

# John R Barker

## List of Publications by Year in descending order

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149  
papers

9,036  
citations

38742

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42399

92  
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152  
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152  
docs citations

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times ranked

3938  
citing authors

#	ARTICLE	IF	CITATIONS
1	CH <sub>2</sub> + O <sub>2</sub> : reaction mechanism, biradical and zwitterionic character, and formation of CH <sub>2</sub> OO, the simplest Criegee intermediate. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 914-927.	2.8	4
2	A pioneer of direct measurements to advance modern gas-phase chemical kinetics. <i>International Journal of Chemical Kinetics</i> , 2021, 53, 3-6.	1.6	0
3	New light on acetone: a master equation model for gas phase photophysics and photochemistry. <i>Molecular Physics</i> , 2021, 119, .	1.7	1
4	Semiclassical transition state theory/master equation kinetics of HO + CO: Performance evaluation. <i>International Journal of Chemical Kinetics</i> , 2020, 52, 1022-1045.	1.6	9
5	High temperature unimolecular decomposition of cyclopentanone. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 267-273.	3.9	10
6	Experiments on collisional energy transfer. <i>Comprehensive Chemical Kinetics</i> , 2019, , 3-62.	2.3	6
7	Monte Carlo stochastic simulation of the master equation for unimolecular reaction systems. <i>Comprehensive Chemical Kinetics</i> , 2019, , 409-463.	2.3	5
8	Atmospheric Reaction Rate Constants and Kinetic Isotope Effects Computed Using the HEAT Protocol and Semi-Classical Transition State Theory. , 2017, , 403-492.		7
9	$\langle \text{OH} \rangle + \text{Isoprene}$ : A Direct Dynamics Study. <i>Bulletin of the Korean Chemical Society</i> , 2017, 38, 651-660.	1.9	4
10	Predicted Chemical Activation Rate Constants for HO <sub>2</sub> + CH <sub>2</sub> NH: The Dominant Role of a Hydrogen-Bonded Pre-reactive Complex. <i>Journal of Physical Chemistry A</i> , 2016, 120, 7060-7070.	2.5	29
11	Reply to "Comment on "When Rate Constants Are Not Enough". <i>Journal of Physical Chemistry A</i> , 2016, 120, 313-317.	2.5	5
12	HO + OCIO Reaction System: Featuring a Barrierless Entrance Channel with Two Transition States. <i>Journal of Physical Chemistry A</i> , 2015, 119, 5723-5731.	2.5	20
13	Comparison of Three Isoelectronic Multiple-Well Reaction Systems: OH + CH <sub>2</sub> O, OH + CH <sub>2</sub> CH <sub>2</sub> , and OH + CH <sub>2</sub> NH. <i>Journal of Physical Chemistry A</i> , 2015, 119, 7578-7592.	2.5	47
14	When Rate Constants Are Not Enough. <i>Journal of Physical Chemistry A</i> , 2015, 119, 7451-7461.	2.5	18
15	Theoretical Study on the Kinetics of the Reaction CH <sub>2</sub> Br + NO <sub>2</sub> . <i>Journal of Physical Chemistry A</i> , 2014, 118, 3313-3318.	2.5	4
16	CH <sub>2</sub> NH <sub>2</sub> + O <sub>2</sub> and CH <sub>3</sub> CHNH <sub>2</sub> + O <sub>2</sub> Reaction Kinetics: Photoionization Mass Spectrometry Experiments and Master Equation Calculations. <i>Journal of Physical Chemistry A</i> , 2014, 118, 2176-2186.	2.5	52
17	HO + CO Reaction Rates and H/D Kinetic Isotope Effects: Master Equation Models with ab Initio SCTST Rate Constants. <i>Journal of Physical Chemistry A</i> , 2013, 117, 821-835.	2.5	61
18	Nitrogen Oxides: Vehicle Emissions and Atmospheric Chemistry. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , 2013, , 101-113.	0.2	1

