Stephen J Klippenstein

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/621138/publications.pdf

Version: 2024-02-01

276 papers 22,853 citations

82 h-index 139 g-index

281 all docs

281 docs citations

times ranked

281

9018 citing authors

#	Article	IF	Citations
1	Theoretical kinetics predictions for NH2Â+ÂHO2. Combustion and Flame, 2022, 236, 111787.	5.2	41
2	HÈ®2Â+ÂHÈ®2: High level theory and the role of singlet channels. Combustion and Flame, 2022, 243, 111975.	5.2	23
3	Infrared spectroscopic signature of a hydroperoxyalkyl radical (•QOOH). Journal of Chemical Physics, 2022, 156, 014301.	3.0	8
4	Low- and intermediate-temperature oxidation of dimethyl ether up to 100 atm in a supercritical pressure jet-stirred reactor. Combustion and Flame, 2022, 243, 112059.	5.2	16
5	Rapid Allylic 1,6 H-Atom Transfer in an Unsaturated Criegee Intermediate. Journal of the American Chemical Society, 2022, 144, 5945-5955.	13.7	5
6	Dramatic Conformer-Dependent Reactivity of the Acetaldehyde Oxide Criegee Intermediate with Dimethylamine <i>Via</i> a 1,2-Insertion Mechanism. Journal of Physical Chemistry A, 2022, 126, 710-719.	2.5	4
7	Automated theoretical chemical kinetics: Predicting the kinetics for the initial stages of pyrolysis. Proceedings of the Combustion Institute, 2021, 38, 375-384.	3.9	28
8	Termolecular chemistry facilitated by radical-radical recombinations and its impact on flame speed predictions. Proceedings of the Combustion Institute, 2021, 38, 515-522.	3.9	15
9	Low-temperature oxidation of diethyl ether: Reactions of hot radicals across coupled potential energy surfaces. Proceedings of the Combustion Institute, 2021, 38, 671-679.	3.9	16
10	Substitution Reactions in the Pyrolysis of Acetone Revealed through a Modeling, Experiment, Theory Paradigm. Journal of the American Chemical Society, 2021, 143, 3124-3142.	13.7	28
11	Functionalized Hydroperoxide Formation from the Reaction of Methacrolein-Oxide, an Isoprene-Derived Criegee Intermediate, with Formic Acid: Experiment and Theory. Molecules, 2021, 26, 3058.	3.8	16
12	Entanglement Effect and Angular Momentum Conservation in a Nonseparable Tunneling Treatment. Journal of Chemical Theory and Computation, 2021, 17, 3863-3885.	5.3	4
13	Watching a hydroperoxyalkyl radical (•QOOH) dissociate. Science, 2021, 373, 679-682.	12.6	31
14	Diastereomers and Low-Temperature Oxidation. Journal of Physical Chemistry A, 2021, 125, 8064-8073.	2.5	11
15	Non-Boltzmann Effects in Chain Branching and Pathway Branching for Diethyl Ether Oxidation. Energy & Samp; Fuels, 2021, 35, 17890-17908.	5.1	16
16	Photodissociation transition states characterized by chirped pulse millimeter wave spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 146-151.	7.1	11
17	Formic acid catalyzed isomerization and adduct formation of an isoprene-derived Criegee intermediate: experiment and theory. Physical Chemistry Chemical Physics, 2020, 22, 26796-26805.	2.8	13
18	Experimental and theoretical studies of the doubly substituted methyl-ethyl Criegee intermediate: Infrared action spectroscopy and unimolecular decay to OH radical products. Journal of Chemical Physics, 2020, 152, 094301.	3.0	17

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19	Reaction Profiles and Kinetics for Radical–Radical Hydrogen Abstraction via Multireference Coupled Cluster Theory. Journal of Chemical Theory and Computation, 2020, 16, 1511-1525.	5.3	8
20	Direct kinetic measurements and theoretical predictions of an isoprene-derived Criegee intermediate. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9733-9740.	7.1	63
21	Automated computational thermochemistry for butane oxidation: A prelude to predictive automated combustion kinetics. Proceedings of the Combustion Institute, 2019, 37, 363-371.	3.9	62
22	Small ester combustion chemistry: Computational kinetics and experimental study of methyl acetate and ethyl acetate. Proceedings of the Combustion Institute, 2019, 37, 419-428.	3.9	45
23	High-pressure oxidation of propane. Proceedings of the Combustion Institute, 2019, 37, 461-468.	3.9	48
24	Kinetics of 1-butyl and 2-butyl radical reactions with molecular oxygen: Experiment and theory. Proceedings of the Combustion Institute, 2019, 37, 291-298.	3.9	15
25	Propane clusters in Titan's lower atmosphere: insights from a combined theory/laboratory study. Monthly Notices of the Royal Astronomical Society, 2019, 488, 676-684.	4.4	2
26	Synthesis, Electronic Spectroscopy, and Photochemistry of Methacrolein Oxide: A Four-Carbon Unsaturated Criegee Intermediate from Isoprene Ozonolysis. Journal of the American Chemical Society, 2019, 141, 15058-15069.	13.7	52
27	Ab initio kinetics for pyrolysis and combustion systems. Computer Aided Chemical Engineering, 2019, , $115\text{-}167$.	0.5	27
28	Nonthermal rate constants for CH4* + X → CH3 + HX, X = H, O, OH, and O2. Journal of Chemical Physics, 2019, 150, 114112.	3.0	21
29	Simulating the density of organic species in the atmosphere of Titan with a coupled ion-neutral photochemical model. Icarus, 2019, 324, 120-197.	2.5	125
30	EStokTP: Electronic Structure to Temperature- and Pressure-Dependent Rate Constants—A Code for Automatically Predicting the Thermal Kinetics of Reactions. Journal of Chemical Theory and Computation, 2019, 15, 1122-1145.	5.3	80
31	Modeling nitrogen chemistry in combustion. Progress in Energy and Combustion Science, 2018, 67, 31-68.	31.2	980
32	Unimolecular Decay of Criegee Intermediates to OH Radical Products: Prompt and Thermal Decay Processes. Accounts of Chemical Research, 2018, 51, 978-985.	15.6	101
33	H-Abstraction reactions by OH, HO ₂ , O, O ₂ and benzyl radical addition to O ₂ and their implications for kinetic modelling of toluene oxidation. Physical Chemistry Chemical Physics, 2018, 20, 10607-10627.	2.8	80
34	Anharmonic Rovibrational Partition Functions for Fluxional Species at High Temperatures via Monte Carlo Phase Space Integrals. Journal of Physical Chemistry A, 2018, 122, 1727-1740.	2.5	15
35	Nascent energy distribution of the Criegee intermediate CH2OO from direct dynamics calculations of primary ozonide dissociation. Journal of Chemical Physics, 2018, 148, 174306.	3.0	36
36	Theory and modeling of relevance to prompt-NO formation at high pressure. Combustion and Flame, 2018, 195, 3-17.	5.2	57

