

Yoshihito Shiota

List of Publications by Year in descending order

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187
papers

6,742
citations

57719

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76872

74
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197
all docs

197
docs citations

197
times ranked

6182
citing authors

#	ARTICLE	IF	CITATIONS
1	Computational Prediction for Singlet- and Triplet-Transition Energies of Charge-Transfer Compounds. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 3872-3877.	2.3	312
2	Methane-to-Methanol Conversion by First-Row Transition-Metal Oxide Ions: ScO^+ , TiO^+ , VO^+ , CrO^+ , MnO^+ , FeO^+ , CoO^+ , NiO^+ , and CuO^+ . <i>Journal of the American Chemical Society</i> , 2000, 122, 12317-12326.	6.6	262
3	Intrinsic reaction coordinate analysis of the conversion of methane to methanol by an iron ^{IV} oxo species: A study of crossing seams of potential energy surfaces. <i>Journal of Chemical Physics</i> , 1999, 111, 538-545.	1.2	191
4	Methane \rightarrow Methanol Conversion by MnO^+ , FeO^+ , and CoO^+ : A Theoretical Study of Catalytic Selectivity. <i>Journal of the American Chemical Society</i> , 1998, 120, 564-572.	6.6	164
5	A light-induced spin crossover actuated single-chain magnet. <i>Nature Communications</i> , 2013, 4, .	5.8	162
6	Methane selective oxidation to methanol by metal-exchanged zeolites: a review of active sites and their reactivity. <i>Catalysis Science and Technology</i> , 2019, 9, 1744-1768.	2.1	148
7	Conversion of Methane to Methanol at the Mononuclear and Dinuclear Copper Sites of Particulate Methane Monooxygenase (pMMO): A DFT and QM/MM Study. <i>Journal of the American Chemical Society</i> , 2006, 128, 9873-9881.	6.6	146
8	Direct Conversion of Methane to Methanol by Metal-Exchanged ZSM-5 Zeolite (Metal = Fe, Co, Ni, Cu). <i>ACS Catalysis</i> , 2016, 6, 8321-8331.	5.5	141
9	Direct Methane \rightarrow Methanol and Benzene \rightarrow Phenol Conversions on Fe \rightarrow ZSM-5 Zeolite: $\delta\epsilon\%$ Theoretical Predictions on the Reaction Pathways and Energetics. <i>Journal of Physical Chemistry B</i> , 2000, 104, 734-740.	1.2	139
10	Ruthenium \rightarrow Catalyzed Selective and Efficient Oxygenation of Hydrocarbons with Water as an Oxygen Source. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 5772-5776.	7.2	133
11	Roles of Zeolite Confinement and Cu ^{II} -O ^{II} -Cu Angle on the Direct Conversion of Methane to Methanol by $[\text{Cu}_2(\text{I}^{\frac{1}{4}}\text{-O})]^{2+}$ -Exchanged AEI, CHA, AFX, and MFI Zeolites. <i>ACS Catalysis</i> , 2017, 7, 3741-3751.	5.5	129
12	Catalytic Mechanism of Dopamine I^2 -Monooxygenase Mediated by Cu(III) \rightarrow Oxo. <i>Inorganic Chemistry</i> , 2006, 45, 3034-3041.	1.9	123
13	Abstraction of the Hydrogen Atom of Methane by Iron \rightarrow Oxo Species: The Concerted Reaction Path Is Energetically More Favorable. <i>Organometallics</i> , 1998, 17, 2825-2831.	1.1	119
14	Reaction Paths for the Conversion of Methane to Methanol Catalyzed by FeO^+ . <i>Chemistry - A European Journal</i> , 1997, 3, 1160-1169.	1.7	114
15	Molecular motor-driven abrupt anisotropic shape change in a single crystal of a Ni complex. <i>Nature Chemistry</i> , 2014, 6, 1079-1083.	6.6	111
16	A ferromagnetically coupled Fe ₂ cyanide-bridged nanocage. <i>Nature Communications</i> , 2015, 6, 5955.	5.8	104
17	Methane Partial Oxidation over $[\text{Cu}_2(\text{I}^{\frac{1}{4}}\text{-O})]^{2+}$ and $[\text{Cu}_3(\text{I}^{\frac{1}{4}}\text{-O})_3]^{2+}$ Active Species in Large-Pore Zeolites. <i>ACS Catalysis</i> , 2018, 8, 1500-1509.	5.5	104
18	Comparison of the Reactivity of Bis($\text{I}^{\frac{1}{4}}\text{-oxo}$) Cu^{II} and Cu^{III} Species to Methane. <i>Inorganic Chemistry</i> , 2009, 48, 838-845.	1.9	102

