core", *Eur. J. Inorg. Chem.* **2021**, 2505-2513 (2021). (DOI: 10.1002/ejic.202100299) 5/26.
11. Toshiro Takao, Hidenori Suzuki, Ryuichi Shimogawa, "Syntheses and Properties of Triruthenium Polyhydrido Complexes Composed of 1,2,4-tri-*tert*-butylcyclopentadienyl and *p*-Cymene Ruthenium Units", *Organometallics* **40**(9), 1303-1313 (2021) (DOI: 10.1021/acs.organomet.1c00094). 4/19
12. Toshiro Takao, Koichi Seki, "Synthesis of Diruthenium μ -Chloromethylidyne Complex: C–C Bond Formation at the Bridging Carbon Atom via the Reduction of a μ -Chloromethylidyne Ligand", *Organometallics* **40**(4), 467-471 (2021) (DOI: 10.1021/acs.organomet.0c00792). 2/10
13. Hajime Kameo, Shigeyoshi Sakaki, Yasuhiro Ohki, Naoki Uehara, Takuya Kosukegawa, Hiroharu Suzuki, Toshiro Takao, "The Four-electron Reduction of Dioxygen on a Metal Surface: Models of Dissociative and Associative Mechanisms in a Homogeneous System", *Inorg. Chem.* **60**(3), 1550-1560 (2021) (DOI: 10.1021/acs.inorgchem.0c02936). 11/6
14. Toshiro Takao, Koichi Seki, "Reversible Transformation of a μ_3 - η^3 -C₃ Ring into μ_3 - η^2 -Ethyne and μ -Vinylidene Ligands at a Triruthenium Site upon Deprotonation and Protonation", *Organometallics*, **39**(24), 4637-4644 (2020). (DOI: 10.1021/acs.organomet.0c00670) 11/26
15. Yusuke Takahashi, Atsushi Tahara, Toshiro Takao, "Intramolecular Nitrene Transfer via the C≡N Bond Cleavage of Acetonitrile to a μ_3 -Alkylidyne Ligand on a Cationic Triruthenium Plane", *Organometallics* **39**(15), 2888-2899 (2020). (DOI: 10.1021/acs.organomet.0c00393) 7/21
16. Hiroyuki Tsuruda, Toshiro Takao, "Synthesis and Site-Dependent Reactivity of a Heterometallic Dinuclear Bis(μ -imido) Complex of Tungsten and Ruthenium", *J. Organomet. Chem.* **919**, 121296 (2020). (DOI: 10.1016/j.jorgchem.2020.121296) 5/4
17. 高尾俊郎, "電子豊富な二核ルテニウム錯体を触媒としたピリジンおよび環状アミンの変換反応", 有機合成化学協会誌, **78**(4), 327-337 (2020). (DOI: 10.5059/yukigoseikyokaishi.78.327) 4/8
18. Takeshi Kaneko, Toshiro Takao, "Reaction of a Triruthenium μ_3 -Borylene Complex with Benzonitrile: Formation of a μ_3 - η^3 -BCN Ring on a Cationic Ru₃ Plane via Photo-Induced Intramolecular Borylene Transfer", *Organometallics*, **39**(4), 593–604 (2020). (DOI: 10.1021/acs.organomet.9b00831)
19. Ryuichi Shimogawa, Yohei Tsurumaki, Hidenori Suzuki, Toshiro Takao, "Selective Synthesis of a Triruthenium Pentahydrido Complex with Mixed-Cp Ligands (C₅'Bu₃H₂ and C₅Me₅) and Its Transformation into Face-Capping Benzene Complexes; Fluxionality of a Face-Capping Benzene Ligand Induced by Oxidation", *Organometallics*, **38**(19), 3824–3833 (2019). (DOI:

10.1021/acs.organomet.9b00503)

20. Hiroki Chikamori, Toshiro Takao, “Formation of a μ_3 -Acetylide on a Ru₃ Cluster via Coupling of μ -Methylene with Isocyanide Accompanied by Elimination of Amine: A Model of Hydrogen-Assisted C–C Bond Formation on a Metal Surface”, *Organometallics*, **38**(14), 2705–2709 (2019). (DOI: 10.1021/acs.organomet.9b00301) *ACS Editor's Choice*
