

Satoshi Maeda

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1831408/publications.pdf>

Version: 2024-02-01

210
papers

7,945
citations

53660

45
h-index

64668

79
g-index

231
all docs

231
docs citations

231
times ranked

5222
citing authors

#	ARTICLE	IF	CITATIONS
1	A Dataset of Computational Reaction Barriers for the Claisen Rearrangement: Chemical and Numerical Analysis. <i>Molecular Informatics</i> , 2022, 41, e2100216.	1.4	2
2	Anthraquinodimethane Ring-Flip in Sterically Congested Alkenes: Isolation of Isomer and Elucidation of Intermediate through Experimental and Theoretical Approach. <i>Bulletin of the Chemical Society of Japan</i> , 2022, 95, 38-46.	2.0	5
3	Designing two-dimensional dodecagonal boron nitride. <i>CrystEngComm</i> , 2022, 24, 471-474.	1.3	7
4	Kinetic Analysis of a Reaction Path Network Including Ambimodal Transition States: A Case Study of an Intramolecular Diels-Alder Reaction. <i>Journal of Chemical Theory and Computation</i> , 2022, 18, 1663-1671.	2.3	2
5	Selecting molecules with diverse structures and properties by maximizing submodular functions of descriptors learned with graph neural networks. <i>Scientific Reports</i> , 2022, 12, 1124.	1.6	4
6	Azo-Crosslinked Double-Network Hydrogels Enabling Highly Efficient Mechanoradical Generation. <i>Journal of the American Chemical Society</i> , 2022, 144, 3154-3161.	6.6	29
7	Leveraging algorithmic search in quantum chemical reaction path finding. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 10305-10310.	1.3	6
8	Electrochemical Dearomative Dicarboxylation of Heterocycles with Highly Negative Reduction Potentials. <i>Journal of the American Chemical Society</i> , 2022, 144, 3685-3695.	6.6	67
9	Enhancement of the mechanical and thermal transport properties of carbon nanotube yarns by boundary structure modulation. <i>Nanotechnology</i> , 2022, 33, 235707.	1.3	5
10	Virtual Ligand-Assisted Screening Strategy to Discover Enabling Ligands for Transition Metal Catalysis. <i>ACS Catalysis</i> , 2022, 12, 3752-3766.	5.5	8
11	Quantum Chemical Calculations to Trace Back Reaction Paths for the Prediction of Reactants. <i>Jacs Au</i> , 2022, 2, 1181-1188.	3.6	18
12	Designing transformer oil immersion cooling servers for machine learning and first principle calculations. <i>PLoS ONE</i> , 2022, 17, e0266880.	1.1	2
13	Chemoselective Cleavage of C(sp ³) Bonds in Unactivated Tetraalkylsilanes Using Iodine Tris(trifluoroacetate). <i>Journal of the American Chemical Society</i> , 2021, 143, 103-108.	6.6	24
14	Combined Graph/Relational Database Management System for Calculated Chemical Reaction Pathway Data. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 554-559.	2.5	6
15	Targeted 1,3-dipolar cycloaddition with acrolein for cancer prodrug activation. <i>Chemical Science</i> , 2021, 12, 5438-5449.	3.7	13
16	Mining hydroformylation in complex reaction network via graph theory. <i>RSC Advances</i> , 2021, 11, 23235-23240.	1.7	1
17	Silane- and peroxide-free hydrogen atom transfer hydrogenation using ascorbic acid and cobalt-photoredox dual catalysis. <i>Nature Communications</i> , 2021, 12, 966.	5.8	58
18	Synthesis of a plasmenylethanolamine. <i>Bioscience, Biotechnology and Biochemistry</i> , 2021, 85, 1383-1389.	0.6	3