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37	Four-Carbon Criegee Intermediate from Isoprene Ozonolysis: Methyl Vinyl Ketone Oxide Synthesis, Infrared Spectrum, and OH Production. Journal of the American Chemical Society, 2018, 140, 10866-10880.	13.7	109
38	Recombination of aromatic radicals with molecular oxygen. Proceedings of the Combustion Institute, 2017, 36, 169-177.	3.9	20
39	Theoretical kinetics of O + C2H4. Proceedings of the Combustion Institute, 2017, 36, 219-227.	3.9	42
40	First-Principles Chemical Kinetic Modeling of Methyl <i>trans</i> -3-Hexenoate Epoxidation by HO ₂ . Journal of Physical Chemistry A, 2017, 121, 1909-1915.	2.5	6
41	High-pressure oxidation of ethane. Combustion and Flame, 2017, 182, 150-166.	5.2	76
42	Accurate Anharmonic Zero-Point Energies for Some Combustion-Related Species from Diffusion Monte Carlo. Journal of Physical Chemistry A, 2017, 121, 4334-4340.	2.5	22
43	Tunneling effects in the unimolecular decay of (CH3)2COO Criegee intermediates to OH radical products. Journal of Chemical Physics, 2017, 146, 134307.	3.0	34
44	Theoretical Kinetics Analysis for á,¢ Atom Addition to 1,3-Butadiene and Related Reactions on the ÄŠ ₄ H ₇ Potential Energy Surface. Journal of Physical Chemistry A, 2017, 121, 7433-7445.	2.5	55
45	Ab Initio Computations and Active Thermochemical Tables Hand in Hand: Heats of Formation of Core Combustion Species. Journal of Physical Chemistry A, 2017, 121, 6580-6602.	2.5	144
46	Ephemeral collision complexes mediate chemically termolecular transformations that affect system chemistry. Nature Chemistry, 2017, 9, 1078-1082.	13.6	85
47	Time-Resolved Kinetic Chirped-Pulse Rotational Spectroscopy in a Room-Temperature Flow Reactor. Journal of Physical Chemistry Letters, 2017, 8, 6180-6188.	4.6	18
48	Selective deuteration illuminates the importance of tunneling in the unimolecular decay of Criegee intermediates to hydroxyl radical products. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12372-12377.	7.1	32
49	From theoretical reaction dynamics to chemical modeling of combustion. Proceedings of the Combustion Institute, 2017, 36, 77-111.	3.9	199
50	Ramifications of including non-equilibrium effects for HCO in flame chemistry. Proceedings of the Combustion Institute, 2017, 36, 525-532.	3.9	36
51	Temperature- and pressure-dependent rate coefficients for the HACA pathways from benzene to naphthalene. Proceedings of the Combustion Institute, 2017, 36, 919-926.	3.9	115
52	Theoretical investigation of intersystem crossing in the cyanonitrene molecule, 1NCN →â€^3NCN. Journal of Chemical Physics, 2017, 147, 084310.	3.0	6
53	Communication: Real time observation of unimolecular decay of Criegee intermediates to OH radical products. Journal of Chemical Physics, 2016, 144, 061102.	3.0	99
54	Deep tunneling in the unimolecular decay of CH3CHOO Criegee intermediates to OH radical products. Journal of Chemical Physics, 2016, 145, 234308.	3.0	56

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55	Direct observation of unimolecular decay of CH3CH2CHOO Criegee intermediates to OH radical products. Journal of Chemical Physics, 2016, 145, 044312.	3.0	49
56	Pressure dependent low temperature kinetics for CN + CH ₃ CN: competition between chemical reaction and van der Waals complex formation. Physical Chemistry Chemical Physics, 2016, 18, 15118-15132.	2.8	21
57	High-pressure oxidation of methane. Combustion and Flame, 2016, 172, 349-364.	5.2	157
58	Low Temperature Kinetics of the First Steps of Water Cluster Formation. Physical Review Letters, 2016, 116, 113401.	7.8	26
59	Pressure-dependent rate constants for PAH growth: formation of indene and its conversion to naphthalene. Faraday Discussions, 2016, 195, 637-670.	3.2	76
60	Weakly Bound Free Radicals in Combustion: "Prompt―Dissociation of Formyl Radicals and Its Effect on Laminar Flame Speeds. Journal of Physical Chemistry Letters, 2016, 7, 85-89.	4.6	63
61	Comment on "When Rate Constants Are Not Enough― Journal of Physical Chemistry A, 2016, 120, 306-312.	2.5	30
62	Dimethylamine Addition to Formaldehyde Catalyzed by a Single Water Molecule: A Facile Route for Atmospheric Carbinolamine Formation and Potential Promoter of Aerosol Growth. Journal of Physical Chemistry A, 2016, 120, 1358-1368.	2.5	41
63	Ab initio Variational Transition State Theory and Master Equation Study of the Reaction (OH) _{3 < /sub>5iOCH _{2 < /sub> + CH _{3 < /sub> ⇌ (OH) _{3 < /sub>3 < /sub>2 < /s Zeitschrift Fur Physikalische Chemie, 2015, 229, 691-708.}}}}	ub ≥l k sut	>>5&/sub>.
64	Comment on "A novel and facile decay path of Criegee intermediates by intramolecular insertion reactions via roaming transition states―[J. Chem. Phys. 142, 124312 (2015)]. Journal of Chemical Physics, 2015, 143, 167101.	3.0	3
65	Temperature and Pressure-Dependent Rate Coefficients for the Reaction of Vinyl Radical with Molecular Oxygen. Journal of Physical Chemistry A, 2015, 119, 7766-7779.	2.5	88
66	Towards a quantitative understanding of the role of non-Boltzmann reactant distributions in low temperature oxidation. Proceedings of the Combustion Institute, 2015, 35, 205-213.	3.9	48
67	The role of radical + fuel-radical well-skipping reactions in ethanol and methylformate low-pressure flames. Proceedings of the Combustion Institute, 2015, 35, 447-455.	3.9	30
68	Hydrolysis of Ketene Catalyzed by Formic Acid: Modification of Reaction Mechanism, Energetics, and Kinetics with Organic Acid Catalysis. Journal of Physical Chemistry A, 2015, 119, 4347-4357.	2.5	48
69	Effects of New Ab Initio Rate Coefficients on Predictions of Species Formed during <i>n</i> lgnition and Pyrolysis. Journal of Physical Chemistry A, 2015, 119, 543-551.	2.5	7
70	Pressure-dependent branching in the reaction of 1 CH 2 with C $_2$ H $_4$ and other reactions on the C $_3$ H $_6$ potential energy surface. Proceedings of the Combustion Institute, 2015, 35, 223-230.	3.9	28
71	A Tribute to Lawrence B. Harding, Joe V. Michael, and Albert F. Wagner for Their 100 Years of Combustion Kinetics Studies at Argonne. Journal of Physical Chemistry A, 2015, 119, 7075-7077.	2.5	2
72	Multiscale Informatics for Low-Temperature Propane Oxidation: Further Complexities in Studies of Complex Reactions. Journal of Physical Chemistry A, 2015, 119, 7095-7115.	2.5	37

