

Yasuhiro Ohki

List of Publications by Year in descending order

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81900

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docs citations

110
times ranked

3040
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#	ARTICLE	IF	CITATIONS
1	Cooperative Catalytic Activation of Si-H Bonds by a Polar Ru-S Bond: Regioselective Low-Temperature C-H Silylation of Indoles under Neutral Conditions by a Friedel-Crafts Mechanism. <i>Journal of the American Chemical Society</i> , 2011, 133, 3312-3315.	13.7	226
2	C-H Bond Activation of Heteroarenes Mediated by a Half-Sandwich Iron Complex of N-Heterocyclic Carbene. <i>Journal of the American Chemical Society</i> , 2008, 130, 17174-17186.	13.7	172
3	Catalytic Generation of Borenium Ions by Cooperative C-H Bond Activation: The Elusive Direct Electrophilic Borylation of Nitrogen Heterocycles with Pinacolborane. <i>Journal of the American Chemical Society</i> , 2013, 135, 10978-10981.	13.7	168
4	Dithiolato-Bridged Dinuclear Iron-Nickel Complexes [Fe(CO) ₂ (CN) ₂ (1/4-SCH ₂ CH ₂ CH ₂ S)Ni(S ₂ CNR ₂)]-Modeling the Active Site of [NiFe] Hydrogenase. <i>Journal of the American Chemical Society</i> , 2005, 127, 8950-8951.	13.7	158
5	C-H Bond Activation/Borylation of Furans and Thiophenes Catalyzed by a Half-Sandwich Iron N-Heterocyclic Carbene Complex. <i>Chemistry - an Asian Journal</i> , 2010, 5, 1657-1666.	3.3	151
6	Metal-Sulfur Compounds in N ₂ Reduction and Nitrogenase-Related Chemistry. <i>Chemical Reviews</i> , 2020, 120, 5194-5251.	47.7	117
7	Synthesis of New [8Fe-7S] Clusters: A Topological Link between the Core Structures of P-Cluster, FeMo-co, and FeFe-co of Nitrogenases. <i>Journal of the American Chemical Society</i> , 2007, 129, 10457-10465.	13.7	114
8	Exploring the Limits of Frustrated Lewis Pair Chemistry with Alkynes: Detection of a System that Favors 1,1-Carbaboration over Cooperative 1,2-Addition. <i>Chemistry - an Asian Journal</i> , 2010, 5, 2199-2208.	3.3	106
9	Synthesis of the P-Cluster Inorganic Core of Nitrogenases. <i>Journal of the American Chemical Society</i> , 2003, 125, 4052-4053.	13.7	101
10	Synthesis of Bis(N-heterocyclic carbene) Complexes of Iron(II) and Their Application in Hydrosilylation and Transfer Hydrogenation. <i>Organometallics</i> , 2012, 31, 4474-4479.	2.3	99
11	Dinitrogen Activation by Group 4 Metal Complexes. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 3180-3183.	13.8	92
12	[Fe ₄] and [Fe ₆] Hydride Clusters Supported by Phosphines: Synthesis, Characterization, and Application in N ₂ Reduction. <i>Journal of the American Chemical Society</i> , 2017, 139, 5596-5606.	13.7	92
13	Mono{hydrotris(mercaptoimidazolyl)borato} Complexes of Manganese(II), Iron(II), Cobalt(II), and Nickel(II) Halides. <i>Inorganic Chemistry</i> , 2006, 45, 9914-9925.	4.0	87
14	Thiolate-Bridged Iron-Nickel Models for the Active Site of [NiFe] Hydrogenase. <i>European Journal of Inorganic Chemistry</i> , 2011, 2011, 973-985.	2.0	77
15	Mechanism of the cooperative Si-H bond activation at Ru-S bonds. <i>Chemical Science</i> , 2015, 6, 4324-4334.	7.4	76
16	Reversible Heterolysis of H ₂ Mediated by an M-S(Thiolate) Bond (M = Ir, Rh): A Mechanistic Implication for [NiFe] Hydrogenase. <i>Journal of the American Chemical Society</i> , 2008, 130, 11610-11611.	13.7	75
17	Reactions at the Ru-S Bonds of Coordinatively Unsaturated Ruthenium Complexes with Tethered 2,6-Dimesitylphenyl Thiolate. <i>Chemistry - an Asian Journal</i> , 2008, 3, 1625-1635.	3.3	70
18	Heterolytic Cleavage of Dihydrogen by Frustrated Lewis Pairs Derived from η^5 -(Dimesitylphosphino)ferrocenes and B(C ₆ F ₅) ₃ . <i>Organometallics</i> , 2008, 27, 5279-5284.	2.3	69