#	ARTICLE	IF	CITATIONS
19	Nonadiabatic dynamic of atmospheric unimolecular photochemical reactions of 4,4-difluoroacrolein using TD-DFT and TSH approaches. <i>International Journal of Quantum Chemistry</i> , 2021, 121, e26663.	1.0	2
20	Observation of Borane-Olefin Proximity Interaction Governing the Structure and Reactivity of Boron-Containing Macrocycles. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14630-14635.	7.2	14
21	Observation of Borane-Olefin Proximity Interaction Governing the Structure and Reactivity of Boron-Containing Macrocycles. <i>Angewandte Chemie</i> , 2021, 133, 14751-14756.	1.6	5
22	Synthesis of Difluoroglycine Derivatives from Amines, Difluorocarbene, and CO ₂ : Computational Design, Scope, and Applications. <i>Chemistry - A European Journal</i> , 2021, 27, 10040-10047.	1.7	15
23	Exploring paths of chemical transformations in molecular and periodic systems: An approach utilizing force. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2021, 11, e1538.	6.2	59
24	Synthesis of Difluoroglycine Derivatives from Amines, Difluorocarbene, and CO ₂ : Computational Design, Scope, and Applications. <i>Chemistry - A European Journal</i> , 2021, 27, 9965-9966.	1.7	0
25	Introduction of a Luminophore into Generic Polymers via Mechanoradical Coupling with a Prefluorescent Reagent. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16003-16008.	7.2	35
26	Pincer-Type Phosphorus Compounds With Boryl Pendant And Application In Catalytic H ₂ Generation From Ammonia-Borane: A Theoretical Study. <i>ChemCatChem</i> , 2021, 13, 3925-3929.	1.8	3
27	Mechanism of 2,6-Dichloro-4,4'-bipyridine-Catalyzed Diboration of Pyrazines Involving a Bipyridine-Stabilized Boryl Radical. <i>Bulletin of the Chemical Society of Japan</i> , 2021, 94, 1894-1902.	2.0	3
28	A reaction route network for methanol decomposition on a Pt(111) surface. <i>Journal of Computational Chemistry</i> , 2021, 42, 2163-2169.	1.5	8
29	Substitution effect on the nonradiative decay and <i>trans</i> → <i>cis</i> photoisomerization route: a guideline to develop efficient cinnamate-based sunscreens. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 834-845.	1.3	13
30	Carboxylation of a Palladacycle Formed via C(sp ³) [•] H Activation: Theory-Driven Reaction Design. <i>Chemistry - an Asian Journal</i> , 2021, 16, 4072-4080.	1.7	1
31	Radical Difunctionalization of Gaseous Ethylene Guided by Quantum Chemical Calculations: Selective Incorporation of Two Molecules of Ethylene. <i>ACS Omega</i> , 2021, 6, 33846-33854.	1.6	7
32	Mechanochemical synthesis of magnesium-based carbon nucleophiles in air and their use in organic synthesis. <i>Nature Communications</i> , 2021, 12, 6691.	5.8	91
33	Understanding the Acetalization Reaction Based on its Reaction Path Network. <i>ChemSystemsChem</i> , 2020, 2, e1900022.	1.1	2
34	Fluorescence Enhancement of Aromatic Macrocycles by Lowering Excited Singlet State Energies. <i>Journal of Organic Chemistry</i> , 2020, 85, 150-157.	1.7	13
35	Computational searches for crystal structures of dioxides of group 14 elements (CO ₂ , SiO ₂ , GeO ₂ , SnO ₂ , PbO ₂). <i>Journal of Computational Chemistry</i> , 2021, 42, 2163-2169.	1.7	4
36	A theoretical study on the alkali metal carboxylate-promoted <i>ε</i> -lactide polymerization. <i>Journal of Computational Chemistry</i> , 2020, 41, 2197-2202.	1.5	9

#	ARTICLE	IF	CITATIONS
37	Kinetic prediction of reverse intersystem crossing in organic donor-acceptor molecules. <i>Nature Communications</i> , 2020, 11, 3909.	5.8	75
38	Chiral lanthanide lumino-glass for a circularly polarized light security device. <i>Communications Chemistry</i> , 2020, 3, .	2.0	45
39	Global Search for Crystal Structures of Carbon under High Pressure. <i>ACS Omega</i> , 2020, 5, 18142-18147.	1.6	7
40	Rate Constant Matrix Contraction Method for Systematic Analysis of Reaction Path Networks. <i>Chemistry Letters</i> , 2020, 49, 553-564.	0.7	27
41	Ineffective OH Pinning of the Flipping Dynamics of a Spherical Guest within a Tight-Fitting Tube. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14570-14576.	7.2	6
42	AFIR explorations of transition states of extended unsaturated systems: automatic location of ambimodal transition states. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 13942-13950.	1.3	7
43	Palladium-Catalyzed C-H Iodination of Arenes by Means of Sulfinyl Directing Groups. <i>Chemistry - an Asian Journal</i> , 2020, 15, 2442-2446.	1.7	12
44	Migrations and Catalytic Action of Water Molecules in the Ionized Formamide-(H ₂ O) ₂ Cluster. <i>Journal of Physical Chemistry A</i> , 2020, 124, 2802-2807.	1.1	0
45	Ineffective OH Pinning of the Flipping Dynamics of a Spherical Guest within a Tight-Fitting Tube. <i>Angewandte Chemie</i> , 2020, 132, 14678-14684.	1.6	4
46	Artificial Force-Induced Reaction Method for Systematic Elucidation of Mechanism and Selectivity in Organometallic Reactions. <i>Topics in Organometallic Chemistry</i> , 2020, , 57-80.	0.7	7
47	Phonon transport probed at carbon nanotube yarn/sheet boundaries by ultrafast structural dynamics. <i>Carbon</i> , 2020, 170, 165-173.	5.4	5
48	Discovery of a synthesis method for a difluoroglycine derivative based on a path generated by quantum chemical calculations. <i>Chemical Science</i> , 2020, 11, 7569-7577.	3.7	33
49	One-Minute Joule Annealing Enhances the Thermoelectric Properties of Carbon Nanotube Yarns via the Formation of Graphene at the Interface. <i>ACS Applied Energy Materials</i> , 2019, 2, 7700-7708.	2.5	24
50	A Theoretical Study on the Mechanism of the Oxidative Deborylation/C-C Coupling Reaction of Borepin Derivatives. <i>Journal of Organic Chemistry</i> , 2019, 84, 1941-1950.	1.7	8
51	Femtosecond electronic relaxation and real-time vibrational dynamics in 2-hydroxychalcone. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 5344-5358.	1.3	8
52	The direct observation of the doorway ¹ state of methylcinnamate and hydrogen-bonding effects on the photochemistry of cinnamate-based sunscreens. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 19755-19763.	1.3	18
53	Zn(OTf) ₂ -mediated annulations of <i>N</i> -propargylated tetrahydrocarbolines: divergent synthesis of four distinct alkaloidal scaffolds. <i>Chemical Science</i> , 2019, 10, 5686-5698.	3.7	11
54	On Benchmarking of Automated Methods for Performing Exhaustive Reaction Path Search. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 2111-2115.	2.3	38