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73	Global uncertainty analysis for RRKM/master equation based kinetic predictions: A case study of ethanol decomposition. Combustion and Flame, 2015, 162, 3427-3436.	5.2	32
74	New Insights into Low-Temperature Oxidation of Propane from Synchrotron Photoionization Mass Spectrometry and Multiscale Informatics Modeling. Journal of Physical Chemistry A, 2015, 119, 7116-7129.	2.5	32
75	Kinetics of Propargyl Radical Dissociation. Journal of Physical Chemistry A, 2015, 119, 7780-7791.	2.5	35
76	Thermal Dissociation and Roaming Isomerization of Nitromethane: Experiment and Theory. Journal of Physical Chemistry A, 2015, 119, 7872-7893.	2.5	59
77	Resolving Some Paradoxes in the Thermal Decomposition Mechanism of Acetaldehyde. Journal of Physical Chemistry A, 2015, 119, 7724-7733.	2.5	33
78	Understanding low-temperature first-stage ignition delay: Propane. Combustion and Flame, 2015, 162, 3658-3673.	5.2	122
79	THE 2014 KIDA NETWORK FOR INTERSTELLAR CHEMISTRY. Astrophysical Journal, Supplement Series, 2015, 217, 20.	7.7	291
80	Effect of non-thermal product energy distributions on ketohydroperoxide decomposition kinetics. Proceedings of the Combustion Institute, 2015, 35, 283-290.	3.9	58
81	Secondary channels in the thermal decomposition of monomethylhydrazine (CH3NHNH2). RSC Advances, 2014, 4, 62951-62964.	3.6	3
82	Predictive a priori pressure-dependent kinetics. Science, 2014, 346, 1212-1215.	12.6	142
83	First-principles binary diffusion coefficients for H, H2, and four normal alkanes + N2. Journal of Chemical Physics, 2014, 141, 124313.	3.0	42
84	Comparison of multireference configuration interaction potential energy surfaces for HÂ+ÂO2Ââ†'ÂHO2: the effect of internal contraction. Theoretical Chemistry Accounts, 2014, 133, 1.	1.4	21
85	Chemical Kinetics and Mechanisms of Complex Systems: AÂPerspective on Recent Theoretical Advances. Journal of the American Chemical Society, 2014, 136, 528-546.	13.7	212
86	Unconventional Peroxy Chemistry in Alcohol Oxidation: The Water Elimination Pathway. Journal of Physical Chemistry Letters, 2013, 4, 350-354.	4.6	38
87	Collision Efficiency of Water in the Unimolecular Reaction CH ₄ (+H ₂ O) ⇆ CH ₃ + H (+H ₂ O): One-Dimensional and Two-Dimensional Solutions of the Low-Pressure-Limit Master Equation. Journal of Physical Chemistry A, 2013, 117, 12243-12255.	2.5	65
88	Uncertainty propagation in the derivation of phenomenological rate coefficients from theory: A case study of n-propyl radical oxidation. Proceedings of the Combustion Institute, 2013, 34, 177-185.	3.9	64
89	xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si14.gif" overflow="scroll"> <mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mm< td=""><td>v> 3.9 </td><td>nn>¹6</td></mm<></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow>	v> 3.9 	nn> ¹ 6
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91	A quantitative explanation for the apparent anomalous temperature dependence of OH + HO2= H2O + O2 through multi-scale modeling. Proceedings of the Combustion Institute, 2013, 34, 547-555.	3.9	73
92	Determining phenomenological rate coefficients from a time-dependent, multiple-well master equation: "species reduction―at high temperatures. Physical Chemistry Chemical Physics, 2013, 15, 4744.	2.8	73
93	Low Temperature Rate Coefficients for the Reaction CN + HC ₃ N. Journal of Physical Chemistry A, 2013, 117, 12155-12164.	2.5	20
94	Dissociation of Propyl Radicals and Other Reactions on a C ₃ H ₇ Potential. Journal of Physical Chemistry A, 2013, 117, 2718-2727.	2.5	74
95	Ab Initio Kinetics for the Decomposition of Hydroxybutyl and Butoxy Radicals of <i>n</i> -Butanol. Journal of Physical Chemistry A, 2013, 117, 1890-1906.	2.5	52
96	Propargyl + O ₂ Reaction in Helium Droplets: Entrance Channel Barrier or Not?. Journal of Physical Chemistry A, 2013, 117, 13626-13635.	2.5	39
97	Rate Constant and Branching Fraction for the NH ₂ + NO ₂ Reaction. Journal of Physical Chemistry A, 2013, 117, 9011-9022.	2.5	37
98	Predictive Theory for the Addition and Insertion Kinetics of ¹ CH ₂ Reacting with Unsaturated Hydrocarbons. Journal of Physical Chemistry A, 2013, 117, 12677-12692.	2.5	21
99	A KINETIC DATABASE FOR ASTROCHEMISTRY (KIDA). Astrophysical Journal, Supplement Series, 2012, 199, 21.	7.7	436
100	RAPID ASSOCIATION REACTIONS AT LOW PRESSURE: IMPACT ON THE FORMATION OF HYDROCARBONS ON TITAN. Astrophysical Journal, 2012, 744, 11.	4.5	54
101	Shock Tube Explorations of Roaming Radical Mechanisms: The Decompositions of Isobutane and Neopentane. Journal of Physical Chemistry A, 2012, 116, 5981-5989.	2.5	34
102	Role of O ₂ + QOOH in Low-Temperature Ignition of Propane. 1. Temperature and Pressure Dependent Rate Coefficients. Journal of Physical Chemistry A, 2012, 116, 3325-3346.	2.5	223
103	Interception of Excited Vibrational Quantum States by O ₂ in Atmospheric Association Reactions. Science, 2012, 337, 1066-1069.	12.6	90
104	Separability of Tight and Roaming Pathways to Molecular Decomposition. Journal of Physical Chemistry A, 2012, 116, 6967-6982.	2.5	48
105	Exploring formation pathways of aromatic compounds in laboratory-based model flames of aliphatic fuels. Combustion, Explosion and Shock Waves, 2012, 48, 508-515.	0.8	68
106	Comment on "Automatic estimation of pressure-dependent rate coefficients―(J. W. Allen, C. F.) Tj ETQq0 0 Physics, 2012, 14, 8431.	0 rgBT /O	verlock 10 Tf 8
107	Comprehensive H ₂ /O ₂ kinetic model for highâ€pressure combustion. International Journal of Chemical Kinetics, 2012, 44, 444-474.	1.6	682
108	Pressure-Dependent OH Yields in Alkene + HO ₂ Reactions: A Theoretical Study. Journal of Physical Chemistry A, 2011, 115, 10218-10225.	2.5	56