21. Toshiro Takao, Takashi Kawashima, Ryo Nagae, Hideyuki Kanda, Wataru Watanabe, “Diruthenium Complexes Having a Partially Hydrogenated Bipyridine Ligand: Plausible Mechanism for the Dehydrogenative Coupling of Pyridines at a Diruthenium Site”, *Faraday Discuss.*, **220**, 249–268 (2019). (DOI: 10.1039/C9FD00029A)
22. Takeshi Kaneko, Hayato Ninagawa, Moe Matsuoka, Toshiro Takao, “Synthesis and Properties of a Triruthenium Hydrido Complex Capped by a μ_3 -Oxoboryl Ligand”, *Organometallics*, **38**(9), 2239–2249 (2019). (DOI: 10.1021/acs.organomet.9b00182)
23. Mocko Saito, Shuhei Kojima, Akiko Inagaki, Koichi Seki, Toshiro Takao, “Effect of Ring Size on the Properties of μ_3 -Cycloalkyne Complexes: Synthesis of Triruthenium Complexes Containing a Perpendicularly Coordinated μ_3 -Allenyl Ligand”, *J. Organomet. Chem.*, **885**, 7–20 (2019). (DOI: 10.1016/j.jorgchem.2019.01.020)
24. Hiroki Chikamori, Atsushi Tahara, Toshiro Takao, “Transformation of a μ_3 -Benzyne Ligand into Phenol on a Cationic Triruthenium Cluster Supported by a μ_3 -Sulfido Ligand”, *Organometallics*, **38**(2), 527–535 (2019). (DOI: 10.1021/acs.organomet.8b00832)
25. Takuya Kosukegawa, Toshiro Takao, “Synthesis of a Heterometallic Spiked Tetrahedral Cluster of Ruthenium and Nickel Containing Multiple Hydrido Ligands and Its Degradation to a Tetrahedral NiRu₃ cluster”, *J. Organomet. Chem.*, **882**, 70–79 (2019). (DOI: 10.1016/j.jorgchem.2018.12.016)
26. Toshiro Takao, Sachie Horikoshi, Takashi Kawashima, Sachio Asano, Yuta Takahashi, Akira Sawano, Hiroharu Suzuki, “Catalytic Hydrogenation of Benzonitrile by Triruthenium Clusters; Consecutive Transformations of Benzonitrile on the Face of a Ru₃ Plane.” *Organometallics*, **37**(10), 1598–1614 (2018). (DOI: 10.1021/acs.organomet.8b00165)
27. Ryuichi Shimogawa, Youhei Tsurumaki, Takuya Kuzutani, Toshiro Takao, “Coordination of a P–H Bond at a Sterically Demanding Diruthenium Site: Tautomerization between Agostic μ -Phosphane and μ -Phosphanido Complexes via an η^2 -P–H Bond Cleavage.” *Organometallics*, **37**(3), 290–293 (2018). (DOI: 10.1021/acs.organomet.7b00856)
28. Hiroyuki Tsuruda, Yoshihiro Hayashi, Susumu Kawauchi, Toshiro Takao, ” Preparation of Bis(μ_3 -silylyne) Complexes via Consecutive Si–H Bond Cleavage at a Triruthenium Site.” *Organometallics*, **36**(19), 3774–3783 (2017). (DOI: 10.1021/acs.organomet.7b00548)
29. Yuta Takahashi, Yumiko Nakajima, Hiroharu Suzuki, Toshiro Takao, “Synthesis of an Electron-Deficient Triruthenium Hydrido Complex Having a Bridging Carbonyl Ligand: Influence of a CO Ligand on the Properties and Reactivities

- of a Hydrido Cluster.”, *Organometallics*, **36**(18), 3539–3552 (2017). (DOI: 10.1021/acs.organomet.7b00465)