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19	A Theoretical Study of the Dynamic Behavior of Alkane Hydroxylation by a Compound I Model of Cytochrome P450. <i>Journal of the American Chemical Society</i> , 2001, 123, 9806-9816.	6.6	97
20	A spin-orbit coupling study on the spin inversion processes in the direct methane-to-methanol conversion by FeO ⁺ . <i>Journal of Chemical Physics</i> , 2003, 118, 5872-5879.	1.2	97
21	Reaction Pathway for the Direct Benzene Hydroxylation by Iron ^{IV} Oxo Species. <i>Journal of the American Chemical Society</i> , 1999, 121, 147-153.	6.6	91
22	Metal-Ligand Cooperation in H ₂ Production and H ₂ O Decomposition on a Ru(II) PNN Complex: The Role of Ligand Dearomatization-Aromatization. <i>Journal of the American Chemical Society</i> , 2009, 131, 13584-13585.	6.6	90
23	Multi-Step Spin Crossover Accompanied by Symmetry Breaking in an Fe ^{III} Complex: Crystallographic Evidence and DFT Studies. <i>Chemistry - A European Journal</i> , 2013, 19, 12948-12952.	1.7	89
24	Theoretical Overview of Methane Hydroxylation by Copper-Oxygen Species in Enzymatic and Zeolitic Catalysts. <i>Accounts of Chemical Research</i> , 2018, 51, 2382-2390.	7.6	85
25	Computational Exploration of the Catalytic Mechanism of Dopamine β -Monooxygenase: Modeling of Its Mononuclear Copper Active Sites. <i>Inorganic Chemistry</i> , 2005, 44, 4226-4236.	1.9	82
26	Reversible Electron Transfer in a Linear {Fe ₂ Co} Trinuclear Complex Induced by Thermal Treatment and Photoirradiation. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 4367-4370.	7.2	81
27	Does the Hydroperoxo Species of Cytochrome P450 Participate in Olefin Epoxidation with the Main Oxidant, Compound I? Criticism from Density Functional Theory Calculations. <i>Bulletin of the Chemical Society of Japan</i> , 2003, 76, 721-732.	2.0	77
28	Specific Enhancement of Catalytic Activity by a Dicopper Core: Selective Hydroxylation of Benzene to Phenol with Hydrogen Peroxide. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 7779-7782.	7.2	77
29	A Low-Spin Ruthenium(IV)-Oxo Complex: Does the Spin State Have an Impact on the Reactivity?. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 8449-8453.	7.2	76
30	Homogeneous Photocatalytic Water Oxidation with a Dinuclear Co ^{III} -Pyridylmethylamine Complex. <i>Inorganic Chemistry</i> , 2016, 55, 1154-1164.	1.9	73
31	Quantum Chemical Approach to the Mechanism for the Biological Conversion of Tyrosine to Dopamine. <i>Journal of the American Chemical Society</i> , 2008, 130, 16890-16897.	6.6	70
32	Assembling an alkyl rotor to access abrupt and reversible crystalline deformation of a cobalt(II) complex. <i>Nature Communications</i> , 2015, 6, 8810.	5.8	69
33	A Cocatalyst that Stabilizes a Hydride Intermediate during Photocatalytic Hydrogen Evolution over a Rhodium-Doped TiO ₂ Nanosheet. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9073-9077.	7.2	62
34	Nickel(II), Palladium(II), and Platinum(II) η^3 -Allyl Complexes Bearing a Bidentate Titanium(IV) Phosphinoamide Ligand: A Ti-M ₂ Dative Bond Enhances the Electrophilicity of the η^3 -Allyl Moiety. <i>Organometallics</i> , 2009, 28, 1988-1991.	1.1	61
35	Role of Tyrosine Residue in Methane Activation at the Dicopper Site of Particulate Methane Monooxygenase: A Density Functional Theory Study. <i>Inorganic Chemistry</i> , 2013, 52, 7907-7917.	1.9	58
36	Superior thermoelasticity and shape-memory nanopores in a porous supramolecular organic framework. <i>Nature Communications</i> , 2016, 7, 11564.	5.8	58