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19	Thiolate-bridged dinuclear iron(tris-carbonyl)nickel complexes relevant to the active site of [NiFe] hydrogenase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 7652-7657.	7.1	69
20	N ₂ activation on a molybdenum-titanium-sulfur cluster. <i>Nature Communications</i> , 2018, 9, 3200.	12.8	67
21	Base-Free Dehydrogenative Coupling of Enolizable Carbonyl Compounds with Silanes. <i>Organic Letters</i> , 2012, 14, 2842-2845.	4.6	64
22	Synthesis, Structures, and Electronic Properties of [8Fe-7S] Cluster Complexes Modeling the Nitrogenase P-Cluster. <i>Journal of the American Chemical Society</i> , 2009, 131, 13168-13178.	13.7	62
23	A Nitrogenase Cluster Model [Fe ₈ S ₆ O] with an Oxygen Unsymmetrically Bridging Two Proto-Fe ₄ S ₃ Cubes: Relevancy to the Substrate Binding Mode of the FeMo Cofactor. <i>Inorganic Chemistry</i> , 2012, 51, 11217-11219.	4.0	58
24	Sulfido-Bridged Dinuclear Molybdenum-Copper Complexes Related to the Active Site of CO Dehydrogenase: [(dithiolate)Mo(O)S ₂ Cu(SAr)] ₂ (dithiolate = 1,2-S ₂ C ₆ H ₄ , 1,2-S ₂ C ₆ H ₂ -3,6-Cl ₂ , 1,2-S ₂ C ₂ H ₄)	4.0	57
25	Nitrogen reduction by the Fe sites of synthetic [Mo ₃ S ₄ Fe] cubes. <i>Nature</i> , 2022, 607, 86-90.	27.8	55
26	Tracing the ninth sulfur of the nitrogenase cofactor via a semi-synthetic approach. <i>Nature Chemistry</i> , 2018, 10, 568-572.	13.6	54
27	Heterolytic Cleavage of Dihydrogen Promoted by Sulfido-Bridged Tungsten-Ruthenium Dinuclear Complexes. <i>Journal of the American Chemical Society</i> , 2003, 125, 7978-7988.	13.7	53
28	An Iron(II) Complex of a Diamine-Bridged Bis-N-Heterocyclic Carbene. <i>Organometallics</i> , 2012, 31, 8047-8050.	2.3	52
29	A model for the CO-inhibited form of [NiFe] hydrogenase: synthesis of (CO) ₃ Fe(Å-StBu) ₃ Ni and reversible CO addition at the Ni site. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 3994-3997.	7.1	51
30	Ambient conversion of CO ₂ to hydrocarbons by biogenic and synthetic [Fe ₄ S ₄] clusters. <i>Nature Catalysis</i> , 2018, 1, 444-451.	34.4	51
31	Synthesis of [2Fe-2S] and [4Fe-4S] Clusters Having Terminal Amide Ligands from an Iron(II) Amide Complex. <i>Chemistry Letters</i> , 2005, 34, 172-173.	1.3	48
32	Synthesis and characterization of heteroleptic iron(II) thiolate complexes with weak iron-arene interactions. <i>Journal of Organometallic Chemistry</i> , 2007, 692, 4792-4799.	1.8	48
33	A Dithiolate-Bridged (CN) ₂ (CO)Fe-Ni Complex Reproducing the IR Bands of [NiFe] Hydrogenase. <i>Inorganic Chemistry</i> , 2009, 48, 2358-2360.	4.0	48
34	Reductive N-N Bond Cleavage of Diphenylhydrazine and Azobenzene Induced by Coordinatively Unsaturated Cp*Fe{N(SiMe ₃) ₂ }. <i>Organometallics</i> , 2006, 25, 3111-3113.	2.3	47
35	Elimination-Addition Mechanism for Nucleophilic Substitution Reaction of Cyclohexenyl Iodonium Salts and Regioselectivity of Nucleophilic Addition to the Cyclohexyne Intermediate. <i>Journal of the American Chemical Society</i> , 2004, 126, 7548-7558.	13.7	46
36	Structure and Reactivity of an Asymmetric Synthetic Mimic of Nitrogenase Cofactor. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15633-15636.	13.8	44