30. Ryuichi Shimogawa, Ryosuke Fujita, Toshiro Takao, Hiroharu Suzuki, “Dehydrogenative Oxidation of Cyclic Amines on a Diruthenium Complex”, *Organometallics*, **36**(10), 1893–1896 (2017). (DOI: 10.1021/acs.organomet.7b00231)
 31. Hajime Kameo, Yutaka Ito, Ryuichi Shimogawa, Asuka Koizumi, Hiroki Chikamori, Junko Fujimoto, Hiroharu Suzuki, Toshiro Takao, “Synthesis and Characterisation of Tetranuclear Ruthenium Polyhydrido Clusters with Pseudo-Tetrahedral Geometry”, *Dalton*, **46**(17), 5631–5643 (2017). (DOI: 10.1039/C6DT04523E)
 32. Ryuichi Shimogawa, Toshiro Takao, Hiroharu Suzuki, “Half-Sandwich Cyclopentadienyl Iridium Dichloride Monomer Cp[‡]IrCl₂ (Cp[‡] = 1,2,4-tri-tert-butylcyclopentadienyl)”, *Chem. Lett.* **46**(2), 197–199 (2017). (DOI: 10.1246/cl.160937)
 33. Takuya Kuzutani, Yushi Torihata, Hiroharu Suzuki, Toshiro Takao, “Synthesis of a Heterometallic Trinuclear Cluster of Ruthenium and Platinum with a Linear Alignment”, *Organometallics*, **35**(15), 2543–2556 (2016). (DOI: 10.1021/acs.organomet.6b00449)
 34. Masahiro Nagaoka, Takashi Kawashima, Hiroharu Suzuki, Toshiro Takao, “Dehydrogenative Coupling of 4-Substituted Pyridines Catalyzed by a Trinuclear Complex of Ruthenium and Cobalt”, *Organometallics*, **35**(14), 2348–2360 (2016). (DOI: 10.1021/acs.organomet.6b00277)
 35. Ryuichi Shimogawa, Toshiro Takao, Hiroharu Suzuki, “Modified synthesis of mixed-ligand dinuclear Ru–Ir, Ru–Rh, and Ru–Ru polyhydride-bridged complexes, CpsRuH₃ML (Cps = C₅Me₅ (Cp*), C₅Bu₃H₂ (Cp[‡]); M = Rh, Ir, Ru; L = C₅(CH₃)₅, C₆H₆, p-CH₃C₆H₄CH(CH₃)₂)”, *J. Organomet. Chem.*, **818**, 168–178 (2016). (DOI: 10.1016/j.jorgchem.2016.06.011)
 36. Ryuichi Shimogawa, Gen-ichi Konishi, Toshiro Takao, Hiroharu Suzuki, “Photo-induced Reactions of Diruthenium Tetrahydride Complexes: Carbon–Hydrogen Bond Cleavage of Tetrahydrofuran Leading to Bridging Cyclic Fischer-Type Carbene Complexes”, *Organometallics*, **35**(10), 1446–1457 (2016). (DOI: 10.1021/acs.organomet.6b00070)
 37. Takeshi Kaneko, Eisuke Murotani, Ryu-ichi Tenjimbayashi, Hiroharu Suzuki, Toshiro Takao, “Photolysis of Triruthenium μ₃-Alkyne Complexes Capped by a μ₃-Oxo Ligand”, *J. Organomet. Chem.* **812**, 167–176 (2016). (DOI: 10.1016/j.jorgchem.2015.10.016)
 38. Ryuichi Shimogawa, Toshiro Takao, Hiroharu Suzuki, “Versatile and Highly Efficient Synthesis of Diruthenium Tetrahydride Complex”, *J. Organomet. Chem.*, **801**(1), 6–9 (2016). (DOI: 10.1016/j.jorgchem.2015.10.009)
 39. Masahiro Nagaoka, Hiroyuki Tsuruda, Masa-aki Amako, Hiroharu Suzuki, Toshiro Takao, “μ₃-η²:η²:η²-Coordination of Primary Silane on a Triruthenium Plane”, *Angew. Chem. Int. Ed.* **54**(49), 14871–14874 (2015). (DOI: 10.1002/anie.201506969R1)
 40. Masahiro Nagaoka, Takanori Shima, Toshiro Takao, Hiroharu Suzuki, “Trinuclear μ₃-Silyl Complexes of Ruthenium and Group 9 Metals Having 3c-

2e Interactions and Transformation of a μ_3 -Silyl Complex of Ru₂Ir into μ -Silyl and μ_3 -Silylene Complexes”, *Organometallics*, **33**(24), 7232–7240 (2014).