#	ARTICLE	IF	CITATIONS
55	Structural and Electronic Properties, Isomerization, and NO Dissociation Reactions on Au, Ag, Cu Clusters. <i>Journal of Computer Chemistry Japan</i> , 2019, 18, 64-69.	0.0	2
56	Iridium-Catalyzed Asymmetric Borylation of Unactivated Methylene C(sp ³)-H Bonds. <i>Journal of the American Chemical Society</i> , 2019, 141, 6817-6821.	6.6	79
57	A Reaction Path Network for Wöhler's Urea Synthesis. <i>Chemistry Letters</i> , 2019, 48, 47-50.	0.7	24
58	Excited-State Reactivity of [Mn(im)(CO) ₃ (phen)] ⁺ : A Structural Exploration. <i>Journal of Computational Chemistry</i> , 2019, 40, 72-81.	1.5	7
59	Combined Automated Reaction Pathway Searches and Sparse Modeling Analysis for Catalytic Properties of Lowest Energy Twins of Cu ₁₃ . <i>Journal of Physical Chemistry A</i> , 2019, 123, 210-217.	1.1	18
60	A Systematic Study on Bond Activation Energies of NO, N ₂ , and O ₂ on Hexamers of Eight Transition Metals. <i>ChemCatChem</i> , 2019, 11, 1346-1353.	1.8	2
61	Exploring approximate geometries of minimum energy conical intersections by TDDFT calculations. <i>Chemical Physics Letters: X</i> , 2019, 737, 100007.	2.1	11
62	Roles of Closed- and Open-Loop Conformations in Large-Scale Structural Transitions of α -Lactate Dehydrogenase. <i>ACS Omega</i> , 2019, 4, 1178-1184.	1.6	9
63	CO ₂ Adsorption on Ti ₃ O ₆ ⁺ : A Novel Carbonate Binding Motif. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8439-8446.	1.5	19
64	Understanding CO oxidation on the Pt(111) surface based on a reaction route network. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 14366-14375.	1.3	27
65	Global Reaction Route Mapping for Surface Adsorbed Molecules: A Case Study for H ₂ O on Cu(111) Surface. <i>Chemistry Letters</i> , 2018, 47, 396-399.	0.7	18
66	Designing the Backbone of Hexasilabenzene Derivatives with a High Unimolecular Kinetic Stability. <i>Chemistry - A European Journal</i> , 2018, 24, 12264-12268.	1.7	5
67	Different photoisomerization routes found in the structural isomers of hydroxy methylcinnamate. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 17583-17598.	1.3	20
68	Low-Energy Electrocatalytic CO ₂ Reduction in Water over Mn-Complex Catalyst Electrode Aided by a Nanocarbon Support and K ⁺ Cations. <i>ACS Catalysis</i> , 2018, 8, 4452-4458.	5.5	79
69	Exploring radiative and nonradiative decay paths in indole, isoindole, quinoline, and isoquinoline. <i>Photochemical and Photobiological Sciences</i> , 2018, 17, 315-322.	1.6	17
70	Implementation and performance of the artificial force induced reaction method in the GRRM17 program. <i>Journal of Computational Chemistry</i> , 2018, 39, 233-251.	1.5	161
71	Theoretical study of initial reactions of amine (CH ₃) ₃ NH ⁺ (n = 1, 2, 3) with ozone. <i>Chemical Physics Letters</i> , 2018, 692, 111-116.	1.2	7
72	Analyses of trajectory on-the-fly based on the global reaction route map. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 1364-1372.	1.3	26

#	ARTICLE	IF	CITATIONS
73	Ultrafast Nonadiabatic Cascade and Subsequent Photofragmentation of Extreme Ultraviolet Excited Caffeine Molecule. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 6927-6933.	2.1	10
74	Exploring potential crossing seams in periodic systems: Intersystem crossing pathways in the benzene crystal. <i>Journal of Chemical Physics</i> , 2018, 149, 072329.	1.2	4
75	Resolving the excited state relaxation dynamics of guanosine monomers and hydrogen-bonded homodimers in chloroform solution. <i>Chemical Physics</i> , 2018, 515, 480-492.	0.9	2
76	On-the-fly molecular dynamics study of the excited-state branching reaction of $\hat{1}\pm$ -methyl-cis-stilbene. <i>Chemical Physics</i> , 2018, 515, 564-571.	0.9	9
77	Isomerization in Gold Clusters upon O_{2} Adsorption. <i>Journal of Physical Chemistry C</i> , 2017, 121, 2661-2668.	1.5	27
78	An autocatalytic cycle in autoxidation of triethylborane. <i>Chemical Communications</i> , 2017, 53, 7302-7305.	2.2	16
79	Exploring the full catalytic cycle of rhodium(<i>i</i>)â€“BINAP-catalysed isomerisation of allylic amines: a graph theory approach for path optimisation. <i>Chemical Science</i> , 2017, 8, 4475-4488.	3.7	26
80	Transition-Metal-Free Boryl Substitution Using Silylboranes and Alkoxy Bases. <i>Synlett</i> , 2017, 28, 1258-1267.	1.0	3
81	Multistructural microiteration technique for geometry optimization and reaction path calculation in large systems. <i>Journal of Computational Chemistry</i> , 2017, 38, 2213-2221.	1.5	6
82	Combined gradient projection/single component artificial force induced reaction (GP/SC-AFIR) method for an efficient search of minimum energy conical intersection (MECI) geometries. <i>Chemical Physics Letters</i> , 2017, 674, 141-145.	1.2	18
83	Excess charge driven dissociative hydrogen adsorption on $Ti_{2}O_{4}^{+}$. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 23154-23161.	1.3	16
84	Global search for low-lying crystal structures using the artificial force induced reaction method: A case study on carbon. <i>Physical Review B</i> , 2017, 95, .	1.1	24
85	Full rate constant matrix contraction method for obtaining branching ratio of unimolecular decomposition. <i>Journal of Computational Chemistry</i> , 2017, 38, 101-109.	1.5	16
86	Lecture Tour upon Receiving the 12th Lectureship Award MBLA. Yuki Gosei Kagaku Kyokaiishi/ <i>Journal of Synthetic Organic Chemistry</i> , 2017, 75, 367-374.	0.0	0
87	Orbital Energy-Based Reaction Analysis of S_N2 Reactions. <i>Computation</i> , 2016, 4, 23.	1.0	5
88	Artificial Force Induced Reaction (AFIR) Method for Exploring Quantum Chemical Potential Energy Surfaces. <i>Chemical Record</i> , 2016, 16, 2232-2248.	2.9	125
89	Nontotally symmetric trifurcation of an S_N2 reaction pathway. <i>Journal of Computational Chemistry</i> , 2016, 37, 487-493.	1.5	10
90	Fragmentation network of doubly charged methionine: Interpretation using graph theory. <i>Journal of Chemical Physics</i> , 2016, 145, 094302.	1.2	3

