

Toshihiro Takao

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Mono- and Bis-cyclopentadienyl Complexes of Ruthenium and Osmium. , 2022, , .		2
2	Formation of an Azaruthenacyclopentadiene Skeleton via Ammonia Activation by an Electron-Deficient Ru ₃ Cluster. Chemistry - A European Journal, 2022, , e202200327.	3.3	0
3	Four-Electron Reduction of Dioxide on a Metal Surface: Models of Dissociative and Associative Mechanisms in a Homogeneous System. Inorganic Chemistry, 2021, 60, 1550-1560.	4.0	1
4	Synthesis of Diruthenium μ -Chloromethylidyne Complex: C-C Bond Formation at the Bridging Carbon Atom via the Reduction of a μ -Chloromethylidyne Ligand. Organometallics, 2021, 40, 467-471.	2.3	6
5	Syntheses and Properties of Triruthenium Polyhydrido Complexes Composed of 1,2,4-tri-tert-butylcyclopentadienyl and p-Cymene Ruthenium Units. Organometallics, 2021, 40, 1303-1313.	2.3	1
6	C-C Bond Formation between the μ -Alkylidyne Ligands in a Diruthenium Bis(μ -Alkylidyne) Complex; π - and σ -Aromaticity of the Ru ₂ C ₂ Core. European Journal of Inorganic Chemistry, 2021, 2021, 2505-2513.	2.0	0
7	Intramolecular Nitrene Transfer via the C-N Bond Cleavage of Acetonitrile to a μ -Alkylidyne Ligand on a Cationic Triruthenium Plane. Organometallics, 2020, 39, 2888-2899.	2.3	3
8	Reversible Transformation of a μ -C ₃ Ring into μ -Ethyne and μ -Vinylidene Ligands at a Triruthenium Site upon Deprotonation and Protonation. Organometallics, 2020, 39, 4637-4644.	2.3	1
9	Reaction of a Triruthenium μ -Borylene Complex with Benzonitrile: Formation of a μ -BCN Ring on a Cationic Ru ₃ Plane via Photo-Induced Intramolecular Borylene Transfer. Organometallics, 2020, 39, 593-604.	2.3	3
10	Transformation of Pyridines and Cyclic Amines at an Electron-Rich Diruthenium Site. Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry, 2020, 78, 327-337.	0.1	0
11	Synthesis of a heterometallic spiked tetrahedral cluster of ruthenium and nickel containing multiple hydrido ligands and its degradation to a tetrahedral NiRu ₃ cluster. Journal of Organometallic Chemistry, 2019, 882, 70-79.	1.8	1
12	Selective Synthesis of a Triruthenium Pentahydrido Complex with Mixed-Cp Ligands (C ₅ H ₃ and C ₅ H ₄) and) μ -C ₃ Ring on a Cationic Ru ₃ Plane via Photo-Induced Intramolecular Borylene Transfer. Organometallics, 2019, 38, 3824-3833.	2.3	2