41. Ryuichi Shimogawa, Toshiro Takao, Gen-ichi Konishi, Hiroharu Suzuki, “Photochemical Reaction of Diruthenium Tetrahydride-Bridged Complexes with Carbon Dioxide: Insertion of CO₂ into a Ru–H Bond versus C=O Double-Bond Cleavage”, *Organometallics*, **33**(19), 5066–5069 (2014).
42. Ryuichi Shimogawa, Toshiro Takao, Hiroharu Suzuki, “Synthesis, Characterization, and Reactions of Ru(II), Ru(III), and Ru(IV) Complexes with Sterically Demanding 1,2,4-Tri-tert-butylcyclopentadienyl Ligands”, *Organometallics*, **33**(1), 289–301 (2014).
43. Toshiro Takao, Hiroharu Suzuki, “Activation of Linear Alkanes by a Hydrido Triruthenium Cluster and Associated Skeletal Rearrangements”, *Bull. Chem. Soc. Jpn.*, **87**(4), 443–458 (2014).
44. Takeshi Kaneko, Toshiro Takao, Hiroharu Suzuki, “A Triruthenium Complex Capped by a Triply Bridging Oxboryl Ligand”, *Angew. Chem. Int. Ed.*, **52**(45), 11884–11887 (2013).
45. Takeshi Kaneko, Hitoshi Suwa, Toshiro Takao, Hiroharu Suzuki, “Intramolecular Borylene Transfer Leading to the Formation of a μ_3 -BC₂ Ring on a Triruthenium Plane”, *Organometallics*, **32**(3), 737–740(2013).
46. Hiroharu Suzuki, Ryuichi Shimogawa, Yuki Muroi, Toshiro Takao, Masato Oshima, Gen-ichi Konishi, “Bimetallic Activation of 2-Alkanones through Photo-Induced α -Hydrogen Abstraction Mediated by a Dinuclear Tetrahydride Complex”, *Angew. Chem. Int. Ed.*, **52**(6), 1773–1776 (2013).
47. Atsushi Tahara, Mana Kajigaya, Toshiro Takao, Hiroharu Suzuki, “Complex Containing $\mu_3\text{-}\eta^2(\text{||})$ -Ethyne and μ_3 -Methylidyne Ligands: Equilibrium of an Ethyne–Hydrido Complex with a Nonclassical μ_3 -Vinyl Complex”, *Organometallics*, **32**(1), 260–271 (2013).
48. Masahiro Nagaoka, Takanori Shima, Toshiro Takao, Hiroharu Suzuki, “Synthesis of a Heterometallic Trinuclear Cluster of Ruthenium and Iridium Containing a Perpendicularly Coordinated Alkyne Ligand and Its Dynamic Behavior”, *J. Organomet. Chem.*, **725**, 68–75 (2013).
49. Masahiro Nagaoka, Toshiro Takao, Hiroharu Suzuki, “Synthesis of a Heterometallic Trinuclear Cluster Containing Ruthenium and Cobalt and Its Reactivity with Internal Alkynes”, *Organometallics*, **31**(18), 6547–6554 (2012).
50. Toshiro Takao, Takashi Kawashima, Hideyuki Kanda, Rei Okamura, Hiroharu Suzuki, “Synthesis of Triruthenium Complexes Containing a Triply Bridging Pyridyl Ligand and Its Transformations to Face-Capping Pyridine and Perpendicularly Coordinated Pyridyl Ligands”, *Organometallics*, **31**(13), 4817–4831 (2012).
