

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

53794
45
h-index

64796
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. | 2.5 | 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. | 3.2 | 5 |
| 3 | Designing two-dimensional dodecagonal boron nitride. <i>CrystEngComm</i> , 2022, 24, 471-474. | 2.6 | 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. | 5.3 | 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. | 3.3 | 4 |
| 6 | Azo-Crosslinked Double-Network Hydrogels Enabling Highly Efficient Mechanoradical Generation. <i>Journal of the American Chemical Society</i> , 2022, 144, 3154-3161. | 13.7 | 29 |
| 7 | Leveraging algorithmic search in quantum chemical reaction path finding. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 10305-10310. | 2.8 | 6 |
| 8 | Electrochemical Dearomative Dicarboxylation of Heterocycles with Highly Negative Reduction Potentials. <i>Journal of the American Chemical Society</i> , 2022, 144, 3685-3695. | 13.7 | 67 |
| 9 | Enhancement of the mechanical and thermal transport properties of carbon nanotube yarns by boundary structure modulation. <i>Nanotechnology</i> , 2022, 33, 235707. | 2.6 | 5 |
| 10 | Virtual Ligand-Assisted Screening Strategy to Discover Enabling Ligands for Transition Metal Catalysis. <i>ACS Catalysis</i> , 2022, 12, 3752-3766. | 11.2 | 8 |
| 11 | Quantum Chemical Calculations to Trace Back Reaction Paths for the Prediction of Reactants. <i>Jacs Au</i> , 2022, 2, 1181-1188. | 7.9 | 18 |
| 12 | Designing transformer oil immersion cooling servers for machine learning and first principle calculations. <i>PLoS ONE</i> , 2022, 17, e0266880. | 2.5 | 2 |
| 13 | Chemoselective Cleavage of Si-C(sp ³) Bonds in Unactivated Tetraalkylsilanes Using Iodine Tris(trifluoroacetate). <i>Journal of the American Chemical Society</i> , 2021, 143, 103-108. | 13.7 | 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. | 5.4 | 6 |
| 15 | Targeted 1,3-dipolar cycloaddition with acrolein for cancer prodrug activation. <i>Chemical Science</i> , 2021, 12, 5438-5449. | 7.4 | 13 |
| 16 | Mining hydroformylation in complex reaction network via graph theory. <i>RSC Advances</i> , 2021, 11, 23235-23240. | 3.6 | 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. | 12.8 | 58 |
| 18 | Synthesis of a plasmenylethanolamine. <i>Bioscience, Biotechnology and Biochemistry</i> , 2021, 85, 1383-1389. | 1.3 | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Nonadiabatic dynamic of atmospheric unimolecular photochemical reactions of 4,4-difluoro- α -crotonaldehyde using TD-DFT and TSH approaches. International Journal of Quantum Chemistry, 2021, 121, e26663. | 2.0 | 2 |
| 20 | Observation of Borane-Olefin Proximity Interaction Governing the Structure and Reactivity of Boron-Containing Macrocycles. Angewandte Chemie - International Edition, 2021, 60, 14630-14635. | 13.8 | 14 |
| 21 | Observation of Borane-Olefin Proximity Interaction Governing the Structure and Reactivity of Boron-Containing Macrocycles. Angewandte Chemie, 2021, 133, 14751-14756. | 2.0 | 5 |
| 22 | Synthesis of Difluoroglycine Derivatives from Amines, Difluorocarbene, and CO ₂ : Computational Design, Scope, and Applications. Chemistry - A European Journal, 2021, 27, 10040-10047. | 3.3 | 15 |
| 23 | Exploring paths of chemical transformations in molecular and periodic systems: An approach utilizing force. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2021, 11, e1538. | 14.6 | 59 |
| 24 | Synthesis of Difluoroglycine Derivatives from Amines, Difluorocarbene, and CO ₂ : Computational Design, Scope, and Applications. Chemistry - A European Journal, 2021, 27, 9965-9966. | 3.3 | 0 |
| 25 | Introduction of a Luminophore into Generic Polymers via Mechanoradical Coupling with a Prefluorescent Reagent. Angewandte Chemie - International Edition, 2021, 60, 16003-16008. | 13.8 | 35 |
| 26 | Pincer-Type Phosphorus Compounds With Boryl Pendant And Application In Catalytic H ₂ Generation From Ammonia-Borane: A Theoretical Study. ChemCatChem, 2021, 13, 3925-3929. | 3.7 | 3 |
| 27 | Mechanism of 2,6-Dichloro-4,4'-bipyridine-Catalyzed Diboration of Pyrazines Involving a Bipyridine-Stabilized Boryl Radical. Bulletin of the Chemical Society of Japan, 2021, 94, 1894-1902. | 3.2 | 3 |
| 28 | A reaction route network for methanol decomposition on a Pt(111) surface. Journal of Computational Chemistry, 2021, 42, 2163-2169. | 3.3 | 8 |
