

Toshihiro Takao

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	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
2	Synthesis, Characterization, and Reactivities of Diruthenium Complexes Containing a μ -Silane Ligand and Structural Studies of the μ -Silane Complex $[\text{Cp}^*\text{Ru}(\text{CO})]_2(\mu\text{-}\eta^2\text{-}\eta^2\text{-H}_2\text{Si}t\text{Bu}_2)$. <i>Organometallics</i> , 1995, 14, 3855-3868.	2.3	76
3	Synthesis, Structures, and Reactions of Coordinatively Unsaturated Trinuclear Ruthenium Polyhydrido Complexes, $[\{\text{Ru}(\text{C}_5\text{Me}_5)\}_3(\eta^4\text{-H})_6](\text{Y})$ ($\text{Y} = \text{BF}_4, \text{CF}_3\text{SO}_3, 1/2(\text{SO}_4), \text{C}_6\text{H}_5\text{CO}_2, \text{CH}_3\text{CO}_2, \text{B}(\text{C}_6\text{H}_5)_4, \text{B}(\text{C}_6\text{H}_5)_3, \text{EtO}^-\text{P}(\text{O})(\text{O}^-)_2$). <i>Organometallics</i> , 2002, 21, 5190-5203.	0.784	174
4	Synthesis and reactivity of dinuclear μ -silyl complexes of ruthenium having three-centre two-electron $\text{Ru}\cdots\text{H}\cdots\text{Si}$ interactions. <i>Journal of the Chemical Society Chemical Communications</i> , 1992, , 476-478.	2.0	47
5	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
6	Skeletal Rearrangement of a C ₂ Unit on a Triruthenium Cluster. Synthesis of η^4 -Ethylidene, η^3 -Ethylidyne, and η^3 -Vinylidene Complexes by the Reaction of $\{\text{Cp}^*\text{Ru}(\eta^4\text{-H})\}_3(\eta^3\text{-H})_2$ with Acetylene. <i>Organometallics</i> , 2002, 21, 5190-5203.	2.3	39
7	Successive $\text{Si}\cdots\text{H}/\text{Si}\cdots\text{C}$ Bond Cleavage of Tertiary Silanes on Diruthenium Centers. Reactivities and Fluxional Behavior of the Bis(η^4 -silylene) Complexes Containing η^4 -Hydride Ligands. <i>Organometallics</i> , 2003, 22, 3855-3876.	2.3	35
8	Cleavage of the $\text{C}\cdots 1/2\text{N}$ 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
9	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
10	Reactions of Diruthenium Tetrahydride Complex $(\eta^5\text{-C}_5\text{Me}_5)\text{Ru}(\eta^4\text{-H})_4\text{Ru}(\eta^5\text{-C}_5\text{Me}_5)$ with Vinylsilanes: A Formation of a η^4 -Silylene Complex via Successive $\text{Si}\cdots\text{H}$ and $\text{Si}\cdots\text{C}$ Bond Cleavage of Dimethylvinylsilane. <i>Organometallics</i> , 2001, 20, 3406-3422.	2.3	29
11	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
12	Fluxional Behavior of a Perpendicularly Coordinated η^3 -Alkyne Ligand on a Triruthenium Cluster. Synthesis and Structure of a η^3 - η^2 - η^1 -Cycloalkyne Complex. <i>Organometallics</i> , 2004, 23, 6090-6093.	2.3	26
13	Arylation of Hydrocarbyl Ligands Formed from $\text{C}\cdots\text{H}$ Alkanes through $\text{C}\cdots\text{H}$ Bond Activation of Benzene Using a Triruthenium Cluster. <i>European Journal of Inorganic Chemistry</i> , 2009, 2009, 3393-3397.	2.0	24
14	Synthesis and Characterization of Triruthenium Complexes Containing a Perpendicularly Coordinated Alkyne Ligand. <i>Organometallics</i> , 2004, 23, 6094-6096.	2.3	23
15	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
16	Synthesis and Property of Diruthenium Complexes Containing Bridging Cyclic Diene Ligands and the Reaction of Diruthenium Tetrahydrido Complex with Benzene Forming a η^4 - η^2 - η^2 -Cyclohexadiene Complex via Partial Hydrogenation on a Ru_2 Center. <i>Organometallics</i> , 2011, 30, 5057-5067.	2.3	23