#	ARTICLE	IF	CITATIONS
91	Computational Catalysis Using the Artificial Force Induced Reaction Method. <i>Accounts of Chemical Research</i> , 2016, 49, 763-773.	7.6	112
92	Theoretical Study of Hydrogenation Catalysis of Phosphorus Compound and Prediction of Catalyst with High Activity and Wide Application Scope. <i>ACS Catalysis</i> , 2016, 6, 4859-4870.	5.5	26
93	Exploring the Mechanism of Ultrafast Intersystem Crossing in Rhenium(I) Carbonyl Bipyridine Halide Complexes: Key Vibrational Modes and Spin-Vibronic Quantum Dynamics. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 2335-2345.	2.3	52
94	Catalytic Hydrogenation of Carbon Dioxide with Ammonia-Borane by Pincer-Type Phosphorus Compounds: Theoretical Prediction. <i>Journal of the American Chemical Society</i> , 2016, 138, 13481-13484.	6.6	41
95	Artificial Force Induced Reaction Method for Systematic Determination of Complex Reaction Mechanisms. <i>Chemical Record</i> , 2016, 16, 2349-2363.	2.9	17
96	Theoretical insight into the wavelength-dependent photodissociation mechanism of nitric acid. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 24582-24590.	1.3	4
97	Deciphering Time Scale Hierarchy in Reaction Networks. <i>Journal of Physical Chemistry B</i> , 2016, 120, 1961-1971.	1.2	15
98	Nonadiabatic Pathways of Furan and Dibenzofuran: What Makes Dibenzofuran Fluorescent?. <i>Chemistry Letters</i> , 2016, 45, 940-942.	0.7	13
99	Multistep Intersystem Crossing Pathways in Cinnamate-Based UV-B Sunscreens. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 4001-4007.	2.1	33
100	Propargyl-Assisted Selective Amidation Applied in C-terminal Glycine Peptide Conjugation. <i>Chemistry - A European Journal</i> , 2016, 22, 18865-18872.	1.7	17
101	Ab Initio Molecular Dynamics Study of the Photoreaction of 1,1-Dimethylstilbene upon S_{1} Excitation. <i>Journal of Physical Chemistry A</i> , 2016, 120, 8804-8812.	1.1	27
102	Theoretical study on mechanism of the photochemical ligand substitution of fac-[$Re^{I}(bpy)(CO)_3(PR)_3$] complex. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 17557-17564.	1.3	16
103	The effect of Mg^{2+} incorporation on the structure of calcium carbonate clusters: investigation by the anharmonic downward distortion following method. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 2690-2698.	1.3	20
104	Contrasting ring-opening propensities in UV-excited $\hat{\pi}$ -pyrone and coumarin. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 2629-2638.	1.3	32
105	Isomers of Benzene on Its Global Network of Reaction Pathways. <i>Bulletin of the Chemical Society of Japan</i> , 2015, 88, 1284-1290.	2.0	9
106	Response to "Comment on "Analyses of bifurcation of reaction pathways on a global reaction route map: A case study of gold cluster Au_5 " [J. Chem. Phys. 143, 177101 (2015)]. <i>Journal of Chemical Physics</i> , 2015, 143, 177102.	1.2	2
107	Analyses of bifurcation of reaction pathways on a global reaction route map: A case study of gold cluster Au_5 . <i>Journal of Chemical Physics</i> , 2015, 143, 014301.	1.2	17
108	Mechanisms for the Breakdown of Halomethanes through Reactions with Ground-State Cyano Radicals. <i>ChemPhysChem</i> , 2015, 16, 181-190.	1.0	6