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37	Novel Mode of C-C Bond Cleavage of Norbornadiene on a Dinuclear Ruthenium Complex. <i>Angewandte Chemie - International Edition</i> , 2000, 39, 3463-3465.	13.8	43
38	Synthetic analogues of $[Fe_4S_4(Cys)_3(His)]$ in hydrogenases and $[Fe_4S_4(Cys)_4]$ in HiPIP derived from all-ferric $[Fe_4S_4\{N(SiMe_3)_2\}_2]$. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 12635-12640.	7.1	41
39	$[(\eta^5-C_5Me_5)Fe]_2(\eta^4-H)_4$: A Novel Dinuclear Iron Tetrahydrido Complex. <i>Angewandte Chemie - International Edition</i> , 2000, 39, 3120-3122.	13.8	40
40	Synthesis of Coordinatively Unsaturated Mesityliron Thiolate Complexes and Their Reactions with Elemental Sulfur. <i>Inorganic Chemistry</i> , 2010, 49, 6102-6109.	4.0	39
41	Impact of ligands and media on the structure and properties of biological and biomimetic iron-sulfur clusters. <i>Coordination Chemistry Reviews</i> , 2017, 338, 207-225.	18.8	36
42	$\{(\eta^5-C_5Me_5)Fe\}_2(\eta^4-H)_2(\eta^4-\eta^2-H_2SitBu_2)$, a Versatile Precursor for Bimetallic Active Species. <i>Organometallics</i> , 2001, 20, 2654-2656.	2.3	35
43	Synthesis and dehydrogenation of $M(AlH_4)_2$ (M=Mg, Ca). <i>Journal of Alloys and Compounds</i> , 2007, 446-447, 237-241.	5.5	35
44	Combining a Nitrogenase Scaffold and a Synthetic Compound into an Artificial Enzyme. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14022-14025.	13.8	35
45	C-H Bond Activation of Decamethylcobaltocene Mediated by a Nitrogenase Fe_8S_7 P-Cluster Model. <i>Inorganic Chemistry</i> , 2009, 48, 4271-4273.	4.0	34
46	New Synthetic Routes to Metal-Sulfur Clusters Relevant to the Nitrogenase Metalloclusters. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2013, 639, 1340-1349.	1.2	34
47	A Half-Sandwich Ruthenium(II) Complex Containing a Coordinatively Unsaturated 2,6-Dimesitylphenyl Thiolate Ligand. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 2290-2293.	13.8	33
48	Reduction of C_1 Substrates to Hydrocarbons by the Homometallic Precursor and Synthetic Mimic of the Nitrogenase Cofactor. <i>Journal of the American Chemical Society</i> , 2017, 139, 603-606.	13.7	33
49	Dinuclear Iron(0) Complexes of N-Heterocyclic Carbenes. <i>Organometallics</i> , 2014, 33, 921-929.	2.3	32
50	Formation of a Nitrogenase $[Fe_8S_7]$ Core via Reductive Fusion of Two All-Ferric $[Fe_4S_4]$ Clusters. <i>Chemistry - an Asian Journal</i> , 2012, 7, 2222-2224.	3.3	31
51	Migration of a Phosphane Ligand between the Two Metal Centers in Diruthenium Hydrido Complexes We gratefully acknowledge Professor Masato Oshima (Tokyo Institute of Polytechnics) for performing the theoretical calculation and thank Kanto Chemical Co., Inc., for a generous gift of pentamethylcyclopentadiene. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 2994.	13.8	30
52	Synthesis and Characterization of Bioinspired $[Mo_2Fe_2]$ Hydride Cluster Complexes and Their Application in the Catalytic Silylation of N_2 . <i>Chemistry - A European Journal</i> , 2017, 23, 13240-13248.	3.3	30
53	Catalytic hydrogenation of CO and CN bonds via heterolysis of H_2 mediated by metal-sulfur bonds of rhodium and iridium thiolate complexes. <i>Journal of Organometallic Chemistry</i> , 2009, 694, 2820-2824.	1.8	29
54	$Co_6H_8(P^i)_3Pr_3$: A Cobalt Octahedron with Face-Capping Hydrides. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15821-15825.	13.8	29