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109	Statistical Theory for the Kinetics and Dynamics of Roaming Reactions. Journal of Physical Chemistry A, 2011, 115, 14370-14381.	2.5	76
110	Shock Tube and Theoretical Studies on the Thermal Decomposition of Propane: Evidence for a Roaming Radical Channel. Journal of Physical Chemistry A, 2011, 115, 3366-3379.	2.5	57
111	Combustion Chemistry: Important Features of the C ₃ H ₅ Potential Energy Surface, Including Allyl Radical, Propargyl + H ₂ , Allene + H, and Eight Transition States. Journal of Physical Chemistry A, 2011, 115, 14209-14214.	2.5	25
112	Long-Range Interaction Potential of Open Shell Atoms with Neutral Molecules : Application to the Calculation of the Rate Constant for the C2H($2\hat{1}\hat{\Sigma}$ +)+O(3P) Reaction. Proceedings of the International Astronomical Union, 2011, 7, 372-382.	0.0	2
113	Insights into the role of polycyclic aromatic hydrocarbon condensation in haze formation in Jupiter's atmosphere. Astronomy and Astrophysics, 2011, 532, A40.	5.1	10
114	Near-threshold H/D exchange in CD3CHO photodissociation. Nature Chemistry, 2011, 3, 443-448.	13.6	60
115	Roaming radicals in the thermal decomposition of dimethyl ether: Experiment and theory. Combustion and Flame, 2011, 158, 618-632.	5.2	92
116	Theoretical rate coefficients for allyl+HO2 and allyloxy decomposition. Proceedings of the Combustion Institute, 2011, 33, 273-282.	3.9	75
117	The role of NNH in NO formation and control. Combustion and Flame, 2011, 158, 774-789.	5.2	304
118	Ab initio kinetics for the decomposition of monomethylhydrazine (CH3NHNH2). Proceedings of the Combustion Institute, 2011, 33, 425-432.	3.9	18
119	Uncertainty driven theoretical kinetics studies for CH3OH ignition: HO2+CH3OH and O2+CH3OH. Proceedings of the Combustion Institute, 2011, 33, 351-357.	3.9	149
120	DISEQUILIBRIUM CARBON, OXYGEN, AND NITROGEN CHEMISTRY IN THE ATMOSPHERES OF HD 189733b AND HD 209458b. Astrophysical Journal, 2011, 737, 15.	4.5	374
121	Insights into the condensation of PAHsin the envelope of IRC +10216. EAS Publications Series, 2011, 46, 191-199.	0.3	1
122	The Effect of Spinâ^'Orbit Splitting on the Association Kinetics of Barrierless Halogen Atomâ^'Hydrocarbon Radical Reactions. Journal of Physical Chemistry A, 2010, 114, 5759-5768.	2.5	40
123	Theoretical Validation of Chemical Kinetic Mechanisms: Combustion of Methanol. Journal of Physical Chemistry A, 2010, 114, 8286-8301.	2.5	66
124	Exploring the Role of PAHs in the Formation of Soot: Pyrene Dimerization. Journal of Physical Chemistry Letters, 2010, 1, 2962-2967.	4.6	152
125	Rate Constants for the Thermal Decomposition of Ethanol and Its Bimolecular Reactions with OH and D: Reflected Shock Tube and Theoretical Studies. Journal of Physical Chemistry A, 2010, 114, 9425-9439.	2.5	139
126	Temperature Dependence of Two Key Interstellar Reactions of H $<$ sub $>3sub><sup>+sup>: O(<sup>3sub><sup>+sup> and CO + H<sub>3sub><sup>+sup>. Journal of Physical Chemistry A, 2010, 114, 278-290.$	2.5	44

#	Article	IF	Citations
127	D-Atom Products in Predissociation of CD ₂ CD ₂ OH from the 202â^215 nm Photodissociation of 2-Bromoethanol. Journal of Physical Chemistry A, 2010, 114, 5453-5461.	2.5	10
128	Reactions between Resonance-Stabilized Radicals: Propargyl + Allyl. Journal of Physical Chemistry A, 2010, 114, 4881-4890.	2.5	84
129	Roaming Radical Pathways for the Decomposition of Alkanes. Journal of Physical Chemistry Letters, 2010, 1, 3016-3020.	4.6	7 3
130	Roaming Radical Kinetics in the Decomposition of Acetaldehyde. Journal of Physical Chemistry A, 2010, 114, 765-777.	2.5	125
131	Experimental and Theoretical Investigation of the Self-Reaction of Phenyl Radicals. Journal of Physical Chemistry A, 2010, 114, 8240-8261.	2.5	63
132	Direct Observation of Roaming Radicals in the Thermal Decomposition of Acetaldehyde. Journal of Physical Chemistry A, 2010, 114, 755-764.	2.5	112
133	Formation of NH3 and CH2NH in Titan's upper atmosphere. Faraday Discussions, 2010, 147, 31.	3.2	66
134	A shock-tube and theory study of the dissociation of acetone and subsequent recombination of methyl radicals. Proceedings of the Combustion Institute, 2009, 32, 123-130.	3.9	38
135	Theoretical rate coefficients for the reaction of methyl radical with hydroperoxyl radical and for methylhydroperoxide decomposition. Proceedings of the Combustion Institute, 2009, 32, 279-286.	3.9	87
136	Kinetics of the H+NCO reaction. Proceedings of the Combustion Institute, 2009, 32, 149-155.	3.9	17
137	Thermal Decomposition of NH ₂ OH and Subsequent Reactions: Ab Initio Transition State Theory and Reflected Shock Tube Experiments. Journal of Physical Chemistry A, 2009, 113, 10241-10259.	2.5	86
138	Shock Tube and Theory Investigation of Cyclohexane and 1-Hexene Decomposition. Journal of Physical Chemistry A, 2009, 113, 13570-13583.	2.5	88
139	Detailed balance in multiple-well chemical reactions. Physical Chemistry Chemical Physics, 2009, 11, 1128.	2.8	43
140	A CROSSED MOLECULAR BEAMS STUDY ON THE FORMATION OF THE EXOTIC CYANOETHYNYL RADICAL IN TITAN'S ATMOSPHERE. Astrophysical Journal, 2009, 701, 1797-1803.	4.5	18
141	Kinetics of CH + N ₂ Revisited with Multireference Methods. Journal of Physical Chemistry A, 2008, 112, 522-532.	2.5	62
142	Reactions over Multiple, Interconnected Potential Wells: Unimolecular and Bimolecular Reactions on a C3H5 Potential. Journal of Physical Chemistry A, 2008, 112, 9429-9438.	2.5	73
143	A combined ab initio and photoionization mass spectrometric study of polyynes in fuel-rich flames. Physical Chemistry Chemical Physics, 2008, 10, 366-374.	2.8	68
144	Thermal Decomposition of CF3and the Reaction of CF2+ OH â†' CF2O + H. Journal of Physical Chemistry A, 2008, 112, 31-37.	2.5	30