#	ARTICLE	IF	CITATIONS
109	Exploration of Quenching Pathways of Multiluminescent Acenes Using the GRRM Method with the SF-TDDFT Method. <i>Journal of Physical Chemistry A</i> , 2015, 119, 11479-11487.	1.1	23
110	Reactivity of Gold Clusters in the Regime of Structural Fluxionality. <i>Journal of Physical Chemistry C</i> , 2015, 119, 11120-11130.	1.5	40
111	Exploration of minimum energy conical intersection structures of small polycyclic aromatic hydrocarbons: toward an understanding of the size dependence of fluorescence quantum yields. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 22561-22565.	1.3	56
112	Positive Effect of Water in Asymmetric Direct Aldol Reactions with Primary Amine Organocatalyst: Experimental and Computational Studies. <i>Chemistry - an Asian Journal</i> , 2015, 10, 2112-2116.	1.7	24
113	Reaction Mechanism of the Anomalous Formal Nucleophilic Borylation of Organic Halides with Silylborane: Combined Theoretical and Experimental Studies. <i>Journal of the American Chemical Society</i> , 2015, 137, 4090-4099.	6.6	71
114	From Roaming Atoms to Hopping Surfaces: Mapping Out Global Reaction Routes in Photochemistry. <i>Journal of the American Chemical Society</i> , 2015, 137, 3433-3445.	6.6	91
115	Global investigation of potential energy surfaces for the pyrolysis of C_{1-3} hydrocarbons: toward the development of detailed kinetic models from first principles. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 27789-27805.	1.3	19
116	Kinetic Analysis for the Multistep Profiles of Organic Reactions: Significance of the Conformational Entropy on the Rate Constants of the Claisen Rearrangement. <i>Journal of Physical Chemistry A</i> , 2015, 119, 11641-11649.	1.1	36
117	Intrinsic reaction coordinate: Calculation, bifurcation, and automated search. <i>International Journal of Quantum Chemistry</i> , 2015, 115, 258-269.	1.0	300
118	Systematic Exploration of Minimum Energy Conical Intersection Structures near the Franck-Condon Region. <i>Journal of Physical Chemistry A</i> , 2014, 118, 12050-12058.	1.1	65
119	Multiple Reaction Pathways Operating in the Mechanism of Vinylogous Mannich-Type Reaction Activated by a Water Molecule. <i>Chemistry - an Asian Journal</i> , 2014, 9, 305-312.	1.7	12
120	Ab initio reaction pathways for photodissociation and isomerization of nitromethane on four singlet potential energy surfaces with three roaming paths. <i>Journal of Chemical Physics</i> , 2014, 140, 244310.	1.2	26
121	Catalytic Transfer Hydrogenation by a Trivalent Phosphorus Compound: Phosphorus-Ligand Cooperation Pathway or P^{III}/P^V Redox Pathway?. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 4633-4637.	7.2	57
122	Exploring transition state structures for intramolecular pathways by the artificial force induced reaction method. <i>Journal of Computational Chemistry</i> , 2014, 35, 166-173.	1.5	151
123	Complete active space second order perturbation theory (CASPT2) study of $N(2D) + H_2O$ reaction paths on D1 and D0 potential energy surfaces: Direct and roaming pathways. <i>Journal of Chemical Physics</i> , 2014, 141, 154303.	1.2	4
124	Predicting pathways for terpene formation from first principles - routes to known and new sesquiterpenes. <i>Chemical Science</i> , 2014, 5, 1555.	3.7	26
125	Theoretical Mechanistic Studies on Methyltrioxorhenium-Catalyzed Olefin Cyclopropanation: Stepwise Transfer of a Terminal Methylene Group. <i>Organometallics</i> , 2014, 33, 3840-3846.	1.1	7
126	Application of Automated Reaction Path Search Methods to a Systematic Search of Single-Bond Activation Pathways Catalyzed by Small Metal Clusters: A Case Study on $H-H$ Activation by Gold. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 1623-1630.	2.3	28

#	ARTICLE	IF	CITATIONS
127	Anharmonic Downward Distortion Following for Automated Exploration of Quantum Chemical Potential Energy Surfaces. Bulletin of the Chemical Society of Japan, 2014, 87, 1315-1334.	2.0	41
128	Exploration of Isomers of Benzene by GRRM/SCC-DFTB. Chemistry Letters, 2014, 43, 702-704.	0.7	11
129	Direct Pathway for Water-Gas Shift Reaction in Gas Phase. Chemistry Letters, 2014, 43, 193-195.	0.7	6
130	Automated Search for Chemical Reaction Pathways by the Artificial Force Induced Reaction Method: Toward Practical Applications in Synthetic Organic Chemistry. Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry, 2014, 72, 567-579.	0.0	2
131	CASPT2 Study of Photodissociation Pathways of Ketene. Journal of Physical Chemistry A, 2013, 117, 7001-7008.	1.1	27
132	Systematic exploration of the mechanism of chemical reactions: the global reaction route mapping (GRRM) strategy using the ADDF and AFIR methods. Physical Chemistry Chemical Physics, 2013, 15, 3683.	1.3	456
133	Sampling of Transition States for Predicting Diastereoselectivity Using Automated Search Method-Aqueous Lanthanide-Catalyzed Mukaiyama Aldol Reaction. Journal of Chemical Theory and Computation, 2013, 9, 2882-2886.	2.3	45
134	Theoretical Study on the Photodissociation of Methylamine Involving S ₁ , T ₁ , and S ₀ States. Journal of Physical Chemistry A, 2013, 117, 5757-5764.	1.1	31
135	Development of Azo-Based Fluorescent Probes to Detect Different Levels of Hypoxia. Angewandte Chemie - International Edition, 2013, 52, 13028-13032.	7.2	241
136	Automated Search for Minimum Energy Conical Intersection Geometries between the Lowest Two Singlet States S ₀ /S ₁ -MECIs by the Spin-Flip TDDFT Method. Journal of Chemical Theory and Computation, 2013, 9, 4116-4123.	2.3	56
137	Quasiclassical Trajectory Studies of the Photodissociation Dynamics of NO ₃ from the D ₀ and D ₁ Potential Energy Surfaces. Journal of Chemical Theory and Computation, 2013, 9, 893-900.	2.3	23
138	Deuterium Uptake in Magnetic-Fusion Devices with Lithium-Conditioned Carbon Walls. Physical Review Letters, 2013, 110, 105001.	2.9	45
139	Exploring Multiple Potential Energy Surfaces: Photochemistry of Small Carbonyl Compounds. Advances in Physical Chemistry, 2012, 2012, 1-13.	2.0	29
140	Experimental and theoretical investigations of isomerization reactions of ionized acetone and its dimer. Physical Chemistry Chemical Physics, 2012, 14, 712-719.	1.3	17
141	Automated Exploration of Photolytic Channels of HCOOH: Conformational Memory via Excited-State Roaming. Journal of Physical Chemistry Letters, 2012, 3, 1900-1907.	2.1	32
142	Toward Predicting Full Catalytic Cycle Using Automatic Reaction Path Search Method: A Case Study on HCo(CO) ₃ -Catalyzed Hydroformylation. Journal of Chemical Theory and Computation, 2012, 8, 380-385.	2.3	61
143	Dynamics of deuterium retention and sputtering of Li-C-O surfaces. Fusion Engineering and Design, 2012, 87, 1732-1736.	1.0	20
144	Global ab Initio Potential Energy Surfaces for Low-Lying Doublet States of NO ₃ . Journal of Chemical Theory and Computation, 2012, 8, 2600-2605.	2.3	18