17	Photochemical Reaction of Diruthenium Tetrahydride-Bridged Complexes with Carbon Dioxide: Insertion of CO_2 into a $\text{Ru}\cdots\text{H}$ Bond versus $\text{C}=\text{O}$ Double-Bond Cleavage. <i>Organometallics</i> , 2014, 33, 5066-5069.	2.3	20
18	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

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19	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
20	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
21	Synthesis, structure, and property of a triruthenium cluster having a η^3 -alkyl ligand: Transformation of a η^3 -alkyne ligand into a η^3 -alkyl ligand via a η^3 -vinylidene complex. <i>Journal of Organometallic Chemistry</i> , 1.8 2007, 692, 442-454.		18
22	Direct Arylation of a Cluster-Bound Alkyne Ligand with Benzene. <i>Organometallics</i> , 2010, 29, 4770-4773.	2.3	18
23	Bimetallic Reductive C-C Coupling Reaction Induced by Chemical Oxidation: Formation of a η^3 -C3 Ring on a Triruthenium Cluster. <i>Organometallics</i> , 2003, 22, 1361-1363.	2.3	17
24	Synthesis and Structure of a Triruthenium Complex Containing a Perpendicularly Coordinated η^3 -Nitrile Ligand and Its Protonation To Yield a Perpendicularly Coordinated Iminoacyl Ligand. <i>Organometallics</i> , 2005, 24, 3371-3374.	2.3	17
25	Formation of a Boraruthenacyclopentenyl Skeleton via B-C Bond Formation across a Triruthenium Plane. <i>Organometallics</i> , 2012, 31, 1825-1831.	2.3	17
26	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
27	Metathesis Reaction of Hydrocarbyl Ligands across the Triruthenium Plane. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 5898-5901.	13.8	16
28	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
29	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
30	Intramolecular Borylene Transfer Leading to the Formation of a η^3 -BC ₂ Ring on a Triruthenium Cluster. <i>Organometallics</i> , 2013, 32, 737-740.	2.3	14
31	A Triruthenium Complex Capped by a Triply Bridging Oxoboryl Ligand. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 11884-11887.	13.8	14
32	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
33	Oxidation-Induced Rearrangement from a nido- to a closo-Ruthenacyclopentadiene. <i>Organometallics</i> , 2006, 25, 5511-5514.	2.3	12
34	Synthesis and Structure of Cationic Triruthenium Complexes Containing an Oxametallacycle: Reversible Carbon-Oxygen Bond Formation and Scission on an Electron-Deficient Triruthenium Plane. <i>Organometallics</i> , 2007, 26, 1650-1657.	2.3	12
35	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
36	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

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37	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. <i>Organometallics</i> , 2012, 31, 1917-1926.	2.3	12
38	Synthesis and Dynamic Properties of a Triruthenium Complex Containing $\eta^3\text{-Ir}^2\text{-Ethyne}$ and $\eta^3\text{-Methylidyne}$ Ligands: Equilibrium of an Ethyne-Hydrido Complex with a Nonclassical $\eta^3\text{-Vinyl}$ Complex. <i>Organometallics</i> , 2013, 32, 260-271.	2.3	12
39	Protonation of Bis- $\eta^4\text{-diethylsilyl}$ Complex $\{(\text{C}_5\text{Me}_5)\text{Ru}(\eta^4\text{-H-SiEt}_2)\}_2(\eta^4\text{-H})(\text{H})$: Enhancement of Bonding Interaction between Bridging Silicon and Hydride Ligands. <i>Chemistry Letters</i> , 2001, 30, 1100-1101.	1.3	10
40	Isomerization of Organic Substrates Catalyzed by Ruthenium Complexes. , 2005, , 309-331.		10