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37	Formation of an Iron-Oxo Species upon Decomposition of Dinitrogen Oxide on a Model of Fe-ZSM-5 Zeolite. <i>Bulletin of the Chemical Society of Japan</i> , 2000, 73, 29-36.	2.0	56
38	A Theoretical Study of Alcohol Oxidation by Ferrate. <i>Journal of Organic Chemistry</i> , 2001, 66, 4122-4131.	1.7	56
39	Multiply-fused porphyrinsâ€™ effects of extended π -conjugation on the optical and electrochemical properties. <i>Chemical Communications</i> , 2013, 49, 5939.	2.2	56
40	Conversion of Methane to Methanol on Diiron and Dicopper Enzyme Models of Methane Monooxygenase: A Theoretical Study on a Concerted Reaction Pathway. <i>Bulletin of the Chemical Society of Japan</i> , 2000, 73, 815-827.	2.0	54
41	Kinetic Isotope Effects in a C-H Bond Dissociation by the Iron-Oxo Species of Cytochrome P450. <i>Journal of Physical Chemistry B</i> , 2000, 104, 12365-12370.	1.2	49
42	Theoretical Study of the Mechanism of Valence Tautomerism in Cobalt Complexes. <i>Journal of Physical Chemistry A</i> , 2010, 114, 12928-12935.	1.1	49
43	Mechanistic Insights into Homogeneous Electrocatalytic and Photocatalytic Hydrogen Evolution Catalyzed by High-Spin Ni(II) Complexes with S ₂ N ₂ -Type Tetradentate Ligands. <i>Inorganic Chemistry</i> , 2018, 57, 7180-7190.	1.9	47
44	Directional Electron Transfer in Crystals of [CrCo] Dinuclear Complexes Achieved by Chirality-Assisted Preparative Method. <i>Journal of the American Chemical Society</i> , 2016, 138, 14170-14173.	6.6	46
45	An Azulene-Fused Tetracene Diimide with a Small HOMO-LUMO Gap. <i>ChemPlusChem</i> , 2017, 82, 1010-1014.	1.3	45
46	Ground-State Copper(III) Stabilized by N-Confused/N-Linked Corroles: Synthesis, Characterization, and Redox Reactivity. <i>Journal of the American Chemical Society</i> , 2018, 140, 6883-6892.	6.6	45
47	Macroscopic Polarization Change via Electron Transfer in a Valence Tautomeric Cobalt Complex. <i>Nature Communications</i> , 2020, 11, 1992.	5.8	41
48	Femtosecond Dynamics of the Methane \rightarrow Methanol and Benzene \rightarrow Phenol Conversions by an Iron \rightarrow Oxo Species. <i>Journal of Physical Chemistry A</i> , 2000, 104, 2552-2561.	1.1	40
49	DFT study of the mechanism for methane hydroxylation by soluble methane monooxygenase (sMMO): effects of oxidation state, spin state, and coordination number. <i>Dalton Transactions</i> , 2013, 42, 1011-1023.	1.6	40
50	A New Family of Anionic Fe ^{III} Spin Crossover Complexes Featuring a Weak-Field N ₂ O ₄ Coordination Octahedron. <i>Chemistry - A European Journal</i> , 2016, 22, 1253-1257.	1.7	39
51	Giant anisotropic thermal expansion actuated by thermodynamically assisted reorientation of imidazoliums in a single crystal. <i>Nature Communications</i> , 2019, 10, 4805.	5.8	39
52	Disilarylthene- and Ferracyclic Complexes Containing Isocyanide Ligands as Effective Catalysts for Hydrogenation of Unfunctionalized Sterically Hindered Alkenes. <i>Journal of the American Chemical Society</i> , 2018, 140, 4119-4134.	6.6	38
53	Mechanistic Proposals for Direct Benzene Hydroxylation over Fe \rightarrow ZSM-5 Zeolite. <i>Journal of Physical Chemistry B</i> , 2003, 107, 11404-11410.	1.2	37
54	Formation and characterization of a reactive chromium(ν) \rightarrow oxo complex: mechanistic insight into hydrogen-atom transfer reactions. <i>Chemical Science</i> , 2015, 6, 945-955.	3.7	37