#	ARTICLE	IF	CITATIONS
145	Exploring Potential Energy Surfaces of Large Systems with Artificial Force Induced Reaction Method in Combination with ONIOM and Microiteration. <i>Journal of Chemical Theory and Computation</i> , 2012, 8, 5058-5063.	2.3	37
146	No Straight Path: Roaming in Both Ground- and Excited-State Photolytic Channels of NO ₃ . <i>Science</i> , 2012, 335, 1075-1078.	6.0	112
147	Finding Minimum Structures on the Seam of Crossing in Reactions of Type A + B → X: Exploration of Nonadiabatic Ignition Pathways of Unsaturated Hydrocarbons. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 852-857.	2.1	25
148	Excited-State Roaming Dynamics in Photolysis of a Nitrate Radical. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 934-938.	2.1	45
149	Finding Reaction Pathways of Type A + B → X: Toward Systematic Prediction of Reaction Mechanisms. <i>Journal of Chemical Theory and Computation</i> , 2011, 7, 2335-2345.	2.3	190
150	Automated Exploration of Chemical Reaction Pathways. <i>Molecular Science</i> , 2011, 5, A0042-A0042.	0.2	2
151	Temperature dependences of rate coefficients for electron catalyzed mutual neutralization. <i>Journal of Chemical Physics</i> , 2011, 135, 024204.	1.2	9
152	Finding Reaction Pathways for Multicomponent Reactions: The Passerini Reaction is a Four-Component Reaction. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 644-649.	7.2	124
153	Ab initio anharmonic calculations of vibrational frequencies of benzene by means of efficient construction of potential energy functions. <i>Chemical Physics Letters</i> , 2011, 503, 322-326.	1.2	12
154	Photochemistry of Methyl Ethyl Ketone: Quantum Yields and S ₁ /S ₀ → Diradical Mechanism of Photodissociation. <i>ChemPhysChem</i> , 2010, 11, 3883-3895.	1.0	23
155	Inside Cover: Photochemistry of Methyl Ethyl Ketone: Quantum Yields and S ₁ /S ₀ → Diradical Mechanism of Photodissociation (<i>ChemPhysChem</i> 18/2010). <i>ChemPhysChem</i> , 2010, 11, 3774-3774.	1.0	1
156	A systematic study on the RuHCl-BINAP-catalyzed asymmetric hydrogenation mechanism by the global reaction route mapping method†. <i>Journal of Molecular Catalysis A</i> , 2010, 324, 133-140.	4.8	14
157	Theoretical Investigation of the Reaction Pathway of O Atom on Si(001)-(2 × 1). <i>Journal of Physical Chemistry C</i> , 2010, 114, 15671-15677.	1.5	11
158	Theoretical Proton Affinity and Fluoride Affinity of Nerve Agent VX. <i>Journal of Physical Chemistry A</i> , 2010, 114, 13189-13197.	1.1	6
159	Long-Range Migration of a Water Molecule To Catalyze a Tautomerization in Photoionization of the Hydrated Formamide Cluster. <i>Journal of Physical Chemistry A</i> , 2010, 114, 11896-11899.	1.1	21
160	Communications: A systematic method for locating transition structures of A+B → X type reactions. <i>Journal of Chemical Physics</i> , 2010, 132, 241102.	1.2	157
161	A Theoretical Study on the Photodissociation of Acetone: Insight into the Slow Intersystem Crossing and Exploration of Nonadiabatic Pathways to the Ground State. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 1841-1845.	2.1	58
162	Synthesis and structure of stable base-free dialkylsilanamines. <i>New Journal of Chemistry</i> , 2010, 34, 1637.	1.4	55