13	Fluxionality of a Face-Capping Benzene Ligand Induced by Oxidation. Organometallics, 2019, 38, 3824-3833.		
13	Formation of a μ -Acetylide on a Ru ₃ 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, 2019, 38, 2705-2709.	2.3	3
14	Synthesis and Properties of a Triruthenium Hydrido Complex Capped by a μ -Oxoboryl Ligand. Organometallics, 2019, 38, 2239-2249.	2.3	3
15	Diruthenium complexes having a partially hydrogenated bipyridine ligand: plausible mechanism for the dehydrogenative coupling of pyridines at a diruthenium site. Faraday Discussions, 2019, 220, 249-268.	3.2	2
16	Effect of ring size on the properties of μ -Cycloalkyne complexes: Synthesis of triruthenium complexes containing a perpendicularly coordinated μ -Allenyl ligand. Journal of Organometallic Chemistry, 2019, 885, 7-20.	1.8	3
17	Transformation of a μ -Benzyne Ligand into Phenol on a Cationic Triruthenium Cluster Supported by a μ -Sulfido Ligand. Organometallics, 2019, 38, 527-535.	2.3	3
18	σ -Coordination of a C-H Bond at a Sterically Demanding Diruthenium Site: Tautomerization between Agostic μ -Phosphane and μ -Phosphanido Complexes via an μ -C-H Bond Cleavage. Organometallics, 2018, 37, 290-293.	2.3	3

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19	Catalytic Hydrogenation of Benzonitrile by Triruthenium Clusters: Consecutive Transformations of Benzonitrile on the Face of a Ru ₃ Plane. <i>Organometallics</i> , 2018, 37, 1598-1614.	2.3	15
20	Synthesis and characterisation of tetranuclear ruthenium polyhydrido clusters with pseudo-tetrahedral geometry. <i>Dalton Transactions</i> , 2017, 46, 5631-5643.	3.3	8
21	Dehydrogenative Oxidation of Cyclic Amines on a Diruthenium Complex. <i>Organometallics</i> , 2017, 36, 1893-1896.	2.3	5
22	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. <i>Organometallics</i> , 2017, 36, 3539-3552.	2.3	13
23	Preparation of Bis(η^3 -silylyne) Complexes via Consecutive Si-H Bond Cleavage at a Triruthenium Site. <i>Organometallics</i> , 2017, 36, 3774-3783.	2.3	2
24	Half-sandwich Cyclopentadienyl Iridium Dichloride Monomer Cp ⁺ IrCl ₂ (Cp ⁺ : 1,2,4-tri- <i>tert</i> -butylcyclopentadienyl). <i>Chemistry Letters</i> , 2017, 46, 197-199.	1.3	4
25	Dehydrogenative Coupling of 4-Substituted Pyridines Catalyzed by a Trinuclear Complex of Ruthenium and Cobalt. <i>Organometallics</i> , 2016, 35, 2348-2360.	2.3	15
26	Modified synthesis of mixed-ligand dinuclear Ru ^{II} -Ir, Ru ^{II} -Rh, and Ru ^{II} -Ru polyhydride-bridged complexes, Cp ₂ RuH ₃ ML (Cp [*] =C ₅ Me ₅ (Cp [*]), C ₅ Bu ₃ H ₂ (Cp ⁺); M=Arh, Ir, Ru; L=C ₅ (CH ₃) ₅ , C ₆ H ₆ , p-CH ₃ C ₆ H ₄ CH(CH ₃) ₂). <i>Journal of Organometallic Chemistry</i> , 2016, 818, 168-178.		4
27	Synthesis of a Heterometallic Trinuclear Cluster of Ruthenium and Platinum with a Linear Alignment. <i>Organometallics</i> , 2016, 35, 2543-2556.	2.3	8
28	Photolysis of triruthenium η^3 -alkyne complexes capped by a η^3 -oxo ligand. <i>Journal of Organometallic Chemistry</i> , 2016, 812, 167-176.	1.8	4
29	Photoinduced Reactions of Diruthenium Tetrahydride Complexes: Carbon-Hydrogen Bond Cleavage of Tetrahydrofuran Leading to Bridging Cyclic Fischer-Type Carbene Complexes. <i>Organometallics</i> , 2016, 35, 1446-1457.	2.3	8
30	Versatile and highly efficient synthesis of diruthenium tetrahydride complex. <i>Journal of Organometallic Chemistry</i> , 2016, 801, 6-9.	1.8	7