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55	Photocatalytic alkene reduction by a B ₁₂ -TiO ₂ hybrid catalyst coupled with C-F bond cleavage for gem-difluoroolefin synthesis. <i>Chemical Communications</i> , 2017, 53, 9478-9481.	2.2	37
56	Dioxygen Activation on Cu-MOR Zeolite: Theoretical Insights into the Formation of Cu ₂ O and Cu ₃ O ₃ Active Species. <i>Inorganic Chemistry</i> , 2018, 57, 10146-10152.	1.9	37
57	QM/MM Study on the Catalytic Mechanism of Benzene Hydroxylation over Fe-ZSM-5. <i>Organometallics</i> , 2006, 25, 3118-3123.	1.1	34
58	Theoretical Study of Thermal Spin Transition between the Singlet State and the Quintet State in the [Fe(2-picolylamine) ₃] ₂ +Spin Crossover System. <i>Journal of Physical Chemistry A</i> , 2010, 114, 5862-5869.	1.1	34
59	A Ruthenium(III)-Oxyl Complex Bearing Strong Radical Character. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 14041-14045.	7.2	34
60	Heterometallic Fe ^{III} /K Coordination Polymer with a Wide Thermal Hysteretic Spin Transition at Room Temperature. <i>Chemistry - A European Journal</i> , 2016, 22, 532-538.	1.7	34
61	A Theoretical Study of Reactivity and Regioselectivity in the Hydroxylation of Adamantane by Ferrate(VI). <i>Journal of Organic Chemistry</i> , 2003, 68, 3958-3965.	1.7	33
62	Mechanism for the Direct Oxidation of Benzene to Phenol by FeO ⁺ . <i>Organometallics</i> , 2005, 24, 3532-3538.	1.1	33
63	Role of Acidic Proton in the Decomposition of NO over Dimeric Cu(I) Active Sites in Cu-ZSM-5 Catalyst: A QM/MM Study. <i>ACS Catalysis</i> , 2014, 4, 2075-2085.	5.5	33
64	Hydrogen atom abstraction reactions independent of C-H bond dissociation energies of organic substrates in water: significance of oxidant-substrate adduct formation. <i>Chemical Science</i> , 2014, 5, 1429-1436.	3.7	33
65	Visible light-driven cross-coupling reactions of alkyl halides with phenylacetylene derivatives for C(sp ³)-C(sp) bond formation catalyzed by a B ₁₂ complex. <i>Chemical Communications</i> , 2019, 55, 13070-13073.	2.2	33
66	Catalytic C-H amination driven by intramolecular ligand-to-nitrene one-electron transfer through a rhodium(III) centre. <i>Chemical Communications</i> , 2017, 53, 4849-4852.	2.2	32
67	Theoretical Investigation of Methane Hydroxylation over Isoelectronic [FeO] ²⁺ and [MnO] ⁺ -Exchanged Zeolites Activated by N ₂ O. <i>Inorganic Chemistry</i> , 2017, 56, 10370-10380.	1.9	32
68	Anisotropic Change in the Magnetic Susceptibility of a Dynamic Single Crystal of a Cobalt(II) Complex. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 717-721.	7.2	30
69	Mechanistic Insight into Concerted Proton-Electron Transfer of a Ru(IV)-Oxo Complex: A Possible Oxidative Asynchronicity. <i>Journal of the American Chemical Society</i> , 2020, 142, 16982-16989.	6.6	30
70	DFT Study on N ₂ Activation by a Hydride-Bridged Diniobium Complex. N≡N Bond Cleavage Accompanied by H ₂ Evolution. <i>Inorganic Chemistry</i> , 2009, 48, 3875-3881.	1.9	29
71	Thiophene-Fused Bisdehydro[12]annulene That Undergoes Transannular Alkyne Cycloaddition by Either Light or Heat. <i>Journal of the American Chemical Society</i> , 2013, 135, 1731-1734.	6.6	29
72	Novel Aspects of the [1,3] Sigmatropic Silyl Shift in Allylsilane. <i>Journal of the American Chemical Society</i> , 1997, 119, 807-815.	6.6	28