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55	Theory of chemical bonds in metalloenzymes V: Hybrid-DFT studies of the inorganic [8Fe ⁺ 7S] core. <i>International Journal of Quantum Chemistry</i> , 2006, 106, 3288-3302.	2.0	28
56	Coupling of an N-Heterocyclic Carbene on Iron with Alkynes to Form Ir^{V} -Cyclopentadienyl Ir^{I} -Diimine Ligands. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 2727-2729.	13.8	28
57	A Convenient Route to Synthetic Analogues of the Oxidized Form of High-Potential Iron-Sulfur Proteins. <i>Inorganic Chemistry</i> , 2014, 53, 4000-4009.	4.0	27
58	Molybdenum Carbonyl Complexes with Citrate and Its Relevant Carboxylates. <i>Organometallics</i> , 2005, 24, 1344-1347.	2.3	25
59	N-Heterocyclic carbenes as supporting ligands in transition metal complexes of N_2 . <i>Dalton Transactions</i> , 2016, 45, 874-880.	3.3	25
60	Naphthalene and Anthracene Complexes Sandwiched by Two $\{\text{Cp}^*\text{Fe}^{\text{I}}\}$ Fragments: Strong Electronic Coupling between the Fe^{I} Centers. <i>Chemistry - an Asian Journal</i> , 2012, 7, 1231-1242.	3.3	24
61	Synthesis and Protonation of N-Heterocyclic-Carbene-Supported Dinitrogen Complexes of Molybdenum(0). <i>Organometallics</i> , 2015, 34, 3414-3420.	2.3	24
62	An Iron(II) Carbonyl Thiolato Complex Bearing 2-Methoxy-Pyridine: A Structural Model of the Active Site of [Fe] Hydrogenase. <i>Chemistry - an Asian Journal</i> , 2010, 5, 1962-1964.	3.3	23
63	Synthesis of Coordinatively Unsaturated Half-Sandwich Iron-Silyl Complexes with an N-Heterocyclic Carbene Ligand and Their Reactions with H_2 . <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 3966-3971.	2.0	23
64	Pentanuclear Polyhydride Cluster of Ruthenium with Trigonal-Bipyramidal Geometry. Synthesis and Fluxional Behavior. <i>Organometallics</i> , 2003, 22, 59-64.	2.3	22
65	Dithiolate-Bridged Fe-Ni-Fe Trinuclear Complexes Consisting of $\text{Fe}(\text{CO})_3$ (CN) (CN) (CN) (CN) Components Relevant to the Active Site of [NiFe] Hydrogenase. <i>Chemistry - an Asian Journal</i> , 2009, 4, 961-968.	3.3	21
66	Synthesis and Reactions of Coordinatively Unsaturated Half-Sandwich Rhodium and Iridium Complexes Having a 2,6-Dimesitylbenzenethiolate Ligand. <i>Organometallics</i> , 2010, 29, 1761-1770.	2.3	20
67	Oxido-Bridged Di-, Tri-, and Tetra-Nuclear Iron Complexes Bearing Bis(trimethylsilyl)amide and Thiolate Ligands. <i>Inorganic Chemistry</i> , 2012, 51, 2645-2651.	4.0	20
68	Interconversion between $[\text{Fe}_4\text{S}_4]$ and $[\text{Fe}_2\text{S}_2]$ Clusters Bearing Amide Ligands. <i>Inorganic Chemistry</i> , 2016, 55, 4512-4518.	4.0	19
69	Rational Synthesis of Tetranuclear Ruthenium Polyhydride Clusters and Their Mixed-Ligand Analogues. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 4085-4087.	13.8	18
70	Cubane-Type $[\text{Mo}_3\text{S}_4\text{M}]$ Clusters with First-Row Groups... 10 Transition-Metal Halides Supported by C_5Me_5 Ligands on Molybdenum. <i>Chemistry - A European Journal</i> , 2018, 24, 17138-17147.	3.3	18
71	Synthesis of $[\text{Mo}_3\text{S}_4]$ Clusters from Half-Sandwich Molybdenum(V) Chlorides and Their Application as Platforms for $[\text{Mo}_3\text{S}_4\text{Fe}]$ Cubes. <i>Inorganic Chemistry</i> , 2019, 58, 5230-5240.	4.0	17
72	A facile method for synthesis of (R)-(-) and (S)-(+)-homocitric acid lactones and related β -hydroxy dicarboxylic acids from d- or l-malic acid. <i>Tetrahedron Letters</i> , 2005, 46, 3815-3818.	1.4	16