31	η^3 - σ - η^2 - η^2 -Coordination of Primary Silane on a Triruthenium Plane. <i>Angewandte Chemie</i> , 2015, 127, 15084-15087.	2.0	2
32	η^3 - σ - η^2 - η^2 -Coordination of Primary Silane on a Triruthenium Plane. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14871-14874.	13.8	6
33	Photochemical Reaction of Diruthenium Tetrahydride-Bridged Complexes with Carbon Dioxide: Insertion of CO ₂ into a Ru-H Bond versus C=O Double-Bond Cleavage. <i>Organometallics</i> , 2014, 33, 5066-5069.	2.3	20
34	Trinuclear η^3 -Silyl Complexes of Ruthenium and Group 9 Metals Having 3c-2e Interactions and Transformation of a η^3 -Silyl Complex of Ru ₂ Ir into η^3 -Silyl and η^3 -Silylene Complexes. <i>Organometallics</i> , 2014, 33, 7232-7240.	2.3	6
35	Synthesis, Characterization, and Reactions of Ruthenium(II), -(III), and -(IV) Complexes with Sterically Demanding 1,2,4-Tri- <i>tert</i> -butylcyclopentadienyl Ligands. <i>Organometallics</i> , 2014, 33, 289-301.	2.3	27
36	Activation of Linear Alkanes by a Hydrido Triruthenium Cluster and Associated Skeletal Rearrangements. <i>Bulletin of the Chemical Society of Japan</i> , 2014, 87, 443-458.	3.2	19

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37	Intramolecular Borylene Transfer Leading to the Formation of a μ_3 -BC ₂ Ring on a Triruthenium Cluster. <i>Organometallics</i> , 2013, 32, 737-740.	2.3	14
38	Synthesis of a heterometallic trinuclear cluster of ruthenium and iridium containing a perpendicularly coordinated alkyne ligand and its dynamic behavior. <i>Journal of Organometallic Chemistry</i> , 2013, 725, 68-75.	1.8	5
39	Synthesis and Dynamic Properties of a Triruthenium Complex Containing μ_3 - η^2 (η^3)-Ethyne and μ_3 -Methylidyne Ligands: Equilibrium of an Ethyne \rightleftharpoons Hydrido Complex with a Nonclassical μ_3 -Vinyl Complex. <i>Organometallics</i> , 2013, 32, 260-271.	2.3	12
40	A Triruthenium Complex Capped by a Triply Bridging Oxoboryl Ligand. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 11884-11887.	13.8	14
41	Bimetallic Activation of α -Alkanones through Photoinduced H -Hydrogen Abstraction Mediated by a Dinuclear Ruthenium Tetrahydride Complex. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 1773-1776.	13.8	8
42	Formation of a Boraruthenacyclopentenyl Skeleton via C Bond Formation across a Triruthenium Plane. <i>Organometallics</i> , 2012, 31, 1825-1831.	2.3	17
43	Synthesis of Triruthenium Complexes Containing a Triply Bridging Pyridyl Ligand and Its Transformations to Face-Capping Pyridine and Perpendicularly Coordinated Pyridyl Ligands. <i>Organometallics</i> , 2012, 31, 4817-4831.	2.3	32
44	Synthesis of a Heterometallic Trinuclear Cluster Containing Ruthenium and Cobalt and Its Reactivity with Internal Alkynes. <i>Organometallics</i> , 2012, 31, 6547-6554.	2.3	12
45	Reactions of a Triruthenium Pentahydrido Complex with Imines Leading to the Formation of a Perpendicularly Coordinated Iminoacyl Ligand and the Scission of a $\text{C}-\text{N}$ Bond on a Triruthenium Plane. <i>Organometallics</i> , 2012, 31, 1917-1926.	2.3	12
46	Skeletal rearrangement of hydrocarbyl ligands on a triruthenium core induced by chemical oxidation. <i>Coordination Chemistry Reviews</i> , 2012, 256, 695-708.	18.8	17