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73	Energetics for the Oxygen Rebound Mechanism of Alkane Hydroxylation by the Iron-Oxo Species of Cytochrome P450. <i>Bulletin of the Chemical Society of Japan</i> , 2000, 73, 2669-2673.	2.0	28
74	Possible Peroxo State of the Dicopper Site of Particulate Methane Monooxygenase from Combined Quantum Mechanics and Molecular Mechanics Calculations. <i>Inorganic Chemistry</i> , 2016, 55, 2771-2775.	1.9	28
75	Quenching and Restoration of Orbital Angular Momentum through a Dynamic Bond in a Cobalt(II) Complex. <i>Journal of the American Chemical Society</i> , 2020, 142, 11434-11441.	6.6	28
76	Role of molecular distortions in the spin-orbit coupling between the singlet and triplet states of the 4f electron systems C ₄ H ₄ , C ₅ H ₅ ⁺ , and C ₃ H ₃ ⁺ . <i>Journal of Chemical Physics</i> , 2001, 115, 9243-9254.	1.2	26
77	Synthesis and Characterization of Novel Ferrocene-Containing Pyridylamine Ligands and Their Ruthenium(II) Complexes: Electronic Communication through Hydrogen-Bonded Amide Linkage. <i>Inorganic Chemistry</i> , 2008, 47, 886-895.	1.9	25
78	Thermally Induced Intra-Carboxyl Proton Shuttle in a Molecular Rack-and-Pinion Cascade Achieving Macroscopic Crystal Deformation. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 14628-14632.	7.2	25
79	Observation of Proton Transfer Coupled Spin Transition and Trapping of Photoinduced Metastable Proton Transfer State in an Fe(II) Complex. <i>Journal of the American Chemical Society</i> , 2019, 141, 14384-14393.	6.6	23
80	Silicon-Carbon Unsaturated Compounds. 69. Reactions of Silenes Produced Thermally from Pivaloyl- and Adamantoyltris(trimethylsilyl)silane with Silyl-Substituted Butadiynes and Enynes. <i>Organometallics</i> , 2004, 23, 4277-4287.	1.1	22
81	Mechanistic Insights into C-H Oxidations by Ruthenium(III)-Pterin Complexes: Impact of Basicity of the Pterin Ligand and Electron Acceptability of the Metal Center on the Transition States. <i>Journal of the American Chemical Society</i> , 2016, 138, 9508-9520.	6.6	22
82	Synergy of Electrostatic and van der Waals Interactions in the Adhesion of Epoxy Resin with Carbon-Fiber and Glass Surfaces. <i>Bulletin of the Chemical Society of Japan</i> , 2017, 90, 500-505.	2.0	22
83	Formation and High Reactivity of the <i>anti</i> -Dioxo Form of High-Spin Oxodioxoiron(IV) as the Active Species That Cleaves Strong C-H Bonds. <i>Chemistry - A European Journal</i> , 2016, 22, 5924-5936.	1.7	21
84	Photochemical Intramolecular C-H Addition of Dimesityl(hetero)arylboranes through a [1,6]-Sigmatropic Rearrangement. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 12210-12214.	7.2	21
85	An Azulene-Based Chiral Helicene and Its Air-Stable Cation Radical. <i>Bulletin of the Chemical Society of Japan</i> , 2019, 92, 1867-1873.	2.0	21
86	Room-Temperature Activation of Methane and Direct Formations of Acetic Acid and Methanol on Zn-ZSM-5 Zeolite: A Mechanistic DFT Study. <i>Bulletin of the Chemical Society of Japan</i> , 2020, 93, 345-354.	2.0	21
87	Manipulating electron redistribution to achieve electronic pyroelectricity in molecular [FeCo] crystals. <i>Nature Communications</i> , 2021, 12, 4836.	5.8	21
88	Proton-Coupled Electron Shuttling in a Covalently Linked Ruthenium-Copper Heterodinuclear Complex. <i>Journal of the American Chemical Society</i> , 2011, 133, 18570-18573.	6.6	20
89	Catalytic Performance of a Dicopper-Oxo Complex for Methane Hydroxylation. <i>Inorganic Chemistry</i> , 2018, 57, 8-11.	1.9	20
90	One-Pot Synthesis of Tertiary Amides from Organic Trichlorides through Oxygen Atom Incorporation from Air by Convergent Paired Electrolysis. <i>Journal of Organic Chemistry</i> , 2021, 86, 5983-5990.	1.7	20