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19	Water Effect on the OH + HCl Reaction. <i>Journal of Physical Chemistry A</i> , 2012, 116, 4712-4719.	2.5	63
20	Reaction of HO with CO: Tunneling Is Indeed Important. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1549-1553.	4.6	79
21	Kinetic Isotope Effects for $\text{Cl} + \text{CH}_4 \rightarrow \text{HCl} + \text{CH}_3$ Calculated Using ab Initio Semiclassical Transition State Theory. <i>Journal of Physical Chemistry A</i> , 2012, 116, 6408-6419.	2.5	56
22	Mechanism and Kinetics of the Reaction $\text{NO}_3 + \text{C}_2\text{H}_4$ . <i>Journal of Physical Chemistry A</i> , 2011, 115, 4894-4901.	2.5	15
23	Ab Initio Reaction Rate Constants Computed Using Semiclassical Transition-State Theory: $\text{HO} + \text{H}_2\text{O} \rightarrow \text{H} + \text{H}_2\text{O} + \text{H}$ and Isotopologues. <i>Journal of Physical Chemistry A</i> , 2011, 115, 5118-5126.	2.5	109
24	Pressure- and temperature-dependent combustion reactions. <i>Combustion and Flame</i> , 2011, 158, 602-617.	5.2	38
25	Sums and Densities of Fully Coupled Anharmonic Vibrational States: A Comparison of Three Practical Methods. <i>Journal of Physical Chemistry A</i> , 2010, 114, 3718-3730.	2.5	105
26	A practical implementation of semi-classical transition state theory for polyatomics. <i>Chemical Physics Letters</i> , 2010, 499, 9-15.	2.6	92
27	Collisional Energy Transfer Probability Densities $\langle P \rangle$ , $\langle E \rangle$ , $\langle J \rangle$ , $\langle E^2 \rangle$ , $\langle J^2 \rangle$ for Monatomics Colliding with Large Molecules. <i>Journal of Physical Chemistry A</i> , 2010, 114, 10619-10633.	2.5	53
28	Energy transfer in master equation simulations: A new approach. <i>International Journal of Chemical Kinetics</i> , 2009, 41, 748-763.	1.6	227
29	Non-RRKM Dynamics in the $\text{CH}_3\text{O}_2 + \text{NO}$ Reaction System. <i>Journal of Physical Chemistry A</i> , 2008, 112, 2553-2562.	2.5	25
30	Tropospheric Oxidation of Ethyne and But-2-yne. 1. Theoretical Mechanistic Study. <i>Journal of Physical Chemistry A</i> , 2008, 112, 3656-3665.	2.5	22
31	Oxidation of Ethyne and But-2-yne. 2. Master Equation Simulations. <i>Journal of Physical Chemistry A</i> , 2008, 112, 3666-3675.	2.5	21
32	Master equation simulations of competing unimolecular and bimolecular reactions: application to OH production in the reaction of acetyl radical with O <sub>2</sub> . <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 4129.	2.8	62
33	On the Chaperon Mechanism: Application to $\text{ClO} + \text{ClO} (+\text{N}_2) \rightarrow \text{ClOCl} (+\text{N}_2)$ . <i>Journal of Physical Chemistry A</i> , 2007, 111, 8689-8698.	2.5	10
34	Quasiclassical Trajectory Simulations of $\text{OH}(v) + \text{NO}_2 \rightarrow \text{HONO}_2^* \rightarrow \text{OH}(v') + \text{NO}_2$ : Capture and Vibrational Deactivation Rate Constants. <i>Journal of Physical Chemistry A</i> , 2006, 110, 1267-1277.	2.5	10
35	On Modeling the Pressure-dependent Photoisomerization of trans-Stilbene by Including Slow Intramolecular Vibrational Energy Redistribution. <i>Journal of Physical Chemistry A</i> , 2006, 110, 7888-7897.	2.5	23
36	Intramolecular Vibrational Energy Redistribution Involving the Torsion in $\text{CF}_3\text{CH}_3$ : A Molecular Dynamics Study. <i>Journal of Physical Chemistry A</i> , 2006, 110, 6851-6859.	2.5	10