#	ARTICLE	IF	CITATIONS
163	Ion Chemistry of VX Surrogates and Ion Energetics Properties of VX: New Suggestions for VX Chemical Ionization Mass Spectrometry Detection. <i>Analytical Chemistry</i> , 2010, 82, 3764-3771.	3.2	13
164	Updated Branching Plane for Finding Conical Intersections without Coupling Derivative Vectors. <i>Journal of Chemical Theory and Computation</i> , 2010, 6, 1538-1545.	2.3	137
165	Systematic Search for Isomerization Pathways of Hexasilabenzene for Finding Its Kinetic Stability. <i>Organometallics</i> , 2009, 28, 2218-2224.	1.1	56
166	Photochemical reactions of the low-lying excited states of formaldehyde: T1/S intersystem crossings, characteristics of the S1 and T1 potential energy surfaces, and a global T1 potential energy surface. <i>Journal of Chemical Physics</i> , 2009, 130, 114304.	1.2	37
167	Automated exploration of stable isomers of H_nO ($n = 5-7$) via <i>ab initio</i> calculations: An application of the anharmonic downward distortion following algorithm. <i>Journal of Computational Chemistry</i> , 2009, 30, 952-961.	1.5	44
168	Water-catalyzed gas-phase reaction of formic acid with hydroxyl radical: A computational investigation. <i>Chemical Physics Letters</i> , 2009, 469, 57-61.	1.2	64
169	An Automated and Systematic Transition Structure Explorer in Large Flexible Molecular Systems Based on Combined Global Reaction Route Mapping and Microiteration Methods. <i>Journal of Chemical Theory and Computation</i> , 2009, 5, 2734-2743.	2.3	60
170	Automated Global Mapping of Minimal Energy Points on Seams of Crossing by the Anharmonic Downward Distortion Following Method: A Case Study of H_2CO . <i>Journal of Physical Chemistry A</i> , 2009, 113, 1704-1710.	1.1	92
171	Decomposition of alkyl hydroperoxide by a copper(I) complex: insights from density functional theory. <i>Tetrahedron Letters</i> , 2008, 49, 6841-6845.	0.7	8
172	A new global reaction route map on the potential energy surface of H_2CO with unrestricted level. <i>Chemical Physics Letters</i> , 2008, 460, 55-58.	1.2	32
173	Microsolvation of Hydrogen Sulfide: Exploration of $\text{H}_2\text{S}\cdot\text{H}_2\text{O}$ and $\text{SH}\cdot\text{H}_2\text{O}$ Cluster Structures on <i>Ab Initio</i> Potential Energy Surfaces by the Scaled Hypersphere Search Method. <i>Journal of Physical Chemistry A</i> , 2008, 112, 2962-2968.	1.1	31
174	Lowest Transition State for the Chirality-Determining Step in Ru((R)-BINAP)-Catalyzed Asymmetric Hydrogenation of Methyl-3-Oxobutanoate. <i>Journal of the American Chemical Society</i> , 2008, 130, 17228-17229.	6.6	48
175	DFT Study on Isomerization and Decomposition of Cuprous Dialkylthiophosphate and Its Reaction with Alkylperoxy Radical. <i>Journal of Physical Chemistry A</i> , 2008, 112, 5720-5726.	1.1	12
176	Finding important anharmonic terms in the sixth-order potential energy function by the scaled hypersphere search method: An application to vibrational analyses of molecules and clusters. <i>Journal of Chemical Physics</i> , 2008, 128, 144111.	1.2	31
177	Intramolecular vibrational frequencies of water clusters $(\text{H}_2\text{O})_n$ ($n=2-5$): Anharmonic analyses using potential functions based on the scaled hypersphere search method. <i>Journal of Chemical Physics</i> , 2008, 129, 074315.	1.2	35
178	Automated exploration of reaction channels. <i>Physica Scripta</i> , 2008, 78, 058122.	1.2	64
179	Automated Exploration of Adsorption Structures of an Organic Molecule on $\text{RuH}_2\text{-BINAP}$ by the ONIOM Method and the Scaled Hypersphere Search Method. <i>Journal of Physical Chemistry A</i> , 2007, 111, 13168-13171.	1.1	25
180	Quantum Chemistry Study of H_nO ($n=8$): A Global Search for Its Isomers by the Scaled Hypersphere Search Method, and Its Thermal Behavior. <i>Journal of Physical Chemistry A</i> , 2007, 111, 10732-10737.	1.1	65

