Shigeyoshi Sakaki Or S Sakaki

List of Publications by Year in descending order

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226 papers	10,324 citations	31976 53 h-index	⁴⁹⁹⁰⁹ 87 g-index
231	231	231	8380
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Bidirectional Chemoâ€&witching of Spin State in a Microporous Framework. Angewandte Chemie - International Edition, 2009, 48, 4767-4771.	13.8	474
2	Self-Accelerating CO Sorption in a Soft Nanoporous Crystal. Science, 2014, 343, 167-170.	12.6	434
3	Design and control of gas diffusion process in a nanoporous soft crystal. Science, 2019, 363, 387-391.	12.6	332
4	Iridium-Catalyzed Borylation of Benzene with Diboron. Theoretical Elucidation of Catalytic Cycle Including Unusual Iridium(V) Intermediate. Journal of the American Chemical Society, 2003, 125, 16114-16126.	13.7	266
5	Câ^'H Bond Activation of Benzene and Methane by M(η2-O2CH)2 (M = Pd or Pt). A Theoretical Study. Organometallics, 2000, 19, 3895-3908.	2.3	205
6	Ruthenium(II)-Catalyzed Hydrogenation of Carbon Dioxide to Formic Acid. Theoretical Study of Real Catalyst, Ligand Effects, and Solvation Effects. Journal of the American Chemical Society, 2005, 127, 4021-4032.	13.7	183
7	Discrete Sandwich Compounds of Monolayer Palladium Sheets. Science, 2006, 313, 1104-1107.	12.6	182
8	The Suzuki–Miyaura Coupling of Nitroarenes. Journal of the American Chemical Society, 2017, 139, 9423-9426.	13.7	158
9	Theoretical Study of Platinum(0)-Catalyzed Hydrosilylation of Ethylene. Chalkâ^'Harrod Mechanism or Modified Chalkâ ''Harrod Mechanism. Organometallics, 1998, 17, 2510-2523.	2.3	157
10	Theoretical Study of Trans-metalation Process in Palladium-Catalyzed Borylation of Iodobenzene with Diboron. Journal of the American Chemical Society, 2004, 126, 10457-10471.	13.7	153
11	Efficient Catalyst for Acceptorless Alcohol Dehydrogenation: Interplay of Theoretical and Experimental Studies. ACS Catalysis, 2014, 4, 1010-1020.	11.2	151
12	<i>para</i> -Selective Alkylation of Benzamides and Aromatic Ketones by Cooperative Nickel/Aluminum Catalysis. Journal of the American Chemical Society, 2016, 138, 14699-14704.	13.7	149
13	Theoretical Study of Ruthenium-Catalyzed Hydrogenation of Carbon Dioxide into Formic Acid. Reaction Mechanism Involving a New Type of σ-Bond Metathesis. Journal of the American Chemical Society, 2000, 122, 3867-3877.	13.7	132
14	A Dualâ€Ligand Porous Coordination Polymer Chemiresistor with Modulated Conductivity and Porosity. Angewandte Chemie - International Edition, 2020, 59, 172-176.	13.8	124
15	Oxidative addition reactions of saturated Si-X bonds (X = H, F, C, or Si) to Pt(PH3)2. An ab initio MO/MP4 study. Journal of the American Chemical Society, 1993, 115, 2373-2381.	13.7	120
16	Density Gradation of Open Metal Sites in the Mesospace of Porous Coordination Polymers. Journal of the American Chemical Society, 2017, 139, 11576-11583.	13.7	118
17	Why Does the Rhodium-Catalyzed Hydrosilylation of Alkenes Take Place through a Modified Chalkâ°'Harrod Mechanism? A Theoretical Study. Organometallics, 2002, 21, 3788-3802.	2.3	110
18	Synthesis of a new copper(i) complex, [Cu(tmdcbpy)2]+ (tmdcbpy =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td	(4,4′,6 2.3	5,6′-tetrar 105

Transactions RSC, 2002, , 840.

#	Article	IF	CITATIONS
19	Theoretical Study of the Cp2Zr-Catalyzed Hydrosilylation of Ethylene. Reaction Mechanism Including New Ïf-Bond Activation. Journal of the American Chemical Society, 2004, 126, 3332-3348.	13.7	105
20	Theoretical Study of Rhodium(III)-Catalyzed Hydrogenation of Carbon Dioxide into Formic Acid. Significant Differences in Reactivity among Rhodium(III), Rhodium(I), and Ruthenium(II) Complexes. Journal of the American Chemical Society, 2002, 124, 7588-7603.	13.7	103
21	New generation of the reference interaction site model self-consistent field method: Introduction of spatial electron density distribution to the solvation theory. Journal of Chemical Physics, 2007, 126, 244504.	3.0	103
22	Structures and binding energies of benzene–methane and benzene–benzene complexes. An ab initio SCF/MP2 study. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 659-664.	1.7	96
23	Ruthenium(II)-Catalyzed Hydrogenation of Carbon Dioxide to Formic Acid. Theoretical Study of Significant Acceleration by Water Molecules. Organometallics, 2006, 25, 3352-3363.	2.3	96
24	Nickel-Catalyzed Double Carboxylation of Alkynes Employing Carbon Dioxide. Organic Letters, 2014, 16, 4960-4963.	4.6	96
25	Rhodium Complexes Bearing PAIP Pincer Ligands. Journal of the American Chemical Society, 2018, 140, 7070-7073.	13.7	96
26	Theoretical Study on σ-Bond Activation of (HO)2Bâ^'XH3by M(PH3)2(X = C, Si, Ge, or Sn; M = Pd or Pt). Noteworthy Contribution of the Boryl pÏ€Orbital to Mâ~'Boryl Bonding and Activation of the Bâ^'X σ-Bond. Organometallics, 1999, 18, 4825-4837.	2.3	93
27	Carbon dioxide capture and efficient fixation in a dynamic porous coordination polymer. Nature Communications, 2019, 10, 4362.	12.8	91
28	Why Does Fluoride Anion Accelerate Transmetalation between Vinylsilane and Palladium(II)â^'Vinyl Complex? Theoretical Study. Journal of the American Chemical Society, 2008, 130, 12975-12985.	13.7	88
29	Syntheses, Structures, and Coordination Chemistry of Phosphole-Containing Hybrid Calixphyrins:Â Promising Macrocyclic P,N2,X-Mixed Donor Ligands for Designing Reactive Transition-Metal Complexes. Journal of the American Chemical Society, 2008, 130, 990-1002.	13.7	85
30	Aromatic C–H Ïf-Bond Activation by Ni ⁰ , Pd ⁰ , and Pt ⁰ Alkene Complexes: Concerted Oxidative Addition to Metal vs Ligand-to-Ligand H Transfer Mechanism. Organometallics, 2017, 36, 2761-2771.	2.3	84
31	Structure and coordinate bonding nature of nickel(0) and copper(I) carbon dioxide complexes. An ab initio molecular orbital study. Inorganic Chemistry, 1982, 21, 760-765.	4.0	82
32	Is a Transition State Planar or Nonplanar in Oxidative Additions of Câ^'H, Siâ^'H, Câ^'C, and Siâ^'C σ-Bonds to Pt(PH3)2? A Theoretical Study. Journal of Physical Chemistry A, 1998, 102, 8027-8036.	2.5	78
33	Reaction of BX2â^BX2(X = H or OH) with M(PH3)2(M = Pd or Pt). A Theoretical Study of the Characteristic Features. Inorganic Chemistry, 1997, 36, 226-229.	4.0	76
34	A Theoretical Investigation on CO Oxidation by Singleâ€Atom Catalysts M ₁ /γâ€Al ₂ O ₃ (M=Pd, Fe, Co, and Ni). ChemCatChem, 2017, 9, 1222-122	9. ^{3.7}	76
35	Levoglucosan Formation from Crystalline Cellulose: Importance of a Hydrogen Bonding Network in the Reaction. ChemSusChem, 2013, 6, 2356-2368.	6.8	74
36	Absorption of CO ₂ and CS ₂ into the Hofmann-Type Porous Coordination Polymer: Electrostatic versus Dispersion Interactions. Journal of the American Chemical Society, 2013, 135, 4840-4849.	13.7	72