| 29 | Substitution effect on the nonradiative decay and <i>trans</i> \rightarrow <i>cis</i> photoisomerization route: a guideline to develop efficient cinnamate-based sunscreens. Physical Chemistry Chemical Physics, 2021, 23, 834-845. | 2.8 | 13 |
| 30 | Carboxylation of a Palladacycle Formed via C(sp ³) α -H Activation: Theory-Driven Reaction Design. Chemistry - an Asian Journal, 2021, 16, 4072-4080. | 3.3 | 1 |
| 31 | Radical Difunctionalization of Gaseous Ethylene Guided by Quantum Chemical Calculations: Selective Incorporation of Two Molecules of Ethylene. ACS Omega, 2021, 6, 33846-33854. | 3.5 | 7 |
| 32 | Mechanochemical synthesis of magnesium-based carbon nucleophiles in air and their use in organic synthesis. Nature Communications, 2021, 12, 6691. | 12.8 | 91 |
| 33 | Understanding the Acetalization Reaction Based on its Reaction Path Network. ChemSystemsChem, 2020, 2, e1900022. | 2.6 | 2 |
| 34 | Fluorescence Enhancement of Aromatic Macrocycles by Lowering Excited Singlet State Energies. Journal of Organic Chemistry, 2020, 85, 150-157. | 3.2 | 13 |
| 35 | Computational searches for crystal structures of dioxides of group 14 elements (CO ₂ ,) Tj ETQq1 1 0.784314 rgBT /Overbo | 3.6 | 4 |
| 36 | A theoretical study on the alkali metal carboxylate-promoted α -lactide polymerization. Journal of Computational Chemistry, 2020, 41, 2197-2202. | 3.3 | 9 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Kinetic prediction of reverse intersystem crossing in organic donor-acceptor molecules. <i>Nature Communications</i> , 2020, 11, 3909. | 12.8 | 75 |
| 38 | Chiral lanthanide lumino-glass for a circularly polarized light security device. <i>Communications Chemistry</i> , 2020, 3, . | 4.5 | 45 |
| 39 | Global Search for Crystal Structures of Carbon under High Pressure. <i>ACS Omega</i> , 2020, 5, 18142-18147. | 3.5 | 7 |
| 40 | Rate Constant Matrix Contraction Method for Systematic Analysis of Reaction Path Networks. <i>Chemistry Letters</i> , 2020, 49, 553-564. | 1.3 | 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. | 13.8 | 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. | 2.8 | 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. | 3.3 | 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. | 2.5 | 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. | 2.0 | 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. | 10.3 | 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. | 7.4 | 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. | 5.1 | 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. | 3.2 | 8 |
| 51 | Femtosecond electronic relaxation and real-time vibrational dynamics in 2-hydroxychalcone. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 5344-5358. | 2.8 | 8 |
| 52 | The direct observation of the doorway ¹ π* state of methylcinnamate and hydrogen-bonding effects on the photochemistry of cinnamate-based sunscreens. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 19755-19763. | 2.8 | 18 |
| 53 | Zn(OTf) ₂ -mediated annulations of N-propargylated tetrahydrocarbolines: divergent synthesis of four distinct alkaloidal scaffolds. <i>Chemical Science</i> , 2019, 10, 5686-5698. | 7.4 | 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. | 5.3 | 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. | 0.1 | 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. | 13.7 | 79 |
| 57 | A Reaction Path Network for Wöhler's Urea Synthesis. <i>Chemistry Letters</i> , 2019, 48, 47-50. | 1.3 | 24 |
| 58 | Excited-State Reactivity of [Mn(im)(CO) ₃ (phen)] ⁺ : A Structural Exploration. <i>Journal of Computational Chemistry</i> , 2019, 40, 72-81. | 3.3 | 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. | 2.5 | 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. | 3.7 | 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 <i>scp</i> -Lactate Dehydrogenase. <i>ACS Omega</i> , 2019, 4, 1178-1184. | 3.5 | 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. | 3.1 | 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. | 2.8 | 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. | 1.3 | 18 |
| 66 | Designing the Backbone of Hexasilabenzene Derivatives with a High Unimolecular Kinetic Stability. <i>Chemistry - A European Journal</i> , 2018, 24, 12264-12268. | 3.3 | 5 |