#	ARTICLE	IF	CITATIONS
181	Structures of Water Octamers (H ₂ O) ₈ : Exploration on Ab Initio Potential Energy Surfaces by the Scaled Hypersphere Search Method. <i>Journal of Physical Chemistry A</i> , 2007, 111, 4527-4534.	1.1	118
182	Insight into Global Reaction Mechanism of [C ₂ , H ₄ , O] System from ab Initio Calculations by the Scaled Hypersphere Search Method. <i>Journal of Physical Chemistry A</i> , 2007, 111, 5099-5110.	1.1	48
183	Global reaction route mapping on potential energy surfaces of C_2O and C_2O_2 . <i>Chemical Physics Letters</i> , 2007, 447, 21-26.	1.2	32
184	Global Reaction Route Mapping on Potential Energy Surfaces of Formaldehyde, Formic Acid, and Their Metal-Substituted Analogues. <i>Journal of Physical Chemistry A</i> , 2006, 110, 8933-8941.	1.1	270
185	Anisotropic Interaction and Stereoreactivity in a Chemi-Ionization Process of OCS by Collision with He*(2S) Metastable Atoms. <i>Journal of Physical Chemistry A</i> , 2006, 110, 11010-11017.	1.1	4
186	Global Mapping of Small Carbon Clusters Using the Scaled Hypersphere Search Method. <i>AIP Conference Proceedings</i> , 2006, , .	0.3	3
187	D ⁺ L Conversion Pathways between Optical Isomers of Alanine: Applications of the Scaled Hypersphere Search Method to Explore Unknown Reaction Routes in a Chiral System. <i>Chemistry Letters</i> , 2006, 35, 492-493.	0.7	18
188	Generation Mechanisms of Amino Acids in Interstellar Space via Reactions between Closed-Shell Species: Significance of Higher Energy Isomers in Molecular Evolution. <i>Astrophysical Journal</i> , 2006, 640, 823-828.	1.6	35
189	Global analysis of reaction pathways on the potential energy surface of cyanoacetylene by the scaled hypersphere search method. <i>Chemical Physics Letters</i> , 2006, 418, 208-216.	1.2	32
190	Probing anisotropic interaction potentials of unsaturated hydrocarbons with He*(2S) metastable atom: Attractive-site preference of σ -direction in C ₂ H ₂ and π -direction in C ₂ H ₄ . <i>Journal of Chemical Physics</i> , 2006, 124, 104308.	1.2	6
191	Conversion pathways between a fullerene and a ring among C ₂₀ clusters by a sphere contracting walk method: Remarkable difference in local potential energy landscapes around the fullerene and the ring. <i>Journal of Chemical Physics</i> , 2006, 124, 174306.	1.2	35
192	Two-dimensional Penning ionization electron spectroscopic study on outer characteristics of molecules. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2005, 142, 283-293.	0.8	6
193	A new approach for finding a transition state connecting a reactant and a product without initial guess: applications of the scaled hypersphere search method to isomerization reactions of HCN, (H ₂ O) ₂ , and alanine dipeptide. <i>Chemical Physics Letters</i> , 2005, 404, 95-99.	1.2	66
194	A scaled hypersphere interpolation technique for efficient construction of multidimensional potential energy surfaces. <i>Chemical Physics Letters</i> , 2005, 414, 265-270.	1.2	25
195	Development of a cooled He*(2S) beam source for measurements of state-resolved collision energy dependence of Penning ionization cross sections: Evidence for a stereospecific attractive well around methyl group in CH ₃ CN. <i>Journal of Chemical Physics</i> , 2005, 123, 194308.	1.2	9
196	Penning ionization electron spectroscopy of C ₆ H ₆ by collision with He*(2 ¹ S) metastable atoms and classical trajectory calculations: Optimization of ab initio model potentials. <i>Journal of Chemical Physics</i> , 2005, 122, 044303.	1.2	15
197	Global Investigation on the Potential Energy Surface of CH ₃ CN: Application of the Scaled Hypersphere Search Method. <i>Journal of Physical Chemistry A</i> , 2005, 109, 7319-7328.	1.1	57
198	Global Mapping of Equilibrium and Transition Structures on Potential Energy Surfaces by the Scaled Hypersphere Search Method: Applications to ab Initio Surfaces of Formaldehyde and Propyne Molecules. <i>Journal of Physical Chemistry A</i> , 2005, 109, 5742-5753.	1.1	310

#	ARTICLE	IF	CITATIONS
199	A scaled hypersphere search method for the topography of reaction pathways on the potential energy surface. <i>Chemical Physics Letters</i> , 2004, 384, 277-282.	1.2	360
200	Determination of outer shape of molecular orbitals based on two-dimensional Penning ionization electron spectroscopy for N ₂ and CO by He*(2 ¹ S). <i>Chemical Physics Letters</i> , 2004, 391, 366-373.	1.2	3
201	No activation barrier synthetic route of glycine from simple molecules (NH ₃ , CH ₂ , and CO ₂) via carboxylation of ammonium ylide: a theoretical study by the scaled hypersphere search method. <i>Chemical Physics Letters</i> , 2004, 398, 240-244.	1.2	50
202	An overlap expansion method for improving ab initio model potentials: Anisotropic intermolecular potentials of N ₂ , CO, and C ₂ H ₂ with He*(2 ¹ S). <i>Journal of Chemical Physics</i> , 2004, 120, 781-790.	1.2	19
203	Ab initio Studies on Synthetic Routes of Glycine from Simple Molecules via Ammonolysis of Acetolactone: Applications of the Scaled Hypersphere Search Method. <i>Chemistry Letters</i> , 2004, 33, 1372-1373.	0.7	26
204	Collision-energy-resolved Penning ionization electron spectroscopy of OCS with He*(2 ³ S) metastable atoms. <i>Chemical Physics Letters</i> , 2003, 379, 332-339.	1.2	14
205	A new method for constructing multidimensional potential energy surfaces by a polar coordinate interpolation technique. <i>Chemical Physics Letters</i> , 2003, 381, 177-186.	1.2	30
206	Classical trajectory calculations for collision-energy/electron-energy resolved two-dimensional Penning ionization electron spectra of N ₂ , CO, and CH ₃ CN with metastable He*(2 ¹ S) atoms. <i>Journal of Chemical Physics</i> , 2002, 117, 5707-5721.	1.2	22
207	Classical trajectory calculations of collision energy dependence of Penning ionization cross-sections for N ₂ and CO by He*(2 ¹ S); optimization of anisotropic model potentials. <i>Chemical Physics Letters</i> , 2002, 355, 311-318.	1.2	11
208	Exploring Pathways of Photoaddition Reactions by Artificial Force Induced Reaction Method: A Case Study on the PaternÅ“chi Reaction. <i>Zeitschrift Fur Physikalische Chemie</i> , 0, , 130617035227002.	1.4	2
209	Pt(II)-Chiral Diene-Catalyzed Enantioselective Formal [4+2] Cycloaddition Initiated by C-C Bond Cleavage and Elucidation of a Pt(II)/(IV) Cycle by DFT Calculations. <i>Organic Chemistry Frontiers</i> , 0, , .	2.3	2
210	Multistructural Microiteration Combined with QM/MM-ONIOM Electrostatic Embedding. <i>Physical Chemistry Chemical Physics</i> , 0, , .	1.3	0