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91	Density Functional Study on Possible Peroxo Form of Non-heme Diiron Enzyme Model. <i>Chemistry Letters</i> , 1997, 26, 587-588.	0.7	19
92	Roles of carboxylate donors in O–O bond scission of peroxodi-iron(III) to high-spin oxodi-iron(IV) with a new carboxylate-containing dinucleating ligand. <i>Chemical Science</i> , 2014, 5, 2282-2292.	3.7	19
93	Proton-Assisted Mechanism of NO Reduction on a Dinuclear Ruthenium Complex. <i>Inorganic Chemistry</i> , 2015, 54, 7181-7191.	1.9	19
94	Cupric-superoxide complex that induces a catalytic aldol reaction-type C–C bond formation. <i>Communications Chemistry</i> , 2019, 2, .	2.0	19
95	Theoretical Study of the Catalytic Hydrogenation of Alkenes by a Disilaferracyclic Complex: Can the Fe–Si σ -Bond-Assisted Activation of H–H Bonds Allow Development of a Catalysis of Iron?. <i>Journal of Organic Chemistry</i> , 2016, 81, 10900-10911.	1.7	18
96	Cobalt–Carbon Bond Formation Reaction via Ligand Reduction of Porphycene–Cobalt(II) Complex and Its Noninnocent Reactivity. <i>ACS Omega</i> , 2018, 3, 4027-4034.	1.6	17
97	Contribution of Coulomb Interactions to a Two-Step Crystal Structure Phase Transformation Coupled with a Significant Change in Spin Crossover Behavior for a Series of Charged Fe(II) Complexes from 2,6-Bis(2-methylthiazol-4-yl)pyridine. <i>Inorganic Chemistry</i> , 2018, 57, 1277-1287.	1.9	17
98	Theoretical Study of the Direct Conversion of Methane to Methanol Using H_2O_2 as an Oxidant on Pd and Au/Pd Surfaces. <i>Journal of Physical Chemistry C</i> , 2020, 124, 13231-13239.	1.5	17
99	Redox-Noninnocent Behavior of Tris(2-pyridylmethyl)amine Bound to a Lewis Acidic Rh(III) Ion Induced by C–H Deprotonation. <i>Journal of the American Chemical Society</i> , 2015, 137, 11222-11225.	6.6	16
100	Persistent four-coordinate iron-centered radical stabilized by π -donation. <i>Chemical Science</i> , 2016, 7, 191-198.	3.7	16
101	Theoretical Study of Thermal Isomerization of Silacyclobutene to Cyclopropene. <i>Organometallics</i> , 2004, 23, 4744-4749.	1.1	15
102	The Role of Coulomb Interactions for Spin Crossover Behaviors and Crystal Structural Transformation in Novel Anionic Fe(III) Complexes from a π -Extended ONO Ligand. <i>Crystals</i> , 2016, 6, 49.	1.0	15
103	A Ruthenium(III)–Oxyl Complex Bearing Strong Radical Character. <i>Angewandte Chemie</i> , 2016, 128, 14247-14251.	1.6	15
104	Three-Step Spin State Transition and Hysteretic Proton Transfer in the Crystal of an Iron(II) Hydrazone Complex. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14781-14787.	7.2	15
105	QM/MM Study of the Mononuclear Non-Heme Iron Active Site of Phenylalanine Hydroxylase. <i>Journal of Physical Chemistry B</i> , 2004, 108, 17226-17237.	1.2	14
106	A Cocatalyst that Stabilizes a Hydride Intermediate during Photocatalytic Hydrogen Evolution over a Rhodium-Doped TiO_2 Nanosheet. <i>Angewandte Chemie</i> , 2018, 130, 9211-9215.	1.6	14
107	Real-space observation of far- and near-field-induced photolysis of molecular oxygen on an Ag(110) surface by visible light. <i>Journal of Chemical Physics</i> , 2019, 151, 144705.	1.2	14
108	Cleavage of C–H Bond of Methane on Intermediate Q of Methane Monooxygenase. <i>Chemistry Letters</i> , 1997, 26, 1213-1214.	0.7	13