| 67 | Different photoisomerization routes found in the structural isomers of hydroxy methylcinnamate. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 17583-17598. | 2.8 | 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. | 11.2 | 79 |
| 69 | Exploring radiative and nonradiative decay paths in indole, isoindole, quinoline, and isoquinoline. <i>Photochemical and Photobiological Sciences</i> , 2018, 17, 315-322. | 2.9 | 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. | 3.3 | 161 |
| 71 | Theoretical study of initial reactions of amine (CH ₃)NH(3 ⁺) (n ⁺ =1, 2, 3) with ozone. <i>Chemical Physics Letters</i> , 2018, 692, 111-116. | 2.6 | 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. | 2.8 | 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. | 4.6 | 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. | 3.0 | 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. | 1.9 | 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. | 1.9 | 9 |
| 77 | Isomerization in Gold Clusters upon $O_{2\text{}}$ Adsorption. <i>Journal of Physical Chemistry C</i> , 2017, 121, 2661-2668. | 3.1 | 27 |
| 78 | An autocatalytic cycle in autoxidation of triethylborane. <i>Chemical Communications</i> , 2017, 53, 7302-7305. | 4.1 | 16 |
| 79 | Exploring the full catalytic cycle of rhodium(κ^i)-BINAP-catalysed isomerisation of allylic amines: a graph theory approach for path optimisation. <i>Chemical Science</i> , 2017, 8, 4475-4488. | 7.4 | 26 |
| 80 | Transition-Metal-Free Boryl Substitution Using Silylboranes and Alkoxy Bases. <i>Synlett</i> , 2017, 28, 1258-1267. | 1.8 | 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. | 3.3 | 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. | 2.6 | 18 |
| 83 | Excess charge driven dissociative hydrogen adsorption on $Ti_{2\text{}}O_{4\text{}}^{\sim}$. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 23154-23161. | 2.8 | 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, . | 3.2 | 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. | 3.3 | 16 |
| 86 | Lecture Tour upon Receiving the 12th Lectureship Award MBLA. Yuki Gosei Kagaku Kyokaishi/ <i>Journal of Synthetic Organic Chemistry</i> , 2017, 75, 367-374. | 0.1 | 0 |
| 87 | Orbital Energy-Based Reaction Analysis of SN_2 Reactions. <i>Computation</i> , 2016, 4, 23. | 2.0 | 5 |
| 88 | Artificial Force Induced Reaction (AFIR) Method for Exploring Quantum Chemical Potential Energy Surfaces. <i>Chemical Record</i> , 2016, 16, 2232-2248. | 5.8 | 125 |
| 89 | Nontotally symmetric trifurcation of an S_N2 reaction pathway. <i>Journal of Computational Chemistry</i> , 2016, 37, 487-493. | 3.3 | 10 |
| 90 | Fragmentation network of doubly charged methionine: Interpretation using graph theory. <i>Journal of Chemical Physics</i> , 2016, 145, 094302. | 3.0 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 91 | Computational Catalysis Using the Artificial Force Induced Reaction Method. Accounts of Chemical Research, 2016, 49, 763-773. | 15.6 | 112 |
| 92 | 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 |
| 93 | Exploring the Mechanism of Ultrafast Intersystem Crossing in Rhenium(I) Carbonyl Bipyridine Halide Complexes: Key Vibrational Modes and Spin-Vibronic Quantum Dynamics. Journal of Chemical Theory and Computation, 2016, 12, 2335-2345. | 5.3 | 52 |
| 94 | 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 |
| 95 | Artificial Force Induced Reaction Method for Systematic Determination of Complex Reaction Mechanisms. Chemical Record, 2016, 16, 2349-2363. | 5.8 | 17 |
| 96 | Theoretical insight into the wavelength-dependent photodissociation mechanism of nitric acid. Physical Chemistry Chemical Physics, 2016, 18, 24582-24590. | 2.8 | 4 |
| 97 | Deciphering Time Scale Hierarchy in Reaction Networks. Journal of Physical Chemistry B, 2016, 120, 1961-1971. | 2.6 | 15 |
| 98 | Nonadiabatic Pathways of Furan and Dibenzofuran: What Makes Dibenzofuran Fluorescent?. Chemistry Letters, 2016, 45, 940-942. | 1.3 | 13 |
| 99 | Multistep Intersystem Crossing Pathways in Cinnamate-Based UV-B Sunscreens. Journal of Physical Chemistry Letters, 2016, 7, 4001-4007. | 4.6 | 33 |
| 100 | Propargyl-Assisted Selective Amidation Applied in C-terminal Glycine Peptide Conjugation. Chemistry - A European Journal, 2016, 22, 18865-18872. | 3.3 | 17 |
| 101 | Ab Initio Molecular Dynamics Study of the Photoreaction of 1,1'-Dimethylstilbene upon $S_{0} \rightarrow S_{1}$ Excitation. Journal of Physical Chemistry A, 2016, 120, 8804-8812. | 2.5 | 27 |