41	Substitution Reactions at a Bridging Silicon Ligand. Formation of a Bis($\eta^4\text{-silylene}$) 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
42	Insertion of Acetylene and Nitriles into a Ru^{\sim}C Bond of a Dicationic Triruthenium Complex Having a $\eta^3\text{-Ir}^3\text{-C}$ Ring: Formation of Six-Membered Ruthenacycles on a Triruthenium Core. <i>Organometallics</i> , 2008, 27, 1044-1054.	2.3	10
43	Bimetallic Activation of $\alpha\text{-Alkanones}$ through Photo-Induced H -Hydrogen Abstraction Mediated by a Dinuclear Ruthenium Tetrahydride Complex. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 1773-1776.	13.8	8
44	Synthesis of a Heterometallic Trinuclear Cluster of Ruthenium and Platinum with a Linear Alignment. <i>Organometallics</i> , 2016, 35, 2543-2556.	2.3	8
45	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
46	Synthesis and characterisation of tetranuclear ruthenium polyhydrido clusters with pseudo-tetrahedral geometry. <i>Dalton Transactions</i> , 2017, 46, 5631-5643.	3.3	8
47	Preparation and Properties of Diruthenium Hydrido Complexes Having a Bridging Benzoquinone Ligand: Formation of an Alcohol Adduct of a $\eta^2\text{-Ir}^2\text{-Benzoquinone}$ Complex through Hydrogen Bonding. <i>Organometallics</i> , 2008, 27, 4199-4206.	2.3	7
48	Versatile and highly efficient synthesis of diruthenium tetrahydride complex. <i>Journal of Organometallic Chemistry</i> , 2016, 801, 6-9.	1.8	7
49	Trinuclear $\eta^3\text{-Silyl}$ Complexes of Ruthenium and Group 9 Metals Having 3c-2e Interactions and Transformation of a $\eta^3\text{-Silyl}$ Complex of Ru_2Ir into $\eta^4\text{-Silyl}$ and $\eta^3\text{-Silylene}$ Complexes. <i>Organometallics</i> , 2014, 33, 7232-7240.	2.3	6
50	$\eta^3\text{-Ir}^2\text{-Ir}^2\text{-Ir}^2$ Coordination of Primary Silane on a Triruthenium Plane. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14871-14874.	13.8	6
51	Synthesis of Diruthenium $\eta^4\text{-Chloromethylidyne}$ Complex: C-C Bond Formation at the Bridging Carbon Atom via the Reduction of a $\eta^4\text{-Chloromethylidyne}$ Ligand. <i>Organometallics</i> , 2021, 40, 467-471.	2.3	6
52	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
53	Dehydrogenative Oxidation of Cyclic Amines on a Diruthenium Complex. <i>Organometallics</i> , 2017, 36, 1893-1896.	2.3	5
54	Modified synthesis of mixed-ligand dinuclear $\text{Ru}^{\sim}\text{Ir}$, $\text{Ru}^{\sim}\text{Rh}$, and $\text{Ru}^{\sim}\text{Ru}$ polyhydride-bridged complexes, CpsRuH_3ML ($\text{Cps} = \text{C}_5\text{Me}_5$ (Cp^*), $\text{C}_5\text{Bu}_3\text{H}_2$ (Cp^i); $\text{M} = \text{Rh}$, Ir , Ru ; $\text{L} = \text{C}_5(\text{CH}_3)_5$, C_6H_6 , $p\text{-CH}_3\text{C}_6\text{H}_4\text{CH}(\text{CH}_3)_2$). <i>Journal of Organometallic Chemistry</i> , 2016, 818, 168-178.		4

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55	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
56	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
57	σ -Coordination of a C-H Bond at a Sterically Demanding Diruthenium Site: Tautomerization between Agostic η^3 -Phosphane and η^3 -Phosphanido Complexes via an Ir^2 -C-H Bond Cleavage. <i>Organometallics</i> , 2018, 37, 290-293.	2.3	3
58	Formation of a η^3 -Acetylide on a Ru_3 Cluster via Coupling of η^3 -Methylene with Isocyanide Accompanied by Elimination of Amine: A Model of Hydrogen-Assisted C-C Bond Formation on a Metal Surface. <i>Organometallics</i> , 2019, 38, 2705-2709.	2.3	3