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37	Cooperative Bond Scission in a Soft Porous Crystal Enables Discriminatory Gate Opening for Ethylene over Ethane. Journal of the American Chemical Society, 2017, 139, 18313-18321.	13.7	72
38	Phosphorus-Containing Hybrid Calixphyrins:Â Promising Mixed-Donor Ligands for Visible and Efficient Palladium Catalysts. Journal of the American Chemical Society, 2006, 128, 11760-11761.	13.7	71
39	C2H4 Insertion into PtII-SiH3 and PtII-H Bonds. An ab Initio MO/MP4 Study. Journal of the American Chemical Society, 1994, 116, 7258-7265.	13.7	67
40	Remarkably Wide Range of Bond Distance Adjustment of d9â^'d9Pdâ^'Pd Interactions to Change in Coordination Environment. Journal of the American Chemical Society, 1998, 120, 4536-4537.	13.7	65
41	Theoretical Study of Câ^'H and Nâ^'H Ïf-Bond Activation Reactions by Titinium(IV)-Imido Complex. Good Understanding Based on Orbital Interaction and Theoretical Proposal for Nâ^'H Ïf-Bond Activation of Ammonia. Journal of the American Chemical Society, 2007, 129, 8615-8624.	13.7	65
42	Thermal Degradation of Methyl β- <scp>d</scp> -Glucoside. A Theoretical Study of Plausible Reaction Mechanisms. Journal of Organic Chemistry, 2009, 74, 6891-6894.	3.2	65
43	Unexpected Electronic Process of H ₂ Activation by a New Nickel Borane Complex: Comparison with the Usual Homolytic and Heterolytic Activations. Inorganic Chemistry, 2013, 52, 2844-2853.	4.0	64
44	The crucial role of a Ni(i) intermediate in Ni-catalyzed carboxylation of aryl chloride with CO2: a theoretical study. Chemical Communications, 2013, 49, 10715.	4.1	62
45	An ab initio MO/SD-CI study of model complexes of intermediates in electrochemical reduction of carbon dioxide catalyzed by NiCl2(cyclam). Journal of the American Chemical Society, 1992, 114, 2055-2062.	13.7	61
46	Pt-catalyzed hydrosilylation of ethylene. A theoretical study of the reaction mechanism. Coordination Chemistry Reviews, 1999, 190-192, 933-960.	18.8	60
47	A Theoretical Study of Nickel(0)-Catalyzed Phenylcyanation of Alkynes. Reaction Mechanism and Regioselectivity. Organometallics, 2009, 28, 2583-2594.	2.3	60
48	Ïf-Bond Activation of Small Molecules and Reactions Catalyzed by Transition-Metal Complexes: Theoretical Understanding of Electronic Processes. Inorganic Chemistry, 2014, 53, 6444-6457.	4.0	60
49	Magnesiation of Aryl Fluorides Catalyzed by a Rhodium–Aluminum Complex. Journal of the American Chemical Society, 2020, 142, 11647-11652.	13.7	59
50	A Theoretical Study of the Câ^'H Activation of Methane Derivatives. Significant Effects of Electron-Withdrawing Substituents. Organometallics, 1998, 17, 1278-1289.	2.3	58
51	Bonding in Ni(PH3)2(C2H4) and Ni(PH3)2(C2H2). Ab initio SCF-MO study. Inorganic Chemistry, 1981, 20, 2292-2297.	4.0	57
52	Catalytic Transfer Hydrogenation by a Trivalent Phosphorus Compound: Phosphorusâ€Ligand Cooperation Pathway or P ^{III} /P ^V Redox Pathway?. Angewandte Chemie - International Edition, 2014, 53, 4633-4637.	13.8	57
53	Theoretical Study of M(PH3)2Complexes of C60, Corannulene (C20H10), and Sumanene (C21H12) (M = Pd) Tj E 8055-8063.	TQq1 1 0. 2.5	784314 rg ^B 56
54	Pd(ii)-promoted direct cross-coupling reaction of arenes via highly regioselective aromatic C–H activation: a theoretical study. Dalton Transactions, 2010, 39, 3279	3.3	55