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73	Co ₆ H ₈ (P ⁱ) ₃ ₆ : A Cobalt Octahedron with Face-Capping Hydrides. <i>Angewandte Chemie</i> , 2016, 128, 16053-16057.	2.0	16
74	N-Heterocyclic Carbene Complexes of Three- and Four-Coordinate Fe(I). <i>Organometallics</i> , 2016, 35, 1368-1375.	2.3	14
75	Structure and Reactivity of an Asymmetric Synthetic Mimic of Nitrogenase Cofactor. <i>Angewandte Chemie</i> , 2016, 128, 15862-15865.	2.0	13
76	Synthesis of Dinuclear Mo ^{VI} Fe Hydride Complexes and Catalytic Silylation of N ₂ . <i>Chemistry - A European Journal</i> , 2020, 26, 9537-9546.	3.3	13
77	Non-Centrosymmetric Coordination Polymer with a Highly Hindered Octahedral Copper Center Bridged by Mandelate. <i>Inorganic Chemistry</i> , 2012, 51, 4689-4693.	4.0	12
78	Tracing the incorporation of the α -ninth sulfur into the nitrogenase cofactor precursor with selenite and tellurite. <i>Nature Chemistry</i> , 2021, 13, 1228-1234.	13.6	12
79	3-(Dimethylboryl)pyridine: Synthesis, Structure, and Remarkable Steric Effects in Scrambling Reactions. <i>Journal of Organic Chemistry</i> , 2008, 73, 81-87.	3.2	11
80	Synthesis of V/Fe/S Clusters Using Vanadium(III) Thiolate Complexes Bearing a Phenoxide-Based Tridentate Ligand. <i>Inorganic Chemistry</i> , 2014, 53, 5438-5446.	4.0	11
81	Synthetic Analogues of the Active Sites of Nitrogenase and [NiFe] Hydrogenase. <i>Bulletin of the Chemical Society of Japan</i> , 2014, 87, 1-19.	3.2	10
82	Synthesis of dimethylmanganese(II) complexes bearing N-heterocyclic carbenes and nucleophilic substitution reaction of tetraalkoxysilanes by diorganomanganese(II) complexes. <i>Journal of Organometallic Chemistry</i> , 2016, 820, 14-19.	1.8	7
83	A dinuclear Mo ₂ H ₈ complex supported by bulky C ₅ H ₂ tBu ₃ ligands. <i>Chemical Communications</i> , 2020, 56, 8035-8038.	4.1	7
84	Trithio-Chloro Molybdate [MoClS ₃] ³⁻ : A Versatile Precursor for Molybdenum Trisulfido Complexes. <i>Inorganic Chemistry</i> , 2008, 47, 3763-3771.	4.0	6
85	3-{4-(Diethylboryl)phenyl}pyridine: Exclusive Crystallization of the Cyclic Tetramer. <i>Chemistry - an Asian Journal</i> , 2019, 14, 568-573.	3.3	6
86	Synthesis of Monophosphaferrocenes Revisited. <i>ChemistrySelect</i> , 2022, 7, .	1.5	6
87	Self-Assembly of 4-(Diethylboryl)pyridine: Crystal Structures of the Cyclic Pentamer and Hexamer and Their Solvent-Dependent Selective Crystallization. <i>Journal of Organic Chemistry</i> , 2016, 81, 2399-2404.	3.2	5
88	Synthesis, Characterization, and Application of Segphos Derivative Having Diferrocenylphosphino-Donor Moieties. <i>Organometallics</i> , 2020, 39, 788-792.	2.3	4
89	Cationic Ru ^{II} -Se Complexes for Cooperative Si-H Bond Activation. <i>Organometallics</i> , 2020, 39, 4747-4753.	2.3	3
90	Evidence for a Rapid Degenerate Hetero-Cope Type Rearrangement in [Cp*W(S) ₂ S ₂ CH ₂ CH ₂ CH ₂ CH ₂]. <i>Chemistry - an Asian Journal</i> , 2009, 4, 1830-1833.	3.3	1

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91	Recent Advances in the Chemical Synthesis of Nitrogenase Model Clusters. Structure and Bonding, 2018, , 33-61.	1.0	1
92	Chemical Synthesis of an Asymmetric Mimic of the Nitrogenase Active Site. Methods in Molecular Biology, 2019, 1876, 229-244.	0.9	1
93	Four-Electron Reduction of Dioxygen on a Metal Surface: Models of Dissociative and Associative Mechanisms in a Homogeneous System. Inorganic Chemistry, 2021, 60, 1550-1560.	4.0	1
94	Organometallic Chemistry in [NiFe] Hydrogenases: Synthesis of the Structural and Functional Models. Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry, 2009, 67, 540-553.	0.1	1
95	Transition metal catalyzed cross-coupling and nitrogen reduction reactions: Lessons from computational studies. Advances in Organometallic Chemistry, 2022, , 35-78.	1.0	1
96	Recent Progress in Research on the Structures and Functions of Nitrogenase Active Sites. Bulletin of Japan Society of Coordination Chemistry, 2015, 66, 26-30.	0.2	0