47	Synthesis and Property of Diruthenium Complexes Containing Bridging Cyclic Diene Ligands and the Reaction of Diruthenium Tetrahydrido Complex with Benzene Forming a μ_2 - η^2 -Cyclohexadiene Complex via Partial Hydrogenation on a Ru_2 Center. <i>Organometallics</i> , 2011, 30, 5057-5067.	2.3	23
48	Metathesis Reaction of Hydrocarbyl Ligands across the Triruthenium Plane. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 5898-5901.	13.8	16
49	Direct Arylation of a Cluster-Bound Alkyne Ligand with Benzene. <i>Organometallics</i> , 2010, 29, 4770-4773.	2.3	18
50	Arylation of Hydrocarbyl Ligands Formed from α -Alkanes through $\text{C}-\text{H}$ Bond Activation of Benzene Using a Triruthenium Cluster. <i>European Journal of Inorganic Chemistry</i> , 2009, 2009, 3393-3397.	2.0	24
51	Skeletal Rearrangement of a Hydrocarbyl Moiety on a Triruthenium Cluster. <i>Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry</i> , 2009, 67, 475-485.	0.1	2
52	Introduction of a Methoxy Group into a Hydrocarbyl Ligand Derived from a Linear Alkane on a Triruthenium Cluster via Chemical Oxidation. <i>Organometallics</i> , 2008, 27, 18-20.	2.3	12
53	Preparation and Properties of Diruthenium Hydrido Complexes Having a Bridging Benzoquinone Ligand: Formation of an Alcohol Adduct of a μ_2 - η^2 -Benzoquinone Complex through Hydrogen Bonding. <i>Organometallics</i> , 2008, 27, 4199-4206.	2.3	7
54	Insertion of Acetylene and Nitriles into a $\text{Ru}-\text{C}$ Bond of a Dicationic Triruthenium Complex Having a μ_3 - η^3 -C ₃ Ring: Formation of Six-Membered Ruthenacycles on a Triruthenium Core. <i>Organometallics</i> , 2008, 27, 1044-1054.	2.3	10

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55	Dehydrogenative Coupling of 4-Substituted Pyridines Catalyzed by Diruthenium Complexes. <i>Journal of the American Chemical Society</i> , 2007, 129, 11006-11007.	13.7	101
56	Redox-Induced Reversible Rearrangement of a Dimetallaallyl Ligand on the Trinuclear Cluster of Ruthenium. Mechanistic Aspects of Formation of the Face-Capping η^3 -C3 Ring on the Triruthenium Plane. <i>Organometallics</i> , 2007, 26, 1349-1360.	2.3	18
57	Synthesis and Structure of Cationic Triruthenium Complexes Containing an Oxametallacycle: σ -Reversible Carbon-Oxygen Bond Formation and Scission on an Electron-Deficient Triruthenium Plane. <i>Organometallics</i> , 2007, 26, 1650-1657.	2.3	12
58	Synthesis, structure, and property of a triruthenium cluster having a η^3 -alkyl ligand: Transformation of a $\eta^3(\text{S}^{\text{Y}})$ -alkyne ligand into a η^3 -alkyl ligand via a η^3 -vinylidene complex. <i>Journal of Organometallic Chemistry</i> , 2007, 692, 442-454.	1.8	18
59	Oxidation-Induced Rearrangement from a nido- to a closo-Ruthenacyclopentadiene. <i>Organometallics</i> , 2006, 25, 5511-5514.	2.3	12
60	Cleavage of the C \equiv N Bond on a Triruthenium Cluster: Synthesis and Structure of a Triruthenium Complex Containing a η^3 -Nitrido Ligand. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 485-488.	13.8	34
61	Synthesis and Structure of a Triruthenium Complex Containing a Face-Capping Pyridine Ligand. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 7615-7618.	13.8	23
62	Isomerization of Organic Substrates Catalyzed by Ruthenium Complexes. , 2005, , 309-331.		10