| 102 | Theoretical study on mechanism of the photochemical ligand substitution of fac-[Re(^I)(bpy)(CO) ₃ (PR ₃) ₃] ⁺ complex. Physical Chemistry Chemical Physics, 2016, 18, 17557-17564. | 2.8 | 16 |
| 103 | The effect of Mg ²⁺ incorporation on the structure of calcium carbonate clusters: investigation by the anharmonic downward distortion following method. Physical Chemistry Chemical Physics, 2016, 18, 2690-2698. | 2.8 | 20 |
| 104 | Contrasting ring-opening propensities in UV-excited 1-pyrone and coumarin. Physical Chemistry Chemical Physics, 2016, 18, 2629-2638. | 2.8 | 32 |
| 105 | Isomers of Benzene on Its Global Network of Reaction Pathways. Bulletin of the Chemical Society of Japan, 2015, 88, 1284-1290. | 3.2 | 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)]. Journal of Chemical Physics, 2015, 143, 177102. | 3.0 | 2 |
| 107 | Analyses of bifurcation of reaction pathways on a global reaction route map: A case study of gold cluster Au ₅ . Journal of Chemical Physics, 2015, 143, 014301. | 3.0 | 17 |
| 108 | Mechanisms for the Breakdown of Halomethanes through Reactions with Ground-State Cyano Radicals. ChemPhysChem, 2015, 16, 181-190. | 2.1 | 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. | 2.5 | 23 |
| 110 | Reactivity of Gold Clusters in the Regime of Structural Fluxionality. <i>Journal of Physical Chemistry C</i> , 2015, 119, 11120-11130. | 3.1 | 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. | 2.8 | 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. | 3.3 | 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. | 13.7 | 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. | 13.7 | 91 |
| 115 | Global investigation of potential energy surfaces for the pyrolysis of C_{11} – C_{13} hydrocarbons: toward the development of detailed kinetic models from first principles. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 27789-27805. | 2.8 | 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. | 2.5 | 36 |
| 117 | Intrinsic reaction coordinate: Calculation, bifurcation, and automated search. <i>International Journal of Quantum Chemistry</i> , 2015, 115, 258-269. | 2.0 | 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. | 2.5 | 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. | 3.3 | 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. | 3.0 | 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. | 13.8 | 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. | 3.3 | 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. | 3.0 | 4 |
| 124 | Predicting pathways for terpene formation from first principles – routes to known and new sesquiterpenes. <i>Chemical Science</i> , 2014, 5, 1555. | 7.4 | 26 |
| 125 | Theoretical Mechanistic Studies on Methyltrioxorhenium-Catalyzed Olefin Cyclopropanation: Stepwise Transfer of a Terminal Methylene Group. <i>Organometallics</i> , 2014, 33, 3840-3846. | 2.3 | 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. | 5.3 | 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. | 3.2 | 41 |
| 128 | Exploration of Isomers of Benzene by GRRM/SCC-DFTB. Chemistry Letters, 2014, 43, 702-704. | 1.3 | 11 |
| 129 | Direct Pathway for Water–Gas Shift Reaction in Gas Phase. Chemistry Letters, 2014, 43, 193-195. | 1.3 | 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. | 0.1 | 2 |
| 131 | CASPT2 Study of Photodissociation Pathways of Ketene. Journal of Physical Chemistry A, 2013, 117, 7001-7008. | 2.5 | 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. | 2.8 | 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. | 5.3 | 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. | 2.5 | 31 |
| 135 | Development of Azo-Based Fluorescent Probes to Detect Different Levels of Hypoxia. Angewandte Chemie - International Edition, 2013, 52, 13028-13032. | 13.8 | 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. | 5.3 | 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. | 5.3 | 23 |
| 138 | Deuterium Uptake in Magnetic-Fusion Devices with Lithium-Conditioned Carbon Walls. Physical Review Letters, 2013, 110, 105001. | 7.8 | 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. | 2.8 | 17 |
| 141 | Automated Exploration of Photolytic Channels of HCOOH: Conformational Memory via Excited-State Roaming. Journal of Physical Chemistry Letters, 2012, 3, 1900-1907. | 4.6 | 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. | 5.3 | 61 |