51. Toshiro Takao, Hiroharu Suzuki, “Skeletal Rearrangement of Hydrocarbyl Ligands on a Triruthenium Core Induced by Chemical Oxidation”, *Coord. Chem. Rev.*, **256**, 695–708 (2012).
52. Hideyuki Kanda, Takashi Kawashima, Toshiro Takao, Hiroharu Suzuki, “Reactions of a Triruthenium Pentahydrido Complex with Imines Leading to the Formation of a Perpendicularly Coordinated Iminoacyl Ligand and the

Scission of a C=N Bond on a Triruthenium Plane”, *Organometallics*, **31**(5), 1917–1926 (2012).

53. Toshiro Takao, Hitoshi Suwa, Rei Okamura, Hiroharu Suzuki, “Formation of a Boraruthenacyclopentenyl Skeleton via B–C Bond Formation across a Triruthenium Plane”, *Organometallics*, **31**(5), 1825–1831 (2012).
54. Toshiro Takao, Nozomi Obayashi, Bo Zhao, Kazunori Akiyoshi, Hideki Omori, Hiroharu Suzuki, “Synthesis and Property of Diruthenium Complexes Containing Bridging Cyclic Diene Ligands and the Reaction of Diruthenium Tetrahydrido Complex with Benzene Forming a $\mu\text{-}\eta^2\text{:}\eta^2$ -Cyclohexadiene Complex via Partial Hydrogenation on a Ru₂ Center”, *Organometallics*, **30**(18), 5057–5067(2011).
55. Toshiro Takao, Makoto Moriya, Mana Kajigaya, Hiroharu Suzuki, "Direct Arylation of a Cluster-Bound Alkyne Ligand with Benzene", *Organometallics*, **29**(21), 4770–4773 (2010).
56. Atsushi Tahara, Mana Kajigaya, Makoto Moriya, Toshiro Takao, Hiroharu Suzuki, “Metathesis Reaction of Hydrocarbyl Ligands across Triruthenium Plane”, *Angew. Chem. Int. Ed.*, **49**(34), 5898–5901 (2010).
57. Makoto Moriya, Atsushi Tahara, Toshiro Takao, Hiroharu Suzuki, “Arylation of a Hydrocarbyl Ligand Formed from *n*-Alkane via C-H Bond Activation of Benzene using a Triruthenium Cluster”, *Eur. J. Inorg. Chem.*, 3393–3397 (2009).
58. 高尾俊郎, 鈴木寛治, ”三核ルテニウムクラスター上での炭化水素配位子の骨格転位”, 有機化学合成協会誌, **67**(5), 475–485 (2009).
59. Toshiro Takao, Kazunori Akiyoshi, Hiroharu Suzuki, “Preparation and Properties of Diruthenium Hydrido Complexes Having a Bridging Benzoquinone Ligand: Formation of an Alcohol Adduct of a $\mu\text{-}\eta^2\text{:}\eta^2$ -Benzoquinone Complex through Hydrogen Bonding”, *Organometallics*, **27**(16), 4199–4206 (2008).
60. Toshiro Takao, Makoto Moriya, Hiroharu Suzuki, “Insertion of Acetylene and Nitriles into a Ru-C Bond of a Dicationic Triruthenium Complex Having a $\mu_3\text{-}\eta^3\text{-C}_3$ Ring: Formation of Six-Membered Ruthenacycles on a Triruthenium Core”, *Organometallics*, **27**(6), 1044–1054 (2008).
61. Toshiro Takao, Makoto Moriya, Hiroharu Suzuki, “Introduction of a Methoxy Group into a Hydrocarbyl Ligand Derived from a Linear Alkane on a Triruthenium Cluster via Chemical Oxidation”, *Organometallics*, **27**(1), 18–20 (2008).
62. Takashi Kawashima, Toshiro Takao, Hiroharu Suzuki, “Dehydrogenative Coupling of 4-Substituted Pyridines Catalyzed by Diruthenium Complexes”, *J. Am. Chem. Soc.*, **129**(36), 11006–11007 (2007).