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55	Reasons Two Nonstrained C–C σ-Bonds Can Be Easily Cleaved in Decyanative [4 + 2] Cycloaddition Catalyzed by Nickel(0)/Lewis Acid Systems. Theoretical Insight. ACS Catalysis, 2015, 5, 1-10.	11.2	55
56	Comparison of Electronic Structure Theories for Solvated Molecules:  RISM-SCF versus PCM. Journal of Physical Chemistry A, 2004, 108, 1629-1634.	2.5	53
57	Ab initio MO study of carbon dioxide insertion into a copper(I)-hydrogen bond. Semiquantitative understanding of changes in geometry, bonding, and electron distribution during the reaction. Inorganic Chemistry, 1989, 28, 2583-2590.	4.0	51
58	Theoretical Study of Pyrazolate-Bridged Dinuclear Platinum(II) Complexes: Interesting Potential Energy Curve of the Lowest Energy Triplet Excited State and Phosphorescence Spectra. Inorganic Chemistry, 2008, 47, 4329-4337.	4.0	51
59	Successful photocatalytic reduction of methylviologen (MV2+) with [Cu(NN)(PPh3)2]+ (NN =) Tj ETQq1 1 0.784 and a novel solvent effect on its catalytic activity. Inorganic Chemistry, 1986, 25, 2330-2333.	314 rgBT / 4.0	Overlock 10 50
60	Theoretical Study of the Structure, Bonding Nature, and Reductive Elimination Reaction of Pd(XH3)(η3-C3H5)(PH3) (X = C, Si, Ge, Sn). Hypervalent Behavior of Group 14 Elements. Organometallics, 1999, 18, 4015-4026.	2.3	50
61	New Insights into Structures, Stability, and Bonding of μ-Allyl Ligands Coordinated with Pdâ^'Pd and Pdâ^'Pt Fragments. Organometallics, 1996, 15, 2089-2097.	2.3	49
62	Heteropolynuclear Complexes of 3,5-Dimethylpyrazolate [Pt ₂ M ₄ (Me ₂ pz) ₈] (M = Ag, Cu). Highly Luminescent Character of the Triplet Excited State Based on Mixed-Metal Cores. Inorganic Chemistry, 2008, 47, 5033-5035.	4.0	49
63	A palladium-catalyzed reaction of a .piallyl ligand with a nucleophile. An MO study about a feature of the reaction and a ligand effect on the reactivity. Journal of the American Chemical Society, 1980, 102, 4062-4069.	13.7	48
64	Reaction paths of carbonyl insertion into the platinum(II)-methyl bond. An MO study. Journal of the American Chemical Society, 1983, 105, 2280-2286.	13.7	48
65	Theoretical Insight into Gate-Opening Adsorption Mechanism and Sigmoidal Adsorption Isotherm into Porous Coordination Polymer. Journal of the American Chemical Society, 2018, 140, 13958-13969.	13.7	48
66	A Theoretical Analysis of a Dielsâ^'Alder Reaction in Ionic Liquids. Journal of Physical Chemistry B, 2009, 113, 8227-8230.	2.6	47
67	Factors Controlling the Reactivity of Heteroarenes in Direct Arylation with Arylpalladium Acetate Complexes. Organometallics, 2013, 32, 4423-4430.	2.3	47
68	The crucial roles of MgCl ₂ as a non-innocent additive in the Ni-catalyzed carboxylation of benzyl halide with CO ₂ . Chemical Communications, 2014, 50, 13026-13029.	4.1	47
69	Can carbon dioxide coordinate to a nickel(I) complex? An ab initio MO/SD-CI study. Journal of the American Chemical Society, 1990, 112, 7813-7814.	13.7	46
70	Evaluation of the Ïf-Donation from Group 11 Metals (Cu, Ag, Au) to Silane, Germane, and Stannane Based on the Experimental/Theoretical Systematic Approach. Organometallics, 2015, 34, 1440-1448.	2.3	46
71	Bonding nature and reaction behavior of inter-element linkages with transition metal complexes. A theoretical study. Journal of Organometallic Chemistry, 2000, 611, 288-298.	1.8	45
72	Ab Initio MO Study of the CO2 Insertion into the Cu(I)-R Bond (R = H, CH3, or OH). Comparison between the CO2 Insertion and the C2H4 Insertion. Inorganic Chemistry, 1995, 34, 1914-1923.	4.0	44