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109	Synthesis and Characterization of Ruthenium(II) Nitrile Complexes with Bisamide-tpa Ligands (tpa =) Tj ETQq1	1.0	13
110	Synthesis and Characterization of Ruthenium(II) Pyridylamine Complexes with Catechol Pendants as Metal Binding Sites. <i>Inorganic Chemistry</i> , 2010, 49, 3737-3745.	1.9	13
111	<i>cis</i> -1,2-Aminohydroxylation of Alkenes Involving a Catalytic Cycle of Osmium(III) and Osmium(V) Centers: Os(V)(O)(NHTs) Active Oxidant with a Macrocyclic Tetradentate Ligand. <i>Inorganic Chemistry</i> , 2015, 54, 7073-7082.	1.9	13
112	Thermodynamics and Photodynamics of a Monoprotonated Porphyrin Directly Stabilized by Hydrogen Bonding with Polar Protic Solvents. <i>Chemistry - A European Journal</i> , 2017, 23, 4669-4679.	1.7	13
113	Acid-Base Properties of a Freebase Form of a Quadruply Ring-Fused Porphyrin Stepwise Protonation Induced by Rigid Ring-Fused Structure. <i>Journal of Organic Chemistry</i> , 2017, 82, 322-330.	1.7	13
114	Intermediate-Spin Iron(III) Complexes Having a Redox-Noninnocent Macrocyclic Tetraamido Ligand. <i>Inorganic Chemistry</i> , 2018, 57, 9683-9695.	1.9	13
115	Possible Nitrogen Fixation by Disilabutadiene. <i>Organometallics</i> , 1997, 16, 5058-5063.	1.1	12
116	Mechanistic Insights into Photochromic Behavior of a Ruthenium(II) Pterin Complex. <i>Chemistry - A European Journal</i> , 2011, 17, 6652-6662.	1.7	12
117	Fundamental electron-transfer and proton-coupled electron-transfer properties of Ru(IV)-oxo complexes. <i>Dalton Transactions</i> , 2019, 48, 13154-13161.	1.6	12
118	Temperature dependence of spherical electron transfer in a nanosized [Fe14] complex. <i>Nature Communications</i> , 2019, 10, 5510.	5.8	12
119	Specific Enhancement of Catalytic Activity by a Dicopper Core: Selective Hydroxylation of Benzene to Phenol with Hydrogen Peroxide. <i>Angewandte Chemie</i> , 2017, 129, 7887-7890.	1.6	11
120	High-Temperature Cooperative Spin Crossover Transitions and Single-Crystal Reflection Spectra of [FeIII(qsal)2](CH3OSO3) and Related Compounds. <i>Crystals</i> , 2019, 9, 81.	1.0	11
121	Photocatalytic hydrogen evolution using a Ru(II)-bound heteroaromatic ligand as a reactive site. <i>Dalton Transactions</i> , 2020, 49, 17230-17242.	1.6	11
122	Local Structures and Dynamics of Imidazole Molecules in Poly(vinylphosphonic acid)-Imidazole Composite Investigated by Molecular Dynamics. <i>ACS Applied Polymer Materials</i> , 2020, 2, 1561-1568.	2.0	11
123	Mechanistic Study for the Reaction of B ₁₂ Complexes with <i>m</i> -Chloroperbenzoic Acid in Catalytic Alkane Oxidations. <i>Inorganic Chemistry</i> , 2022, 61, 9710-9724.	1.9	11
124	Theoretical Study of Oxidation of Cyclohexane Diol to Adipic Anhydride by [RuIV(O)(tpa)(H2O)] ²⁺ Complex (tpa = Tris(2-pyridylmethyl)amine). <i>Inorganic Chemistry</i> , 2011, 50, 6200-6209.	1.9	10
125	Theoretical Study on the Formation of Silacyclopropene from Acylsilane and Acetylene via Silene-to-Silylene Rearrangement. <i>Organometallics</i> , 2011, 30, 3160-3167.	1.1	10
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