#	Article	IF	Citations
145	Kinetics and Product Branching Ratios of the Reaction of ¹ CH ₂ with H ₂ and D ₂ . Journal of Physical Chemistry A, 2008, 112, 9575-9583.	2.5	23
146	An experimental and theoretical high temperature kinetic study of the thermal unimolecular dissociation of fluoroethane. Physical Chemistry Chemical Physics, 2008, 10, 6266.	2.8	13
147	Theory of Low Temperature Gas-Phase Reactions. , 2008, , 175-229.		6
148	Direct Measurement and Theoretical Calculation of the Rate Coefficient for Cl + CH3in the Range fromT= 202â~298 K. Journal of Physical Chemistry A, 2007, 111, 1015-1023.	2.5	15
149	Understanding Reactivity at Very Low Temperatures: The Reactions of Oxygen Atoms with Alkenes. Science, 2007, 317, 102-105.	12.6	131
150	Ab initio methods for reactive potential surfaces. Physical Chemistry Chemical Physics, 2007, 9, 4055.	2.8	158
151	Tribute to James A. Miller. Journal of Physical Chemistry A, 2007, 111, 3673-3675.	2.5	0
152	Reaction Kinetics of CO + HO2â†' Products: Ab Initio Transition State Theory Study with Master Equation Modelingâ€. Journal of Physical Chemistry A, 2007, 111, 4031-4042.	2.5	92
153	A Two Transition State Model for Radicalâ-'Molecule Reactions:Â Applications to Isomeric Branching in the OHâ-'Isoprene Reaction. Journal of Physical Chemistry A, 2007, 111, 5582-5592.	2.5	71
154	Association rate constants for reactions between resonance-stabilized radicals: C3H3 + C3H3, C3H3 + C3H5, and C3H5 + C3H5. Physical Chemistry Chemical Physics, 2007, 9, 4259.	2.8	141
155	Theory, measurements, and modeling of OH and HO2 formation in the reaction of cyclohexyl radicals with O2. Physical Chemistry Chemical Physics, 2007, 9, 4315.	2.8	92
156	Reflected Shock Tube and Theoretical Studies of High-Temperature Rate Constants for OH + CF3H ⇆ CF3+ H2O and CF3+ OH → Productsâ€. Journal of Physical Chemistry A, 2007, 111, 6822-6831.	2.5	18
157	Measurements and Modeling of DO2Formation in the Reactions of C2D5and C3D7Radicals with O2â€. Journal of Physical Chemistry A, 2007, 111, 4015-4030.	2.5	31
158	Initial Steps of Aromatic Ring Formation in a Laminar Premixed Fuel-Rich Cyclopentene Flameâ€. Journal of Physical Chemistry A, 2007, 111, 4081-4092.	2.5	102
159	Strange Kinetics of the C2H6+ CN Reaction Explainedâ€. Journal of Physical Chemistry A, 2007, 111, 3802-3811.	2.5	85
160	Secondary Kinetics of Methanol Decomposition:  Theoretical Rate Coefficients for ³ CH ₂ + OH, ³ CH ₂ + ³ CH ₂ , and ³ CH ₂ + CH ₃ . Journal of Physical Chemistry A, 2007, 111, 8699-8707.	2.5	26
161	Performance of the Spin-Flip and Multireference Methods for Bond Breaking in Hydrocarbons:  A Benchmark Study. Journal of Physical Chemistry A, 2007, 111, 13264-13271.	2.5	31
162	On the Combination Reactions of Hydrogen Atoms with Resonance-Stabilized Hydrocarbon Radicalsâ€. Journal of Physical Chemistry A, 2007, 111, 3789-3801.	2.5	111