59	Synthesis and Properties of a Triruthenium Hydrido Complex Capped by a η^3 -Oxoboryl Ligand. <i>Organometallics</i> , 2019, 38, 2239-2249.	2.3	3
60	Effect of ring size on the properties of η^3 -Cycloalkyne complexes: Synthesis of triruthenium complexes containing a perpendicularly coordinated η^3 -Allenyl ligand. <i>Journal of Organometallic Chemistry</i> , 2019, 885, 7-20.	1.8	3
61	Transformation of a η^3 -Benzynes Ligand into Phenol on a Cationic Triruthenium Cluster Supported by a η^3 -Sulfido Ligand. <i>Organometallics</i> , 2019, 38, 527-535.	2.3	3
62	Intramolecular Nitrene Transfer via the C-N Bond Cleavage of Acetonitrile to a η^3 -Alkylidyne Ligand on a Cationic Triruthenium Plane. <i>Organometallics</i> , 2020, 39, 2888-2899.	2.3	3
63	Reaction of a Triruthenium η^3 -Borylene Complex with Benzonitrile: Formation of a η^3 - Ir^3 -BCN Ring on a Cationic Ru_3 Plane via Photo-Induced Intramolecular Borylene Transfer. <i>Organometallics</i> , 2020, 39, 593-604.	2.3	3
64	η^3 - Ir^2 - Ir^2 - Ir^2 Coordination of Primary Silane on a Triruthenium Plane. <i>Angewandte Chemie</i> , 2015, 127, 15084-15087.	2.0	2
65	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
66	Selective Synthesis of a Triruthenium Pentahydrido Complex with Mixed-Cp Ligands ($\text{C}_5\text{H}_2\text{Bu}_3$ and C_5H_3) <i>Journal of Organometallic Chemistry</i> , 2019, 882, 70-79.	2.3	2
67	Fluxionality of a Face-Capping Benzene Ligand Induced by Oxidation. <i>Organometallics</i> , 2019, 38, 3824-3833.	3.2	2
68	Diruthenium complexes having a partially hydrogenated bipyridine ligand: plausible mechanism for the dehydrogenative coupling of pyridines at a diruthenium site. <i>Faraday Discussions</i> , 2019, 220, 249-268.	0.1	2
69	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.		2
70	Mono- and Bis-cyclopentadienyl Complexes of Ruthenium and Osmium. , 2022, , .		2
71	Synthesis of a heterometallic spiked tetrahedral cluster of ruthenium and nickel containing multiple hydrido ligands and its degradation to a tetrahedral NiRu_3 cluster. <i>Journal of Organometallic Chemistry</i> , 2019, 882, 70-79.	1.8	1
72	Reversible Transformation of a η^3 - Ir^3 -C ₃ Ring into η^3 - Ir^2 -Ethyne and η^3 -Vinylidene Ligands at a Triruthenium Site upon Deprotonation and Protonation. <i>Organometallics</i> , 2020, 39, 4637-4644.	2.3	1
72	Four-Electron Reduction of Dioxygen on a Metal Surface: Models of Dissociative and Associative Mechanisms in a Homogeneous System. <i>Inorganic Chemistry</i> , 2021, 60, 1550-1560.	4.0	1

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73	Syntheses and Properties of Triruthenium Polyhydrido Complexes Composed of 1,2,4-tri-tert-butylcyclopentadienyl and p-Cymene Ruthenium Units. <i>Organometallics</i> , 2021, 40, 1303-1313.	2.3	1
74	C ^α -C Bond Formation between the η^5 -Alkylidyne Ligands in a Diruthenium Bis(η^5 -alkylidyne) Complex; η^5 -Aromaticity of the Ru ₂ C ₂ Core. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 2505-2513.	2.0	0
75	Transformation of Pyridines and Cyclic Amines at an Electron-Rich Diruthenium Site. Yuki Gosei Kagaku Kyokaiishi/ <i>Journal of Synthetic Organic Chemistry</i> , 2020, 78, 327-337.	0.1	0
76	Formation of an Azaruthenacyclopentadiene Skeleton via Ammonia Activation by an Electron-Deficient Ru ₃ Cluster. <i>Chemistry - A European Journal</i> , 2022, , e202200327.	3.3	0