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73	Theory of emission state of tris(8-quinolinolato)aluminum and its related compounds. Journal of Applied Physics, 2001, 90, 6092-6097.	2.5	44
74	sp ³ C–H Borylation Catalyzed by Iridium(III) Triboryl Complex: Comprehensive Theoretical Study of Reactivity, Regioselectivity, and Prediction of Excellent Ligand. Journal of the American Chemical Society, 2019, 141, 9854-9866.	13.7	44
75	Geometries, Bonding Nature, and Relative Stabilities of Dinuclear Palladium(I) π-Allyl and Mononuclear Palladium(II) π-Allyl Complexes. A Theoretical Study. Organometallics, 1997, 16, 2995-3003.	2.3	43
76	Generation of Dihydrogen Molecule and Hydrosilylation of Carbon Dioxide Catalyzed by Zinc Hydride Complex: Theoretical Understanding and Prediction. Inorganic Chemistry, 2014, 53, 8485-8493.	4.0	43
77	Theoretical Study of Rhenium Dinuclear Complexes:Â Reâ^'Re Bonding Nature and Electronic Structure. Journal of Physical Chemistry A, 2006, 110, 9710-9717.	2.5	42
78	Binding Energy of Transition-Metal Complexes with Large π-Conjugate Systems. Density Functional Theory vs Post-Hartreeâ^Fock Methods. Journal of Physical Chemistry A, 2007, 111, 7124-7132.	2.5	42
79	Cooperative Catalysis of Combined Systems of Transitionâ€Metal Complexes with Lewis Acids: Theoretical Understanding. Chemical Record, 2016, 16, 2405-2425.	5.8	42
80	Theoretical Study of Reactivity of Ge(II)-hydride Compound: Comparison with Rh(I)-Hydride Complex and Prediction of Full Catalytic Cycle by Ge(II)-hydride. Journal of the American Chemical Society, 2013, 135, 8955-8965.	13.7	41
81	Catalytic Hydrogenation of Carbon Dioxide with Ammonia–Borane by Pincer-Type Phosphorus Compounds: Theoretical Prediction. Journal of the American Chemical Society, 2016, 138, 13481-13484.	13.7	41
82	Pd/NHC-catalyzed cross-coupling reactions of nitroarenes. Chemical Communications, 2019, 55, 9291-9294.	4.1	41
83	Oxidative addition of silane to Pt(PH3)2. An ab initio MO/MP4 study. Journal of the American Chemical Society, 1991, 113, 5063-5065.	13.7	40
84	Analytical energy gradient for reference interaction site model self-consistent field explicitly including spatial electron density distribution. Journal of Chemical Physics, 2009, 131, 214504.	3.0	40
85	Geometry, electronic structure, and coordination ability of (diiminoethane)bis(phosphine)copper(1+) at the lowest energy triplet metal-to-ligand charge-transfer excited state. A theoretical study. Inorganic Chemistry, 1992, 31, 4575-4581.	4.0	39
86	Ab Initio MO Study of the Geometry, η3⇄ η1Conversion, and Reductive Elimination of a Palladium(II) η3-Allyl Hydride Complex and Its Platinum(II) Analogue. Organometallics, 1996, 15, 1713-1720.	2.3	38
87	Structuralâ€Deformationâ€Energyâ€Modulation Strategy in a Soft Porous Coordination Polymer with an Interpenetrated Framework. Angewandte Chemie - International Edition, 2020, 59, 15517-15521.	13.8	38
88	Ab initio MO study of palladium-assisted nucleophilic attack on a coordinated olefin: semiquantitative understanding of the reaction and the mechanism of palladium acceleration. Inorganic Chemistry, 1987, 26, 2499-2505.	4.0	37
89	Ab initio MO study of carbon dioxide insertion into a methyl-copper(I) bond. Critical difference from CO2 insertion into a hydrogen-copper(I) bond. Organometallics, 1989, 8, 2970-2973.	2.3	37
90	Oxygen Atom Transfer Reactions of Iridium and Osmium Complexes: Theoretical Study of Characteristic Features and Significantly Large Differences Between These Two Complexes. Inorganic Chemistry, 2009, 48, 8154-8163.	4.0	37

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91	Oxidative addition of a C–H σ bond to M(PH3)2 (Mâ€=â€Pd or Pt). An ab initio molecular orbital study on t chelate phosphine effect. Journal of the Chemical Society Dalton Transactions, 1997, , 803-810.	the 1.1	35
92	The barrier origin on the reaction of CO2+OHâ^' in aqueous solution. Chemical Physics Letters, 2007, 443, 264-268.	2.6	35
93	Solvation effects in oxidative addition reaction of Methyliodide to Pt(II) complex: A theoretical study with RISM–SCF method. Chemical Physics Letters, 2008, 458, 329-332.	2.6	35
94	Ab initio MO study of nickel(0) complexes: stereochemistry of Ni(PH3)2L (L = H2CO or (CO)2) and comparison of coordinate bonds of various ligands. Inorganic Chemistry, 1983, 22, 104-108.	4.0	34
95	Characteristic features of carbon dioxide insertion into a copper-hydrogen bond. An ab initio MO study. Inorganic Chemistry, 1988, 27, 2020-2021.	4.0	34
96	Formation of the Oxanickelacyclopentene Complex from Nickel(0), Carbon Dioxide, and Alkyne. Anab initioMO/SD-CI Study. Bulletin of the Chemical Society of Japan, 1993, 66, 3289-3299.	3.2	34
97	Chromatographic separation of geometrical isomers using highly oriented polymer-immobilized silica gels. Journal of Chromatography A, 1994, 672, 237-241.	3.7	34
98	Theoretical and Computational Study of a Complex System Consisting of Transition Metal Element(s): How to Understand and Predict Its Geometry, Bonding Nature, Molecular Property, and Reaction Behavior. Bulletin of the Chemical Society of Japan, 2015, 88, 889-938.	3.2	34
99	Transition-Metal-Mediated Germanium–Fluorine Activation: Inverse Electron Flow in σ-Bond Metathesis. Organometallics, 2016, 35, 713-719.	2.3	34
100	Theoretical Study of Nickel-Catalyzed Selective Alkenylation of Pyridine: Reaction Mechanism and Crucial Roles of Lewis Acid and Ligands in Determining the Selectivity. Journal of Organic Chemistry, 2017, 82, 289-301.	3.2	34
101	Ethylene, silene, and disilene coordinate bonds with platinum(0) and platinum(II). An ab initio MO/MP4 and SD-CI study. Inorganic Chemistry, 1991, 30, 4218-4224.	4.0	33
102	Reactivity of Pd(PH3)2 for Oxidative Additions of the Si-X .sigmaBonds (X = H, C, Si). An ab Initio MO/MP4 Study. Inorganic Chemistry, 1994, 33, 1660-1665.	4.0	33
103	Carbon dioxide capture at the molecular level. Physical Chemistry Chemical Physics, 2009, 11, 8556.	2.8	33
104	New Palladium(II) Complex of P,S-Containing Hybrid Calixphyrin. Theoretical Study of Electronic Structure and Reactivity for Oxidative Addition. Journal of the American Chemical Society, 2009, 131, 10955-10963.	13.7	32
105	Theoretical Study on the Transition-Metal Oxoboryl Complex: M–BO Bonding Nature, Mechanism of the Formation Reaction, and Prediction of a New Oxoboryl Complex. Inorganic Chemistry, 2012, 51, 4597-4605.	4.0	32
106	A Theoretical Study on the Oxidative Addition of an Si-X Bond (X = H or Si) to M(PH3)2 (M = Pd or Pt). A Comparison of the Reactivity between Pt(PH3)2 and Pd(PH3)2. The Journal of Physical Chemistry, 1995, 99, 9933-9939.	2.9	31
107	Photoinduced electron transfer between [Cu(dmphen)L2]+[dmphen = 2,9-dimethyl-1,10-phenanthroline, L = PPhn(C6H4OMe-p)3 –n(n= 0–3)] and methyl viologen. Journal of the Chemical Society Dalton Transactions, 1996, , 1909-1914.	1.1	31
108	Theoretical and computational studies of organometallic reactions: successful or not?. Chemical Record. 2010. 10. 29-45.	5.8	31