63. Makoto Moriya, Toshiro Takao, Hiroharu Suzuki, “Synthesis and Structure of Cationic Triruthenium Complexes Containing an Oxametallacycle; Reversible Carbon-Oxygen Bond Formation and Scission on an Electron-Deficient Triruthenium Plane”, *Organometallics*, **26**(7), 1650–1657 (2007).
64. Toshiro Takao, Makoto Moriya, Hiroharu Suzuki, “Redox-induced Reversible Rearrangement of a Dimetallocallyl Ligand on the Trinuclear Cluster of

- Ruthenium. Mechanistic Aspects of Formation of the Face-capping μ_3 -C₃ Ring on the Triruthenium Plane”, *Organometallics*, **26**(6), 1349–1360 (2007).
65. Ryu-ichi Tenjimbayashi, Eisuke Murotani, Toshifumi Takemori, Toshiro Takao, Hiroharu Suzuki, “Synthesis, structure, and property of a triruthenium cluster having a μ -alkyl ligand: Transformation of a $\mu_3(\perp)$ -alkyne ligand into a μ -alkyl ligand via a μ_3 -vinylidene complex”, *J. Organomet. Chem.*, **692**, 442–454 (2007).
 66. Toshiro Takao, Akiko Inagaki, Tsubomi Imamura, Hiroharu Suzuki, “Oxidation-induced Rearrangement from a *nido*- to a *closو*-Ruthenacyclopentadiene”, *Organometallics*, **25**, 5511–5514 (2006).
 67. Takashi Kawashima, Toshiro Takao, Hiroharu Suzuki, “Synthesis and Structure of a Triruthenium Complex Containing a Face-Capping Pyridine Ligand”, *Angew. Chem., Int. Ed.* **45**, 7615–7618 (2006).
 68. Takashi Kawashima, Toshiro Takao, Hiroharu Suzuki, “Cleavage of the C≡N Triple Bond on the Triruthenium Cluster: Synthesis and Structure of a Triruthenium Complex Containing a μ_3 -Nitrido Ligand”, *Angew. Chem., Int. Ed.*, **45**, 485–488 (2006).
 69. Toshiro Takao, Takashi Kawashima, Kouki Matsubara, Hiroharu Suzuki, “Synthesis and Structure of a Triruthenium Complex Containing a Perpendicularly Coordinated $\mu_3\text{-}\eta^2\text{:}\eta^2(\perp)$ -Nitrile Ligand, and Its Protonation to Yield a Perpendicularly Coordinated Iminoacyl Ligand”, *Organometallics*, **24**, 3371–3374 (2005).
 70. Toshiro Takao, Shigeru Yoshida, Hiroharu Suzuki, “Substitution Reaction at a Bridging Silicon Ligand. Formation of a Bis(μ -Silylene) Complex Containing a Trifluoroacetyl Group, and Mechanistic Studies of the Site-exchange Process of the Hydride Ligands”, *Organometallics*, **24**, 521–532 (2005).
 71. Hiroharu Suzuki, Takeaki Kakigano, Ken-ichi Tada, Minoru Igarashi, Kouki Matsubara, Akiko Inagaki, Masato Oshima, Toshiro Takao, “Synthesis, Structures, and Reactions of Coordinatively Unsaturated Trinuclear Ruthenium Polyhydrido Complexes, $[\{Ru(C_5Me_5)\}_3(\mu\text{-H})_6](Y)$ ($Y = BF_4^-$, $CF_3SO_3^-$, $1/2(SO_4)^{2-}$, $C_6H_5CO_2^-$, $CH_3CO_2^-$, $B(C_6H_5)_4$, PF_6^-) and $[\{Ru(C_5Me_5)\}_3(\mu\text{-H})_3(\mu_3\text{-H}_2)]$ ”, *Bull. Chem. Soc. Jpn.*, **78**, 67–87 (2005).
 72. Toshiro Takao, Satoshi Kakuta, Ryu-ichi Tenjimbayashi, Toshifumi Takemori, Eisuke Murotani, Hiroharu Suzuki, “Fluxional Behavior of a Perpendicularly Coordinated μ_3 -Alkyne ligand on a Triruthenium cluster. Synthesis and Structure of a $\mu_3\text{-}\eta^2\text{:}\eta^2(\perp)$ -Cycloalkyne Complex”, *Organometallics*, **23**, 6090–6093 (2004).