#	Article	IF	Citations
163	Kinetics of the Reaction of Methyl Radical with Hydroxyl Radical and Methanol Decompositionâ€. Journal of Physical Chemistry A, 2007, 111, 3932-3950.	2.5	188
164	Experimental and theoretical rate constants for CH4 + O2 \hat{a}^{\dagger} CH3 + HO2. Combustion and Flame, 2007, 149, 104-111.	5.2	61
165	On the formation and decomposition of C7H8. Proceedings of the Combustion Institute, 2007, 31, 221-229.	3.9	101
166	Decomposition of acetaldehyde: Experiment and detailed theory. Proceedings of the Combustion Institute, 2007, 31, 167-174.	3.9	42
167	Oxidation pathways in the reaction of diacetylene with OH radicals. Proceedings of the Combustion Institute, 2007, 31, 185-192.	3.9	20
168	Identification and Chemistry of C4H3and C4H5Isomers in Fuel-Rich Flames. Journal of Physical Chemistry A, 2006, 110, 3670-3678.	2.5	143
169	Predictive theory for the combination kinetics of two alkyl radicals. Physical Chemistry Chemical Physics, 2006, 8, 1133.	2.8	202
170	Reaction of Ethylene with Hydroxyl Radicals: A Theoretical Studyâ€. Journal of Physical Chemistry A, 2006, 110, 6960-6970.	2.5	156
171	Master Equation Methods in Gas Phase Chemical Kinetics. Journal of Physical Chemistry A, 2006, 110, 10528-10544.	2.5	386
172	Identification of C5HxIsomers in Fuel-Rich Flames by Photoionization Mass Spectrometry and Electronic Structure Calculations. Journal of Physical Chemistry A, 2006, 110, 4376-4388.	2.5	122
173	Energy-Resolved Photoionization of Alkylperoxy Radicals and the Stability of Their Cations. Journal of the American Chemical Society, 2006, 128, 13559-13567.	13.7	87
174	Pathways and Rate Coefficients for the Decomposition of Vinoxy and Acetyl Radicals. Journal of Physical Chemistry A, 2006, 110, 5772-5781.	2.5	74
175	Modeling the Kinetics of Bimolecular Reactions. Chemical Reviews, 2006, 106, 4518-4584.	47.7	533
176	Dissociation, relaxation, and incubation in the high-temperature pyrolysis of ethane, and a successful RRKM modeling. Proceedings of the Combustion Institute, 2005, 30, 1129-1135.	3.9	63
177	Long-range transition state theory. Journal of Chemical Physics, 2005, 122, 194103.	3.0	236
178	A complete statistical analysis of the reaction between OH and CO. Proceedings of the Combustion Institute, 2005, 30, 945-953.	3.9	40
179	Reactions of oxygen atoms with hydrocarbon radicals: a priori kinetic predictions for the CH3+O, C2H5+O, and C2H3+O reactions. Proceedings of the Combustion Institute, 2005, 30, 985-993.	3.9	54
180	Enols Are Common Intermediates in Hydrocarbon Oxidation. Science, 2005, 308, 1887-1889.	12.6	306

#	Article	IF	Citations
181	Synchrotron photoionization measurements of combustion intermediates: Photoionization efficiency and identification of C3H2 isomers. Physical Chemistry Chemical Physics, 2005, 7, 806.	2.8	113
182	The Addition of Hydrogen Atoms to Diacetylene and the Heats of Formation ofi-C4H3andn-C4H3. Journal of Physical Chemistry A, 2005, 109, 4285-4295.	2.5	61
183	Predictive Theory for Hydrogen Atomâ^'Hydrocarbon Radical Association Kinetics. Journal of Physical Chemistry A, 2005, 109, 4646-4656.	2.5	176
184	Measurements and Modeling of HO2Formation in the Reactions ofn-C3H7andi-C3H7Radicals with O2â€. Journal of Physical Chemistry B, 2005, 109, 8374-8387.	2.6	38
185	The Vinyl + NO Reaction:Â Determining the Products with Time-Resolved Fourier Transform Spectroscopy. Journal of Physical Chemistry A, 2005, 109, 4921-4929.	2.5	9
186	Channel Specific Rate Constants Relevant to the Thermal Decomposition of Disilane. Journal of Physical Chemistry A, 2005, 109, 4911-4920.	2.5	32
187	A Two Transition State Model for Radicalâ [*] Molecule Reactions:Â A Case Study of the Addition of OH to C2H4. Journal of Physical Chemistry A, 2005, 109, 6031-6044.	2.5	218
188	The Reaction of Acetylene with Hydroxyl Radicals. Journal of Physical Chemistry A, 2005, 109, 6045-6055.	2.5	86
189	Kinetics of the reaction of vinyl radicals with NO: Ab initio theory, master equation predictions, and laser absorption measurements. Physical Chemistry Chemical Physics, 2004, 6, 2216-2223.	2.8	25
190	The H + C2H2(+M) â‡,, C2H3(+M) and H + C2H2(+M) â‡,, C2H5(+M) reacti transition-state theory, and solutions to a two-dimensional master equation. Physical Chemistry Chemical Physics, 2004, 6, 1192-1202.	ons: Electi 2.8	ronic structur 139
191	Some Observations Concerning Detailed Balance in Association/Dissociation Reactions. Journal of Physical Chemistry A, 2004, 108, 8296-8306.	2.5	31
192	Vibrational Spectroscopy and Density Functional Theory of Transition-Metal Ionâ^'Benzene and Dibenzene Complexes in the Gas Phase. Journal of the American Chemical Society, 2004, 126, 10981-10991.	13.7	157
193	Development of an Effective Chiral Auxiliary for Hydroxylalkyl Radicals ChemInform, 2003, 34, no.	0.0	0
194	A kinetic issue in reburning: the fate of HCNO. Combustion and Flame, 2003, 135, 357-362.	5.2	51
195	RRKM Theory and Its Implementation. Comprehensive Chemical Kinetics, 2003, , 55-103.	2.3	11
196	Variable reaction coordinate transition state theory: Analytic results and application to the C2H3+Hâ†'C2H4 reaction. Journal of Chemical Physics, 2003, 118, 5442-5455.	3.0	135
197	Measurements, Theory, and Modeling of OH Formation in Ethyl + O2 and Propyl + O2 Reactions. Journal of Physical Chemistry A, 2003, 107, 4415-4427.	2.5	160
198	Product Formation in the Cl-Initiated Oxidation of Cyclopropane. Journal of Physical Chemistry A, 2003, 107, 1992-2002.	2.5	20