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109	Transitionâ€Metalâ€Mediated Cleavage of Fluoroâ€Silanes under Mild Conditions. Chemistry - A European Journal, 2016, 22, 2370-2375.	3.3	30
110	Noble Reaction Features of Bromoborane in Oxidative Addition of B–Br σ-Bond to [M(PMe ₃) ₂] (M = Pt or Pd): Theoretical Study. Inorganic Chemistry, 2011, 50, 5290-5297.	4.0	29
111	Syntheses and Luminescent Properties of 3,5-Diphenylpyrazolato-Bridged Heteropolynuclear Platinum Complexes. The Influence of Chloride Ligands on the Emission Energy Revealed by the Systematic Replacement of Chloride Ligands by 3,5-Dimethylpyrazolate. Inorganic Chemistry, 2012, 51, 7977-7992.	4.0	29
112	Electronic structure and enhanced reactivity of carbon dioxide coordinated with a rhodium(I) complex. An ab initio MO study. Inorganic Chemistry, 1989, 28, 103-109.	4.0	28
113	M2E2 four-member ring structure, M2(μ-EH2)2(P2)2 (M=Pd or Pt; E=Si or Ge; P2=(PH3)2 or) Tj ETQq1 1 0.7843 study. Journal of Organometallic Chemistry, 2001, 635, 173-186.	14 rgBT /C 1.8	Overlock 10 28
114	Distortion of Electronic Structure in Solvated Molecules:Â Tautomeric Equilibrium of 2-Pyridone and 2-Hydroxypridine in Water Studied by the RISM-SCF Method. Journal of Physical Chemistry A, 2004, 108, 2097-2102.	2.5	28
115	Luminescent Heteropolynuclear Complexes of 3,5â€Dimethylpyrazolate [Pt ₂ Au ₂ M ₂ (Me ₂ pz) ₈] (M=Ag, Cu) Showing the Synergistic Effect of Three Transition Elements in the Excited State. Chemistry - A European Journal. 2009. 15. 4238-4242.	3.3	28
116	RISM-SCF-SEDD Study on the Symmetry Breaking of Carbonate and Nitrate Anions in Aqueous Solution. Journal of Physical Chemistry B, 2010, 114, 10513-10519.	2.6	28
117	Effects of PAr ₃ Ligands on Direct Arylation of Heteroarenes with Isolated [Pd(2,6-Me ₂ C ₆ H ₃)(μ-O ₂ CMe)(PAr ₃)] _{4< Complexes. Organometallics, 2014, 33, 6247-6252.}	(खाफ़)	28
118	DRIFT and Theoretical Studies of Ethylene/Ethane Separation on Flexible and Microporous [Cu ₂ (2,3â€pyrazinedicarboxylate) ₂ (pyrazine)] <i>_n</i> . European Journal of Inorganic Chemistry, 2014, 2014, 2747-2752.	2.0	28
119	Electronic structures and stereochemistry of some side-on dioxygen complexes. Inorganic Chemistry, 1978, 17, 3183-3188.	4.0	27
120	Platinum-catalyzed hydrosilylation of ethylene. A theoretical study on the reaction mechanism involving cis–trans isomerization of PtH(SiH3)(PH3)2. Computational and Theoretical Chemistry, 1999, 461-462, 533-546.	1.5	27
121	Modulating fluorescence of 8-quinolinolato compounds by functional groups: A theoretical study. Applied Physics Letters, 2001, 79, 2348-2350.	3.3	27
122	Theoretical Study of Oxidative Additions of H ₂ and MeCN to a Nickel(0) Complex: Significantly Large Correlation Effects and Characteristic Features of the Reaction. Journal of Physical Chemistry A, 2007, 111, 7915-7924.	2.5	27
123	Evaluation Procedure of Electrostatic Potential in 3D-RISM-SCF Method and Its Application to Hydrolyses of Cis- and Transplatin Complexes. Journal of Physical Chemistry B, 2012, 116, 13045-13062.	2.6	27
124	Characterization of Rh–Al Bond in Rh(PAIP) (PAIP = Pincer-type Diphosphino-Aluminyl Ligand) in Comparison with Rh(L)(PMe ₃) ₂ (L = AlMe ₂ ,) Tj ETQq0 0 0 rgBT /Overlock 1	19 Tf 50 1 4.0	42_Td (Al(N
125	Theoretical Study of Hydrogenation Catalysis of Phosphorus Compound and Prediction of Catalyst with High Activity and Wide Application Scope. ACS Catalysis, 2016, 6, 4859-4870.	11.2	26

Formation of the Oxanickelacyclopentene Complex from Nickel(0), Carbon Dioxide, and Alkyne. Anab initioMO/SD-CI Study. Part II. Reactivity and Regioselectivity of Hydroxyacetylene. Bulletin of the 3.2 25 Chemical Society of Japan, 1995, 68, 1873-1882.