 73. Toshiro Takao, Yoshiaki Takaya, Eisuke Murotani, Ryu-ichi Tenjimbayashi, Hiroharu Suzuki, “Synthesis and Characterization of Triruthenium Complexes Containing a Perpendicularly Coordinated Alkyne Ligand”, *Organometallics*, **23**, 6094–6096 (2004).
 74. Toshiro Takao, Masa-aki Amako, Hiroharu Suzuki, “Successive Si-H/Si-C Bond Cleavage of Tertiaryl silanes on Diruthenium Centers. Reactivities and Fluxional Behavior of the Bis(μ -silylene) Complexes Containing μ -Hydride Ligands”, *Organometallics*, **22**, 3855–3876 (2003).
 75. Akiko Inagaki, Toshiro Takao, Makoto Moriya, Hiroharu Suzuki, “Thermal

Skeletal Rearrangement of a *nido*-Ruthenacyclopentadiene Complex Involving Reversible Rupture and Formation of a Ruthenium-Ruthenium Bond”, *Organometallics*, **22**, 2196–2198 (2003).

76. Toshiro Takao, Akiko Inagaki, Eisuke Murotani, Tsubomi Imamura, Hiroharu Suzuki, “Bimetallic Reductive C-C Coupling Reaction Induced by Chemical Oxidation; Formation of a μ_3 -C₃ Ring on a Triruthenium Cluster”, *Organometallics*, **22**, 1361–1363 (2003).
77. Toshiro Takao, Toshifumi Takemori, Makoto Moriya, Hiroharu Suzuki, “Skeletal Rearrangement of a C₂ Unit on a Triruthenium Cluster. Synthesis of μ -Ethyldiene, μ_3 -Ethyldyne, and μ_3 -Vinylidene Complexes by the Reaction of {Cp*Ru(μ -H)}₃(μ_3 -H)₂ with Acetylene”, *Organometallics*, **21**, 5190–5203 (2002).
78. Toshiro Takao, Shigeru Yoshida, Hiroharu Suzuki, “Protonation of Bis- μ -Diethylsilyl Complex {(C₅Me₅)Ru(μ - η^2 -HSiEt₂)}(μ -H)(H). Enhancement of Bonding Interaction between Bridging Silicon and Hydride Ligands”, *Chem. Lett.*, 1100–1101 (2001).
79. Toshiro Takao, Masa-aki Amako, Hiroharu Suzuki, “Reactions of Diruthenium Tetrahydride Complex (η^5 -C₅Me₅)Ru(μ -H)₄Ru(η^5 -C₅Me₅) with Vinylsilanes: Formation of a μ -Silylene Complex via Successive Si-H and Si-C Bond Cleavage of Dimethylvinylsilane”, *Organometallics*, **20**, 3406–3422 (2001).
80. Toshiro Takao, Shigeru Yoshida, Hiroharu Suzuki, Masako Tanaka, "Synthesis, Characterization, and Reactivities of Diruthenium Complexes Containing μ -Silane Ligand, and Structural Studies of μ -Silane Complex [Cp'Ru(CO)]₂(μ - η^2 : η^2 -H₂Si^tBu₂)", *Organometallics*, **14**, 3855–3868 (1995).
81. Toshiro Takao, Hiroharu Suzuki, Masako Tanaka, "Insertion of Acetylene into the Ru-Si Bond of a Bis(μ -Silylene) Complex. Synthesis and Structure of a 2,5-Disilaruthenacyclopentene Complex", *Organometallics*, **13**, 2554–2556 (1994).
82. Hiroharu Suzuki, Toshiro Takao, Masako Tanaka, Yoshihiko Moro-oka, "Synthesis and Reactivity of Dinuclear μ -Silyl Complexes of Ruthenium having Three-centre Two-electron Ru-H-Si Interactions", *J. Chem. Soc., Chem. Commun.*, 476–478 (1992).