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37	CF <sub>3</sub> CH <sub>3</sub> + HF + CF <sub>2</sub> CH <sub>2</sub> : A Non-RRKM Reaction?. Journal of Physical Chemistry A, 2006, 110, 2944-2954.	2.5	21
38	Quasi-Classical Trajectory Simulations of Intramolecular Vibrational Energy Redistribution in HONO <sub>2</sub> and DONO <sub>2</sub> . Journal of Physical Chemistry B, 2005, 109, 8304-8309.	2.6	18
39	Master Equation Models for the Pressure- and Temperature-Dependent Reactions HO + NO <sub>2</sub> → HONO <sub>2</sub> and HO + NO <sub>2</sub> → HOONO. ChemInform, 2004, 35, no.	0.0	1
40	Free Radical Reactions Involving Cl <sup>•</sup> , Cl <sub>2</sub> <sup>•</sup> , and SO <sub>4</sub> <sup>•</sup> in the 248 nm Photolysis of Aqueous Solutions Containing S <sub>2</sub> O <sub>8</sub> <sup>2-</sup> and Cl <sup>-</sup> . ChemInform, 2004, 35, no.	0.0	2
41	An approximation for hindered rotor state energies. Chemical Physics Letters, 2004, 383, 203-207.	2.6	20
42	Free Radical Reactions Involving Cl <sup>•</sup> , Cl <sub>2</sub> <sup>•</sup> , and SO <sub>4</sub> <sup>•</sup> in the 248 nm Photolysis of Aqueous Solutions Containing S <sub>2</sub> O <sub>8</sub> <sup>2-</sup> and Cl <sup>-</sup> . Journal of Physical Chemistry A, 2004, 108, 295-308.	2.5	300
43	Modeling the Organic Nitrate Yields in the Reaction of Alkyl Peroxy Radicals with Nitric Oxide. 1. Electronic Structure Calculations and Thermochemistry. Journal of Physical Chemistry A, 2003, 107, 7429-7433.	2.5	57
44	Effects of Temperature and Ionic Strength on the Rate and Equilibrium Constants for the Reaction I <sup>•</sup> (aq) + I <sub>2</sub> <sup>•</sup> (aq). Journal of Physical Chemistry A, 2003, 107, 10296-10302.	2.5	15
45	Modeling the Organic Nitrate Yields in the Reaction of Alkyl Peroxy Radicals with Nitric Oxide. 2. Reaction Simulations. Journal of Physical Chemistry A, 2003, 107, 7434-7444.	2.5	60
46	Hydrogen Peroxide Photolysis in Acidic Aqueous Solutions Containing Chloride Ions. II. Quantum Yield of HO <sup>•</sup> (Aq) Radicals. Journal of Physical Chemistry A, 2003, 107, 1325-1332.	2.5	77
47	Hydrogen Peroxide Photolysis in Acidic Aqueous Solutions Containing Chloride Ions. I. Chemical Mechanism. Journal of Physical Chemistry A, 2003, 107, 1313-1324.	2.5	146
48	Master Equation Analysis of Pressure-Dependent Atmospheric Reactions. Chemical Reviews, 2003, 103, 4577-4592.	47.7	97
49	Master Equation Models for the Pressure- and Temperature-Dependent Reactions HO + NO <sub>2</sub> → HONO <sub>2</sub> and HO + NO <sub>2</sub> → HOONO. Journal of Physical Chemistry A, 2003, 107, 11057-11071.	2.5	65
50	Temperature-Dependent Rate and Equilibrium Constants for Br <sup>•</sup> (aq) + Br <sup>-</sup> (aq) → Br <sub>2</sub> <sup>•</sup> (aq). Journal of Physical Chemistry A, 2002, 106, 11075-11082.	2.5	18
51	Vibrational Energy Transfer Modeling of Nonequilibrium Polyatomic Reaction Systems. Journal of Physical Chemistry A, 2001, 105, 796-809.	2.5	109
52	Empirical potentials for rovibrational energy transfer of hydrogen fluoride in collisions with argon. Journal of Chemical Physics, 2001, 115, 4573-4585.	3.0	13
53	Multiple-Well, multiple-path unimolecular reaction systems. I. MultiWell computer program suite. International Journal of Chemical Kinetics, 2001, 33, 232-245.	1.6	517
54	Multiple-Well, multiple-path unimolecular reaction systems. II. 2-methylhexyl free radicals. International Journal of Chemical Kinetics, 2001, 33, 246-261.	1.6	70