#	ARTICLE	IF	CITATIONS
127	How to Stabilize η ³ -Silapropargyl/Alkynylsilyl Complex of [CpL ₂ M] ⁺ (<i>L</i> = CO, PMe ₃ , or PF _{3} and M =) T	jETEQ:q11	0. 28 4314 rg
128	Theoretical Study of Excited States of Pyrazolate- and Pyridinethiolate-Bridged Dinuclear Platinum(II) Complexes: Relationship between Geometries of Excited States and Phosphorescence Spectra. Inorganic Chemistry, 2010, 49, 8977-8985.	4.0	25
129	How Can We Understand Au ₈ Cores and Entangled Ligands of Selenolate- and Thiolate-Protected Gold Nanoclusters Au ₂₄ (ER) ₂₀ and Au ₂₀ (ER) ₁₆ (E = Se, S; R = Ph, Me)? A Theoretical Study. Journal of the American Chemical Society, 2015, 137, 8593-8602.	13.7	25
130	Theoretical study on high-spin to low-spin transition of {Fe(pyrazine)[Pt(CN)4]}: Guest-induced entropy decrease. Chemical Physics Letters, 2011, 511, 399-404.	2.6	24
131	Theoretical Mechanistic Study of Novel Ni(0)-Catalyzed [6 – 2 + 2] Cycloaddition Reactions of Isatoic Anhydrides with Alkynes: Origin of Facile Decarboxylation. Organometallics, 2013, 32, 7564-7574.	2.3	24
132	Synthesis, Geometry, and Bonding Nature of Heptacoordinate Compounds of Silicon and Germanium Featuring Three Phosphine Donors. Organometallics, 2014, 33, 6557-6567.	2.3	24
133	How To Perform Suzuki–Miyaura Reactions of Nitroarene or Nitrations of Bromoarene Using a Pd ⁰ Phosphine Complex: Theoretical Insight and Prediction. Organometallics, 2018, 37, 3480-3487.	2.3	24
134	Reaction Behavior of the NO Molecule on the Surface of an M _{<i>n</i>} Particle (M = Ru,) Tj ETQq0 C Journal of Physical Chemistry A, 2019, 123, 7021-7033.	0 rgBT /C 2.5	verlock 10 T 24
135	A theoretical study of platinum-catalyzed disilylation of alkene. Journal of Organometallic Chemistry, 1997, 535, 25-28.	1.8	23
136	Insertion of carbon dioxide into a rhodium(III)–hydride bond: a theoretical study â€. Journal of the Chemical Society Dalton Transactions, 1998, , 577-584.	1.1	23
137	Why Is the Nickel(II) Diphenyldiimine Complex the Best Catalyst for Polymerization of Ethylene in Three Kinds of Cationic Nickel(II) Complexes, [Ni(CH3)L]+ (L = Diphenyldiimine, 2,2â€⁻-Bipyridine, or) Tj ETQq1 1 0.784	13 1243°gBT	/O 2e rlock 10
138	Experimental and Theoretical Study of a Tungsten Dihydride Silyl Complex: New Insight into Its Bonding Nature and Fluxional Behavior. Organometallics, 2010, 29, 6267-6281.	2.3	23
139	Ab initio study on SN2 reaction of methyl p-nitrobenzenesulfonate and chloride anion in [mmim][PF6]. Physical Chemistry Chemical Physics, 2010, 12, 1822.	2.8	23
140	Binding energies and bonding nature of MX(CO)(PH3)2(C60) (M=Rh or Ir; X=H or Cl): Theoretical study. Journal of Organometallic Chemistry, 2007, 692, 299-306.	1.8	22
141	Synthesis of Thiophene-Containing Hybrid Calixphyrins of the 5,10-Porphodimethene Type. Journal of Organic Chemistry, 2008, 73, 5139-5142.	3.2	22
142	Synthesis, Structure, and Bonding Nature of Ethynediyl-Bridged Bis(silylene) Dinuclear Complexes of Tungsten and Molybdenum. Organometallics, 2011, 30, 4515-4531.	2.3	22
143	Theoretical Study of One-Electron Oxidized Mn(III)– and Ni(II)–Salen Complexes: Localized vs Delocalized Ground and Excited States in Solution. Journal of Chemical Theory and Computation, 2014, 10, 1062-1073.	5.3	22
144	An ab initio molecular-orbital study of insertion of CO2into a Rhl–H bond. Journal of the Chemical Society Dalton Transactions, 1994, , 3047-3054.	1.1	21

#	Article	IF	CITATIONS
145	Interaction of Various Gas Molecules with Paddle-Wheel-Type Open Metal Sites of Porous Coordination Polymers: Theoretical Investigation. Inorganic Chemistry, 2014, 53, 2417-2426.	4.0	21
146	The important role of the Mo–Mo quintuple bond in catalytic synthesis of benzene from alkynes. A theoretical study. Dalton Transactions, 2014, 43, 11478-11492.	3.3	21
147	Ni(I)-Hydride Catalyst for Hydrosilylation of Carbon Dioxide and Dihydrogen Generation: Theoretical Prediction and Exploration of Full Catalytic Cycle. Organometallics, 2018, 37, 1258-1270.	2.3	21
148	Methane Borylation Catalyzed by Ru, Rh, and Ir Complexes in Comparison with Cyclohexane Borylation: Theoretical Understanding and Prediction. Journal of the American Chemical Society, 2020, 142, 16732-16747.	13.7	21
149	Frontier Orbital Consistent Quantum Capping Potential (FOC-QCP) for Bulky Ligand of Transition Metal Complexes. Journal of Physical Chemistry A, 2008, 112, 1946-1955.	2.5	20
150	Theoretical study on aquation reaction of cis-platin complex: RISM–SCF–SEDD, a hybrid approach of accurate quantum chemical method and statistical mechanics. Dalton Transactions, 2011, 40, 11125.	3.3	20
151	Solvation structure of coronene–transition metal complex: a RISM-SCF study. Physical Chemistry Chemical Physics, 2011, 13, 309-313.	2.8	20
152	Activation of Strong Boron–Fluorine and Silicon–Fluorine σâ€Bonds: Theoretical Understanding and Prediction. Chemistry - A European Journal, 2015, 21, 13588-13597.	3.3	20
153	Mo–Mo Quintuple Bond is Highly Reactive in H–H, C–H, and O–H σ-Bond Cleavages Because of the Polarized Electronic Structure in Transition State. Inorganic Chemistry, 2017, 56, 4011-4020.	4.0	20
154	C2-selective alkylation of pyridines by rhodium–aluminum complexes. Tetrahedron, 2021, 95, 132339.	1.9	19
155	A Theoretical Study on the Oxidative Addition of a Si–HÏ <i>f</i> -Bond to [MCl(CO)(PH3)2] (M = Rh or Ir). Similarities to and Differences from [M′(PH3)2] (M′ = Pd or Pt) and [RhCl(PH3)2]. Bulletin of the Chemical Society of Japan, 1996, 69, 3047-3057.	3.2	18
156	Theoretical Study of Silyl-Bridged Dinuclear Palladium(I) and Platinum(I) Complexes, M2(μ-η2-H···SiH2)2(PH3)2(M = Pd or Pt). New Insight into the Bonding Nature. Organometallics, 2005, 24, 4029-4038.	2.3	18
157	Analysis on Solvated Molecules with a New Energy Partitioning Scheme for Intra- and Intermolecular Interactions. Journal of Physical Chemistry B, 2006, 110, 12714-12720.	2.6	18
158	Twoâ€step evaluation of binding energy and potential energy surface of van der Waals complexes. Journal of Computational Chemistry, 2012, 33, 617-628.	3.3	18
159	DFT Mechanistic Study on Alkene Hydrogenation Catalysis of Iron Metallaboratrane: Characteristic Features of Iron Species. Organometallics, 2017, 36, 3530-3538.	2.3	18
160	Theoretical Study of Dioxygen Binding Process in Iron(III) Catechol Dioxygenase: "Oxygen Activation― vs "Substrate Activation― Journal of Physical Chemistry B, 2009, 113, 4826-4836.	2.6	17
161	{2 + 2} Cycloaddition of Alkyne with Titaniumâ^'Imido Complex: Theoretical Study of Determining Factor of Reactivity and Regioselectivity. Journal of Physical Chemistry A, 2010, 114, 659-665.	2.5	17
162	Acetylene-insertion reactions into Pt(II)-H and Pt(II)-SiH 3 bonds. An ab initio MO study and analysis based on the vibronic coupling model. Theoretical Chemistry Accounts, 1999, 102, 377-384.	1.4	16