63	Synthesis, Structures, and Reactions of Coordinatively Unsaturated Trinuclear Ruthenium Polyhydrido Complexes, $[\{\text{Ru}(\text{C}_5\text{Me}_5)\}_3(\eta^3\text{-H})_6](\text{Y})$ (Y = BF ₄ , CF ₃ SO ₃ , 1/2(SO ₄), C ₆ H ₅ CO ₂ , CH ₃ CO ₂ , B(C ₆ H ₅) ₄), η^5 -ETQq174 0.784		
64	Synthesis and Structure of a Triruthenium Complex Containing a Perpendicularly Coordinated η^3 - η^2 (S^{Y})-Nitrile Ligand and Its Protonation To Yield a Perpendicularly Coordinated Iminoacyl Ligand. <i>Organometallics</i> , 2005, 24, 3371-3374.	2.3	17
65	Substitution Reactions at a Bridging Silicon Ligand. Formation of a Bis(η^3 -silylene) Complex Containing a Trifluoroacetoxy Group. Mechanistic Studies of the Site-Exchange Process of the Hydride Ligands. <i>Organometallics</i> , 2005, 24, 521-532.	2.3	10
66	Synthesis and Characterization of Triruthenium Complexes Containing a Perpendicularly Coordinated Alkyne Ligand. <i>Organometallics</i> , 2004, 23, 6094-6096.	2.3	23
67	Fluxional Behavior of a Perpendicularly Coordinated η^3 -Alkyne Ligand on a Triruthenium Cluster. Synthesis and Structure of a η^3 - η^2 (S^{Y})-Cycloalkyne Complex. <i>Organometallics</i> , 2004, 23, 6090-6093.	2.3	26
68	Thermal Skeletal Rearrangement of a nido-Ruthenacyclopentadiene Complex Involving Reversible Rupture and Formation of a Ruthenium-Ruthenium Bond. <i>Organometallics</i> , 2003, 22, 2196-2198.	2.3	19
69	Bimetallic Reductive C-C Coupling Reaction Induced by Chemical Oxidation: σ -Formation of a η^3 -C3 Ring on a Triruthenium Cluster. <i>Organometallics</i> , 2003, 22, 1361-1363.	2.3	17
70	Successive Si-H/Si-C Bond Cleavage of Tertiary Silanes on Diruthenium Centers. Reactivities and Fluxional Behavior of the Bis(η^3 -silylene) Complexes Containing η^3 -Hydride Ligands. <i>Organometallics</i> , 2003, 22, 3855-3876.	2.3	35
71	Skeletal Rearrangement of a C ₂ Unit on a Triruthenium Cluster. Synthesis of η^3 -Ethylidene, η^3 -Ethylidyne, and η^3 -Vinylidene Complexes by the Reaction of $\{\text{Cp}^*\text{Ru}(\eta^3\text{-H})\}_3(\eta^3\text{-H})_2$ with Acetylene. <i>Organometallics</i> , 2002, 21, 5190-5203.	2.3	39
72	Reactions of Diruthenium Tetrahydride Complex (η^5 -C ₅ Me ₅)Ru(η^3 -H) ₄ Ru(η^5 -C ₅ Me ₅) with Vinylsilanes: σ -Formation of a η^3 -Silylene Complex via Successive Si-H and Si-C Bond Cleavage of Dimethylvinylsilane. <i>Organometallics</i> , 2001, 20, 3406-3422.	2.3	29

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73	Protonation of Bis- η^4 -diethylsilyl Complex $\{(C_5Me_5)Ru(\eta^4-HSiEt_2)_2(\eta^4-H)(H)\}$: Enhancement of Bonding Interaction between Bridging Silicon and Hydride Ligands. <i>Chemistry Letters</i> , 2001, 30, 1100-1101.	1.3	10
74	Synthesis, Characterization, and Reactivities of Diruthenium Complexes Containing a μ -Silane Ligand and Structural Studies of the μ -Silane Complex $[Cp^*Ru(CO)]_2(\mu-H_2SiBu_2)$. <i>Organometallics</i> , 1995, 14, 3855-3868.	2.3	76
75	Insertion of Acetylene into the Ru-Si Bond of a Bis(μ -Silylene) Complex. Synthesis and Structure of a 2,5-Disilaruthenacyclopentane Complex. <i>Organometallics</i> , 1994, 13, 2554-2556.	2.3	45
76	Synthesis and reactivity of dinuclear μ -silyl complexes of ruthenium having three-centre two-electron Ru \cdots H \cdots Si interactions. <i>Journal of the Chemical Society Chemical Communications</i> , 1992, , 476-478.	2.0	47