| 143 | Dynamics of deuterium retention and sputtering of Li–Ca–O surfaces. Fusion Engineering and Design, 2012, 87, 1732-1736. | 1.9 | 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. | 5.3 | 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. | 5.3 | 37 |
| 146 | No Straight Path: Roaming in Both Ground- and Excited-State Photolytic Channels of NO ₃ . <i>Science</i> , 2012, 335, 1075-1078. | 12.6 | 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. | 4.6 | 25 |
| 148 | Excited-State Roaming Dynamics in Photolysis of a Nitrate Radical. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 934-938. | 4.6 | 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. | 5.3 | 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. | 3.0 | 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. | 13.8 | 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. | 2.6 | 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. | 2.1 | 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. | 2.1 | 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. | 3.1 | 11 |
| 158 | Theoretical Proton Affinity and Fluoride Affinity of Nerve Agent VX. <i>Journal of Physical Chemistry A</i> , 2010, 114, 13189-13197. | 2.5 | 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. | 2.5 | 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. | 3.0 | 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. | 4.6 | 58 |
| 162 | Synthesis and structure of stable base-free dialkylsilanimines. <i>New Journal of Chemistry</i> , 2010, 34, 1637. | 2.8 | 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. | 6.5 | 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. | 5.3 | 137 |
| 165 | Systematic Search for Isomerization Pathways of Hexasilabenzene for Finding Its Kinetic Stability. <i>Organometallics</i> , 2009, 28, 2218-2224. | 2.3 | 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. | 3.0 | 37 |
| 167 | Automated exploration of stable isomers of $H^{+}(H_2O)_n$ ($n = 5\sim 7$) 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. | 3.3 | 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. | 2.6 | 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. | 5.3 | 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. | 2.5 | 92 |
| 171 | Decomposition of alkyl hydroperoxide by a copper(II) complex: insights from density functional theory. <i>Tetrahedron Letters</i> , 2008, 49, 6841-6845. | 1.4 | 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. | 2.6 | 32 |
| 173 | Microsolvation of Hydrogen Sulfide: Exploration of $H_2S\cdots H_2O)_n$ and $SH\cdots H_2O)_n$ ($n = 5\sim 7$) Cluster Structures on Ab Initio Potential Energy Surfaces by the Scaled Hypersphere Search Method. <i>Journal of Physical Chemistry A</i> , 2008, 112, 2962-2968. | 2.5 | 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. | 13.7 | 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. | 2.5 | 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. | 3.0 | 31 |
| 177 | Intramolecular vibrational frequencies of water clusters $(H_2O)_n$ ($n = 2\sim 5$): Anharmonic analyses using potential functions based on the scaled hypersphere search method. <i>Journal of Chemical Physics</i> , 2008, 129, 074315. | 3.0 | 35 |
| 178 | Automated exploration of reaction channels. <i>Physica Scripta</i> , 2008, 78, 058122. | 2.5 | 64 |
| 179 | Automated Exploration of Adsorption Structures of an Organic Molecule on $RuH_2\cdots BINAP$ by the ONIOM Method and the Scaled Hypersphere Search Method. <i>Journal of Physical Chemistry A</i> , 2007, 111, 13168-13171. | 2.5 | 25 |
| 180 | Quantum Chemistry Study of $H^{+}(H_2O)_8$: 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. | 2.5 | 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. Journal of Physical Chemistry A, 2007, 111, 4527-4534. | 2.5 | 118 |
| 182 | Insight into Global Reaction Mechanism of [C ₂ , H ₄ , O] System from ab Initio Calculations by the Scaled Hypersphere Search Method. Journal of Physical Chemistry A, 2007, 111, 5099-5110. | 2.5 | 48 |
| 183 | Global reaction route mapping on potential energy surfaces of C_2H_2 and C_2H_4 . Chemical Physics Letters, 2007, 447, 21-26. | 2.6 | 32 |
| 184 | Global Reaction Route Mapping on Potential Energy Surfaces of Formaldehyde, Formic Acid, and Their Metal-Substituted Analogues. Journal of Physical Chemistry A, 2006, 110, 8933-8941. | 2.5 | 270 |