#	Article	IF	CITATIONS
163	Participation of (η3-Allyl)ruthenium(II) Complexes in Câ^'C Bond Formation and Câ^'C Bond Cleavage. A Theoretical Study. Organometallics, 2001, 20, 3145-3158.	2.3	16
164	Theoretical Study of Cp2Zr-, (MeO)2Zr-, and M(PH3)-Mediated Coupling Reactions of Acetylenes (M = Ni,) Tj ETQ0 2005, 24, 2129-2140.	q0 0 0 rgB 2.3	T /Overlock 16
165	Delocalization of the Excited State and Emission Spectrum of the Platinum(II) Bipyridine Complex in Crystal: Periodic QM/MM Study. Journal of Physical Chemistry C, 2020, 124, 10453-10461.	3.1	16
166	Bonding Nature of Open-Lantern-type Dinuclear Cr(II) Complexes. Theoretical Study with the MRMP2 Method. Journal of Physical Chemistry A, 2009, 113, 3202-3209.	2.5	15
167	Aqueous Solvation of <i>p</i> -Aminobenzonitrile in the Excited States: A Molecular Level Theory on Density Dependence. Journal of Physical Chemistry B, 2010, 114, 910-914.	2.6	15

#	Article	IF	CITATIONS
181	Dependence of Absorption and Emission Spectra on Polymorphs of Gold(I) Isocyanide Complexes: Theoretical Study with QM/MM Approach. Journal of Physical Chemistry C, 2019, 123, 4773-4794.	3.1	12
182	Theoretical prediction of Ni(I) atalyst for hydrosilylation of pyridine and quinoline. Journal of Computational Chemistry, 2019, 40, 2119-2130.	3.3	12
183	A theoretical study on CO2 insertion into an M(bond)H bond (M = Rh and Cu). International Journal of Quantum Chemistry, 1996, 57, 481-491.	2.0	11
184	A theoretical study of the liquid structure of nitromethane with RISM method. Journal of Molecular Liquids, 2009, 147, 9-12.	4.9	11
185	Binding energy of gas molecule with two pyrazine molecules as organic linker in metal–organic framework: its theoretical evaluation and understanding of determining factors. Theoretical Chemistry Accounts, 2011, 130, 475-482.	1.4	11
186	A 3D-RISM-SCF method with dual solvent boxes for a highly polarized system: application to 1,6-anhydrosugar formation reaction of phenyl α- and β-d-glucosides under basic conditions. Physical Chemistry Chemical Physics, 2013, 15, 6368.	2.8	11
187	Generalization of the New Resonance Theory: Second Quantization Operator, Localization Scheme, and Basis Set. Journal of Chemical Theory and Computation, 2009, 5, 1741-1748.	5.3	10
188	Synthesis, Electronic Properties, and Lewis Acidity of Rhodium Complexes Bearing X-Type PBP, PAIP, and PGaP Pincer Ligands. Bulletin of the Chemical Society of Japan, 2021, 94, 1859-1868.	3.2	10
189	Ptlî— Ptl bond energy in dinuclear Ptl complexes. A theoretical study. Chemical Physics Letters, 1997, 274, 543-548.	2.6	9
190	Platinum(II) Hydride Silanone Complexes and Cyclic Trimers of Silanone. A Theoretical Study of Their Geometries, Bonding Nature, and Stabilities. Organometallics, 2001, 20, 3896-3905.	2.3	9
191	Theoretical Study of 1,6-Anhydrosugar Formation from Phenyld-Glucosides under Basic Condition: Reasons for Higher Reactivity of Î ² -Anomer. Journal of Organic Chemistry, 2010, 75, 8400-8409.	3.2	9
192	Theoretical Study of Pt(PR ₃) ₂ (AlCl ₃) (R = H, Me, Ph, or Cy) Including an Unsupported Bond between Transition Metal and Non-transition Metal Elements: Geometry, Bond Strength, and Prediction. Journal of Physical Chemistry A, 2011, 115, 8520-8527.	2.5	9
193	Heterolytic Activation of Dihydrogen Molecule by Hydroxo-/Sulfido-Bridged Ruthenium–Germanium Dinuclear Complex. Theoretical Insights. Inorganic Chemistry, 2015, 54, 576-585.	4.0	9
194	Coordination Flexibility of the Rh(PXP) Complex to NH ₃ , CO, and C ₂ H ₄ (PXP = Diphosphine-Based Pincer Ligand; X = B, Al, and Ga): Theoretical Insight. Inorganic Chemistry, 2020, 59, 15862-15876.	4.0	9
195	Can Cp2Zr(C2H4) Easily React with Hydrosilane? Theoretical Study. Chemistry Letters, 2001, 30, 1222-1223.	1.3	8
196	A coordination strategy to realize a sextuply-bonded complex. Physical Chemistry Chemical Physics, 2017, 19, 14947-14954.	2.8	8
197	A Dualâ€Ligand Porous Coordination Polymer Chemiresistor with Modulated Conductivity and Porosity. Angewandte Chemie, 2020, 132, 178-182	2.0	8
198	Coordinate bonding nature and stereochemistry of platinum(0)-ethylene, -acetylene, and -carbon disulfide complexes. The Journal of Physical Chemistry, 1980, 84, 3390-3394.	2.9	7