#	Article	IF	CITATIONS
199	From the Multiple-Well Master Equation to Phenomenological Rate Coefficients:  Reactions on a C3H4 Potential Energy Surface. Journal of Physical Chemistry A, 2003, 107, 2680-2692.	2.5	216
200	The Recombination of Propargyl Radicals and Other Reactions on a C6H6Potential. Journal of Physical Chemistry A, 2003, 107, 7783-7799.	2.5	368
201	Transition State Theory for Multichannel Addition Reactions:  Multifaceted Dividing Surfaces. Journal of Physical Chemistry A, 2003, 107, 9776-9781.	2.5	147
202	Time-resolved measurements of OH and HO2 product formation in pulsed-photolytic chlorine atom initiated oxidation of neopentane. Physical Chemistry Chemical Physics, 2003, 5, 1584-1592.	2.8	32
203	Photodissociation dynamics of dicyclopropyl ketone at 193 nm: Isomerization of the cyclopropyl ligand. Journal of Chemical Physics, 2003, 119, 7222-7236.	3.0	15
204	Geometric Investigation of Association/Dissociation Kinetics with an Application to the Master Equation for CH3 + CH3 â†" C2H6. Journal of Physical Chemistry A, 2002, 106, 5860-5879.	2.5	24
205	From the Time-Dependent, Multiple-Well Master Equation to Phenomenological Rate Coefficients. Journal of Physical Chemistry A, 2002, 106, 9267-9277.	2.5	184
206	Development of an Effective Chiral Auxiliary for Hydroxyalkyl Radicals. Journal of Organic Chemistry, 2002, 67, 6195-6209.	3.2	26
207	Solution of Some One- and Two-Dimensional Master Equation Models for Thermal Dissociation:  The Dissociation of Methane in the Low-Pressure Limit. Journal of Physical Chemistry A, 2002, 106, 4904-4913.	2.5	127
208	Resolving the mystery of prompt CO2: The HCCO+O2 reaction. Proceedings of the Combustion Institute, 2002, 29, 1209-1217.	3.9	50
209	A theoretical analysis of the CH3+H reaction: isotope effects, the high-pressure limit, and transition state recrossing. Proceedings of the Combustion Institute, 2002, 29, 1229-1236.	3.9	28
210	Infrared frequency-modulation probing of product formation in alkyl + O2 reactions. Part IV.For Part III see ref. 12. Reactions of propyl and butyl radicals with O2Electronic Supplementary Information available. See http://www.rsc.org/suppdata/fd/b1/b102237g/. Faraday Discussions, 2001, 119, 101-120.	3.2	86
211	Kinetic Isotope Effects and Variable Reaction Coordinates in Barrierless Recombination Reactions. Journal of Physical Chemistry A, 2001, 105, 8567-8578.	2.5	24
212	The Recombination of Propargyl Radicals:Â Solving the Master Equation. Journal of Physical Chemistry A, 2001, 105, 7254-7266.	2.5	127
213	Anab initiomolecular dynamics study of S0 ketene fragmentation. Journal of Chemical Physics, 2001, 115, 2134-2145.	3.0	18
214	A theoretical analysis of the reaction between propargyl and molecular oxygen. Faraday Discussions, 2001, 119, 79-100.	3.2	93
215	A direct transition state theory based analysis of the branching in NH2 + NO. Faraday Discussions, 2001, 119, 207-222.	3.2	27
216	Temperature Dependence and Deuterium Kinetic Isotope Effects in the CH (CD) + C2H4(C2D4) Reaction between 295 and 726 K. Journal of Physical Chemistry A, 2001, 105, 5393-5401.	2.5	28

#	Article	IF	Citations
217	Theoretical and Experimental Investigation of the Dynamics of the Production of CO from the CH3 + O and CD3 + O Reactions. Journal of Physical Chemistry A, 2001, 105, 8361-8369.	2.5	87
218	The reaction between ethyl and molecular oxygen II: Further analysis. International Journal of Chemical Kinetics, 2001, 33, 654-668.	1.6	124
219	Sterically promoted zirconium–phosphorus π-bonding: structural investigations of [Cp2Zr(Cl){P(H)Dmp}] and [Cp2Zr{P(H)Dmp}2] (Dmp=2,6-Mes2C6H3). Inorganica Chimica Acta, 2000, 297, 181-190.	2.4	23
220	Theoretical kinetic estimates for the recombination of hydrogen atoms with propargyl and allyl radicals. Proceedings of the Combustion Institute, 2000, 28, 1503-1509.	3.9	27
221	Density functional theory predictions for the binding of transition metal cations to pi systems: from acetylene to coronene and tribenzocyclyne. International Journal of Mass Spectrometry, 2000, 201, 253-267.	1.5	84
222	A theoretical analysis of the reaction between ethyl and molecular oxygen. Proceedings of the Combustion Institute, 2000, 28, 1479-1486.	3.9	105
223	A Theoretical Analysis of the Reaction between Vinyl and Acetylene:Â Quantum Chemistry and Solution of the Master Equation. Journal of Physical Chemistry A, 2000, 104, 7525-7536.	2.5	91
224	Binding Energies of Gas-Phase Metal Ions with Pyrrole:  Experimental and Quantum Chemical Results. Journal of Physical Chemistry A, 2000, 104, 3246-3256.	2.5	89
225	Theoretical Considerations in the NH2 + NO Reaction. Journal of Physical Chemistry A, 2000, 104, 2061-2069.	2.5	74
226	A Summary of "A Direct Transition State Theory Based Study of Methyl Radical Recombination Kinetics― Journal of Physical Chemistry A, 2000, 104, 2351-2354.	2.5	9
227	The spin-forbidden reaction CH(2Î)+N2→HCN+N(4S) revisited. II. Nonadiabatic transition state theory and application. Journal of Chemical Physics, 1999, 110, 9469-9482.	3.0	118
228	Binding energies of chromium cations with fluorobenzenes from radiative association kinetics. International Journal of Mass Spectrometry, 1999, 185-187, 913-923.	1.5	19
229	Angular momentum conservation in the O + OH ? O2 + H reaction. International Journal of Chemical Kinetics, 1999, 31, 753-756.	1.6	18
230	A theoretical study of the kinetics of C2H3+H. Physical Chemistry Chemical Physics, 1999, 1, 989-997.	2.8	28
231	A Direct Transition State Theory Based Study of Methyl Radical Recombination Kinetics. Journal of Physical Chemistry A, 1999, 103, 9388-9398.	2.5	77
232	Theory and Modeling of the Binding in Cationic Transition-Metalâ^Benzene Complexes. Journal of Physical Chemistry A, 1999, 103, 1094-1103.	2.5	78
233	Angular momentum conservation in the O + OH â†" O2 + H reaction. , 1999, 31, 753.		1
234	A theoretical analysis of the reaction of H with C2H5. Proceedings of the Combustion Institute, 1998, 27, 151-157.	0.3	13