| 185 | Anisotropic Interaction and Stereoreactivity in a Chemi-Ionization Process of OCS by Collision with He*(2S) Metastable Atoms. Journal of Physical Chemistry A, 2006, 110, 11010-11017. | 2.5 | 4 |
| 186 | Global Mapping of Small Carbon Clusters Using the Scaled Hypersphere Search Method. AIP Conference Proceedings, 2006, , . | 0.4 | 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. Chemistry Letters, 2006, 35, 492-493. | 1.3 | 18 |
| 188 | Generation Mechanisms of Amino Acids in Interstellar Space via Reactions between Closed-Shell Species: Significance of Higher Energy Isomers in Molecular Evolution. Astrophysical Journal, 2006, 640, 823-828. | 4.5 | 35 |
| 189 | Global analysis of reaction pathways on the potential energy surface of cyanoacetylene by the scaled hypersphere search method. Chemical Physics Letters, 2006, 418, 208-216. | 2.6 | 32 |
| 190 | Probing anisotropic interaction potentials of unsaturated hydrocarbons with He*(2S) metastable atom: Attractive-site preference of π -direction in C ₂ H ₂ and π -direction in C ₂ H ₄ . Journal of Chemical Physics, 2006, 124, 104308. | 3.0 | 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. Journal of Chemical Physics, 2006, 124, 174306. | 3.0 | 35 |
| 192 | Two-dimensional Penning ionization electron spectroscopic study on outer characteristics of molecules. Journal of Electron Spectroscopy and Related Phenomena, 2005, 142, 283-293. | 1.7 | 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. Chemical Physics Letters, 2005, 404, 95-99. | 2.6 | 66 |
| 194 | A scaled hypersphere interpolation technique for efficient construction of multidimensional potential energy surfaces. Chemical Physics Letters, 2005, 414, 265-270. | 2.6 | 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. Journal of Chemical Physics, 2005, 123, 194308. | 3.0 | 9 |
| 196 | Penning ionization electron spectroscopy of C ₆ H ₆ by collision with He*(2 ³ S) metastable atoms and classical trajectory calculations: Optimization of ab initio model potentials. Journal of Chemical Physics, 2005, 122, 044303. | 3.0 | 15 |
| 197 | Global Investigation on the Potential Energy Surface of CH ₃ CN: Application of the Scaled Hypersphere Search Method. Journal of Physical Chemistry A, 2005, 109, 7319-7328. | 2.5 | 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. Journal of Physical Chemistry A, 2005, 109, 5742-5753. | 2.5 | 310 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | A scaled hypersphere search method for the topography of reaction pathways on the potential energy surface. Chemical Physics Letters, 2004, 384, 277-282. | 2.6 | 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 ³ S). Chemical Physics Letters, 2004, 391, 366-373. | 2.6 | 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. Chemical Physics Letters, 2004, 398, 240-244. | 2.6 | 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 ³ S). Journal of Chemical Physics, 2004, 120, 781-790. | 3.0 | 19 |
| 203 | Ab initio Studies on Synthetic Routes of Glycine from Simple Molecules via Ammonolysis of Acetolactone: Applications of the Scaled Hypersphere Search Method. Chemistry Letters, 2004, 33, 1372-1373. | 1.3 | 26 |
| 204 | Collision-energy-resolved Penning ionization electron spectroscopy of OCS with He*(2 ³ S) metastable atoms. Chemical Physics Letters, 2003, 379, 332-339. | 2.6 | 14 |
| 205 | A new method for constructing multidimensional potential energy surfaces by a polar coordinate interpolation technique. Chemical Physics Letters, 2003, 381, 177-186. | 2.6 | 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 ³ S) atoms. Journal of Chemical Physics, 2002, 117, 5707-5721. | 3.0 | 22 |
| 207 | Classical trajectory calculations of collision energy dependence of Penning ionization cross-sections for N ₂ and CO by He*(2 ³ S); optimization of anisotropic model potentials. Chemical Physics Letters, 2002, 355, 311-318. | 2.6 | 11 |
| 208 | Exploring Pathways of Photoaddition Reactions by Artificial Force Induced Reaction Method: A Case Study on the PaternÅ“BÅ¼chi Reaction. Zeitschrift Fur Physikalische Chemie, 0, , 130617035227002. | 2.8 | 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. Organic Chemistry Frontiers, 0, , . | 4.5 | 2 |
| 210 | Multistructural Microiteration Combined with QM/MM-ONIOM Electrostatic Embedding. Physical Chemistry Chemical Physics, 0, , . | 2.8 | 0 |