#	Article	IF	CITATIONS
199	Theoretical Study of Dihydrogen Activation by a Trinuclear Ruthenium μ3-Imido Complex. Organometallics, 2012, 31, 5342-5348.	2.3	7
200	A theoretical study of luminescent vapochromic compounds including an AuCu2(NHC)2 core. Dalton Transactions, 2013, 42, 4809.	3.3	7
201	Reactions of Silanone(silyl)tungsten and -molybdenum Complexes with MesCNO, (Me ₂ SiO) ₃ , MeOH, and H ₂ O: Experimental and Theoretical Studies. Organometallics, 2017, 36, 1009-1018.	2.3	7
202	Reversible Oxidative Addition/Reductive Elimination of a Siâ^'H Bond with Base‣tabilized Silylenes: A Theoretical Insight. Chemistry - A European Journal, 2018, 24, 11377-11385.	3.3	7
203	Rh Complex with Unique Rh–Al Direct Bond: Theoretical Insight into its Characteristic Features and Application to Catalytic Reaction via σ-Bond Activation. Topics in Catalysis, 2022, 65, 392-417.	2.8	7
204	Theoretical Study of $\ddot{\rm l}f$ -Bond Activation Reactions and Catalytic Reactions by Transition Metal Complexes. , 2012, , 391-434.		7
205	Theoretical Study on Siâ^'Cl Bond Activation in Pdâ€Catalyzed Crossâ€Coupling of Chlorosilanes with Organoaluminum. European Journal of Organic Chemistry, 2022, 2022, .	2.4	7
206	Theoretical prediction of O–H, Si–H, and Si–C Ï∱-bond activation reactions by titanium(IV)–imido complex. Canadian Journal of Chemistry, 2009, 87, 1415-1424.	1.1	6
207	Systematic assessment on aqueous p <i>K</i> _a and p <i>K</i> _b of an amino acid base on RISM CF EDD method: Toward first principles calculations. International Journal of Quantum Chemistry, 2012, 112, 103-112.	2.0	6
208	Photo absorption of â€coumaric acid in aqueous solution: RISMâ€SCFâ€SEDD theory approach. Journal of Computational Chemistry, 2017, 38, 1567-1573.	3.3	6
209	Experimental and Theoretical Investigation of an S _N 2-type Pathway for Borate–Fluorine Bond Cleavage by Electron-Rich Late-Transition Metal Complexes. Inorganic Chemistry, 2020, 59, 4282-4291.	4.0	6
210	Complicated Electronic Process of C–C σ-Bond Activation of Cyclopropene by Ruthenium and Iridium Complexes: Theoretical Study. Organometallics, 2012, 31, 8189-8199.	2.3	5
211	Propene oxidation catalysis and electronic structure of M ₅₅ particles (M = Pd or Rh): differences and similarities between Pd ₅₅ and Rh ₅₅ . Physical Chemistry Chemical Physics, 2020, 22, 11783-11796.	2.8	5
212	Theoretical Study of NO Dissociative Adsorption onto 3d Metal Particles M ₅₅ (M = Fe, Co,) Tj ETQqO ACS Omega, 2021, 6, 4888-4898.	0 0 rgBT 3.5	/Overlock 10 5
213	Molecule in soft-crystal at ground and excited states: Theoretical approach. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2022, 51, 100482.	11.6	5
214	Theoretical Insight into Catalysis of the Aluminabenzene–Iridium Complex for C(sp ³)–H Borylation of NEt ₃ : How to Control α- and β-Regioselectivities?. ACS Catalysis, 2022, 12, 4880-4897.	11.2	5
215	Structuralâ€Deformationâ€Energyâ€Modulation Strategy in a Soft Porous Coordination Polymer with an Interpenetrated Framework. Angewandte Chemie, 2020, 132, 15647-15651.	2.0	4
216	Single atom alloys <i>vs.</i> phase separated alloys in Cu, Ag, and Au atoms with Ni(111) and Ni, Pd, and Pt atoms with Cu(111): a theoretical exploration. Physical Chemistry Chemical Physics, 2022, 24, 10420-10438.	2.8	4

#	Article	IF	CITATIONS
217	How to understand very weak Cr–Cr double bonds and negative spin populations in trinuclear Cr complexes: theoretical insight. Physical Chemistry Chemical Physics, 2019, 21, 22976-22989.	2.8	3
218	O ₂ activation by core–shell Ru ₁₃ @Pt ₄₂ particles in comparison with Pt ₅₅ particles: a DFT study. RSC Advances, 2020, 10, 36090-36100.	3.6	3
219	Pincerâ€Type Phosphorus Compounds With Borylâ€Pendant And Application In Catalytic H 2 Generation From Ammoniaâ€Borane: A Theoretical Study. ChemCatChem, 2021, 13, 3925-3929.	3.7	3
220	Hydrogenation of Carbon Dioxide. Catalysis By Metal Complexes, 2002, , 79-105.	0.6	2
221	Heptacoordinate Structures of Organotin Halides with Three Phosphine Donors: Halogenâ€6ubstituent Effect on Geometry. European Journal of Inorganic Chemistry, 2019, 2019, 3045-3052.	2.0	2
222	Theoretical Study of N–H σ-Bond Activation by Nickel(0) Complex: Reaction Mechanism, Electronic Processes, and Prediction of Better Ligand. Inorganic Chemistry, 2022, 61, 8715-8728.	4.0	2
223	HeterolyticÏf-Bond Activation by Transition Metal Complexes. , 0, , 265-283.		1
224	Theoretical investigation of μâ€Oâ€bridged dinuclear Re complexes: Electronic structure, bonding nature, and absorption spectra. International Journal of Quantum Chemistry, 2009, 109, 2319-2327.	2.0	1
225	A molecular level study of selective cation capture by a host–guest mechanism for 25,26,27,28-tetramethoxycalix[4]arene in MClO ₄ solution (MÂ=ÂNa, K). Molecular Simulation, 2015, 41, 881-891.	2.0	1
226	Heterometallic d ⁸ –d ¹⁰ Coupling of Rh(I) and M(0) (M=Pd, Pt) in a Sandwich Framework of Ï€â€Conjugated Ligands. Chemistry - A European Journal, 2021, 27, 10558-10562.	3.3	0