#	Article	IF	Citations
235	Transition-State Theory Based Modeling of the Dynamics of the $O+(4S) + CO2$ Reaction. Journal of Physical Chemistry A, 1998, 102, 9811-9818.	2.5	5
236	Temperature Dependence of Radiative Association Rates. Journal of Physical Chemistry A, 1998, 102, 8865-8870.	2.5	18
237	A Theoretical and Experimental Study of the CN + NO Association Reaction. Journal of Physical Chemistry A, 1998, 102, 6973-6980.	2.5	15
238	Binding Energies of Ag+ and Cd+ Complexes from Analysis of Radiative Association Kinetics. Journal of Physical Chemistry A, 1997, 101, 3338-3347.	2.5	91
239	Experiments and Theory on the Thermal Decomposition of CHCl3and the Reactions of CCl2. Journal of Physical Chemistry A, 1997, 101, 8653-8661.	2.5	58
240	Variable reaction coordinate direct RRKM theory. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1997, 101, 423-437.	0.9	32
241	Current Status of Transition-State Theory. The Journal of Physical Chemistry, 1996, 100, 12771-12800.	2.9	1,795
242	Radiative Association of NO+with 3-Pentanone:Â Rate, Binding Energy, and Temperature Dependence. Journal of the American Chemical Society, 1996, 118, 5462-5468.	13.7	36
243	Binding Energy of Al(C6H6)+from Analysis of Radiative Association Kinetics. Journal of the American Chemical Society, 1996, 118, 5277-5283.	13.7	102
244	Theory and modeling of ion–molecule radiative association kinetics. Journal of Chemical Physics, 1996, 104, 4502-4516.	3.0	70
245	A high level ab initio map and direct statistical treatment of the fragmentation of singlet ketene. Journal of Chemical Physics, 1996, 105, 118-140.	3.0	81
246	A combined quantum chemical and transition state theory study of the C2H+2+CH4 reaction dynamics. Journal of Chemical Physics, 1996, 104, 5437-5445.	3.0	19
247	TRANSITION STATES IN BARRIERLESS REACTIONS. Advanced Series in Physical Chemistry, 1996, , 120-163.	1.5	2
248	The anharmonic force field and equilibrium molecular structure of ketene. Journal of Chemical Physics, 1995, 102, 8506-8532.	3.0	106
249	Infrared Spectral Properties of the Naphthalene Cation: Radiative Cooling Kinetics Experiments and Density Functional Calculations. The Journal of Physical Chemistry, 1995, 99, 12115-12124.	2.9	31
250	Comparisons between statistics, dynamics, and experiment for the H+O2â†'OH+O reaction. Journal of Chemical Physics, 1995, 103, 7287-7298.	3.0	44
251	Auxiliary Induced .rhoStereocontrol in Acetaloxyalkyl Radical Addition Reactions. Journal of the American Chemical Society, 1995, 117, 4183-4184.	13.7	26
252	Trajectory simulations for unimolecular dissociations with application to the dissociation of NCNO. Journal of Chemical Physics, 1994, 101, 1996-2005.	3.0	18

#	Article	IF	Citations
253	A first principles theoretical determination of the rate constant for the dissociation of singlet ketene. Journal of Chemical Physics, 1994, 101, 9198-9201.	3.0	22
254	An Efficient Procedure for Evaluating the Number of Available States within a Variably Defined Reaction Coordinate Framework. The Journal of Physical Chemistry, 1994, 98, 11459-11464.	2.9	166
255	The fragmentation pattern of 1,4-dioxane ion. International Journal of Mass Spectrometry and Ion Processes, 1993, 128, 21-30.	1.8	6
256	Variational statistical study of the CN+O2 reaction employing ab initio determined properties for the transition state. Journal of Chemical Physics, 1993, 99, 5790-5799.	3.0	46
257	A theoretical study of the dissociation of NO2. Journal of Chemical Physics, 1993, 99, 3644-3653.	3.0	50
258	A combined theoretical and experimental study of the dissociation of benzene cation. Journal of Chemical Physics, 1993, 98, 243-256.	3.0	75
259	Comparison of variational Rice–Ramsperger–Kassel–Marcus theory with quantum scattering theory for the He+H+2 →HeH++H reaction. Journal of Chemical Physics, 1992, 96, 8164-8170.	3.0	24
260	Variational optimizations in the Rice–Ramsperger–Kassel–Marcus theory calculations for unimolecular dissociations with no reverse barrier. Journal of Chemical Physics, 1992, 96, 367-371.	3.0	268
261	Comparison of variational RRKM theory with quantum scattering theory for the Ne+H+2â†'NeH++H reaction. Chemical Physics Letters, 1992, 195, 513-517.	2.6	6
262	A bond length reaction coordinate for unimolecular reactions. II. Microcanonical and canonical implementations with application to the dissociation of NCNO. Journal of Chemical Physics, 1991, 94, 6469-6482.	3.0	119
263	Variational calculation of the rate of dissociation of ethenone into methylene and carbon monoxide on an ab initio determined potential energy surface. The Journal of Physical Chemistry, 1991, 95, 9882-9889.	2.9	34
264	Intramolecular dynamics. I. Curvilinear normal modes, local modes, molecular anharmonic Hamiltonian, and application to benzene. Journal of Chemical Physics, 1991, 94, 7319-7334.	3.0	38
265	Implementation of RRKM theory for highly flexible transition states with a bond length as the reaction coordinate. Chemical Physics Letters, 1990, 170, 71-77.	2.6	109
266	Application of unimolecular reaction rate theory for highly flexible transition states to the dissociation of CH2CO into CH2 and CO. II. Photofragment excitation spectra for vibrationallyâ€excited fragments. Journal of Chemical Physics, 1990, 93, 2418-2424.	3.0	53
267	Application of unimolecular reaction rate theory for highly flexible transition states to the dissociation of CH2CO into CH2 and CO. Journal of Chemical Physics, 1989, 91, 2280-2292.	3.0	103
268	Application of artificial intelligence methods to intramolecular dynamics calculations. Chemical Physics Letters, 1988, 146, 7-12.	2.6	12
269	Application of unimolecular reaction rate theory for highly flexible transition states to the dissociation of NCNO into NC and NO. Journal of Chemical Physics, 1988, 89, 4761-4770.	3.0	128
270	Unimolecular reaction rate theory for highly flexible transition states: use of conventional coordinates. The Journal of Physical Chemistry, 1988, 92, 3105-3109.	2.9	42

#	Article	lF	CITATIONS
271	Unimolecular reaction rate theory for highly flexible transition states. 2. Conventional coordinate formulas for the various possible fragment combinations: miscellaneous topics. The Journal of Physical Chemistry, 1988, 92, 5412-5417.	2.9	36
272	High pressure rate constants for unimolecular dissociation/free radical recombination: Determination of the quantum correction via quantum Monte Carlo path integration. Journal of Chemical Physics, 1987, 87, 3410-3417.	3.0	104
273	Iteratively determined effective Hamiltonians for the adiabatically reduced coupled equations approach to intramolecular dynamics calculations. Journal of Chemical Physics, 1986, 85, 5019-5026.	3.0	7
274	A test of two approximate twoâ€state treatments for the dynamics of Hâ€atom transfers between two heavy particles. Journal of Chemical Physics, 1986, 85, 1924-1930.	3.0	10
275	A semiclassical model for orientation effects in electron transfer reactions. Journal of Chemical Physics, 1986, 84, 3089-3098.	3.0	20
276	Energy-resolved and time-dependent unimolecular dissociation of hydroperoxyalkyl radicals (˙QOOH). Faraday Discussions, 0, 238, 575-588.	3.2	2