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55	Multiple-Well, multiple-path unimolecular reaction systems. II. 2-methylhexyl free radicals. <i>International Journal of Chemical Kinetics</i> , 2001, 33, 246-261.	1.6	1
56	Recoil Energy Distributions in van der Waals Cluster Vibrational Predissociation. <i>ACS Symposium Series</i> , 2000, , 151-166.	0.5	3
57	Identifying trapping desorption in gas-surface scattering. <i>Chemical Physics Letters</i> , 2000, 329, 84-91.	2.6	61
58	Time of flight measurement of recoil energy distributions from vibrational predissociation of van der Waals clusters. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 813-821.	2.8	16
59	Quasiclassical Trajectory Simulations of Pyrazine-Argon and Methylpyrazine-Argon van der Waals Cluster Predissociation and Collisional Energy Transfer. <i>Journal of Physical Chemistry A</i> , 2000, 104, 10184-10193.	2.5	28
60	Photochemical Kinetics of Vibrationally Excited Ozone Produced in the 248 nm Photolysis of O <sub>2</sub> /O <sub>3</sub> Mixtures. <i>Journal of Physical Chemistry A</i> , 2000, 104, 6218-6226.	2.5	21
61	Ion imaging the recoil energy distribution following vibrational predissociation of triplet state pyrazine-Ar van der Waals clusters. <i>Chemical Physics Letters</i> , 1999, 302, 602-608.	2.6	31
62	An introduction to global warming. <i>American Journal of Physics</i> , 1999, 67, 1216-1226.	0.7	19
63	A reduced mechanism for methanol oxidation in supercritical water. <i>Chemical Engineering Science</i> , 1998, 53, 857-867.	3.8	61
64	Deactivation of highly excited CS <sub>2</sub> and SO <sub>2</sub> by rare gases. <i>Journal of Chemical Physics</i> , 1998, 108, 2383-2394.	3.0	19
65	Stalking the Step-Size Distribution: A Statistical-Dynamical Theory for Large-Molecule Collisional Energy Transfer. <i>ACS Symposium Series</i> , 1997, , 220-236.	0.5	3
66	A state-to-state statistical-dynamical theory for large molecule collisional energy transfer. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1997, 101, 566-573.	0.9	22
67	Temperature and Ionic Strength Effects on Some Reactions Involving Sulfate Radical [SO <sub>4</sub> -(aq)]. <i>The Journal of Physical Chemistry</i> , 1996, 100, 9780-9787.	2.9	53
68	Memory effects during collisional energy transfer from highly excited CS <sub>2</sub> . <i>Chemical Physics Letters</i> , 1996, 259, 225-232.	2.6	9
69	Kinetics and Mechanism of Methanol Oxidation in Supercritical Water. <i>The Journal of Physical Chemistry</i> , 1996, 100, 15834-15842.	2.9	109
70	Temperature effects in the collisional deactivation of highly vibrationally excited pyrazine by unexcited pyrazine. <i>Journal of Chemical Physics</i> , 1996, 105, 3012-3018.	3.0	37
71	Collisional deactivation of highly vibrationally excited pyrazine. <i>Journal of Chemical Physics</i> , 1996, 105, 1383-1391.	3.0	65
72	Vibrational energy transfer in shock-heated norbornene. <i>Journal of Chemical Physics</i> , 1995, 103, 4953-4966.	3.0	34

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73	Absolute integrated cross sections for some O <sub>2</sub> Herzberg I transitions near 248–249 nm. Journal of Chemical Physics, 1995, 103, 6-13.	3.0	7
74	Population distributions in the vibrational deactivation of benzene and benzene-d <sub>6</sub> . First and second moments derived from two-color infrared fluorescence measurements. Chemical Physics, 1993, 175, 99-111.	1.9	50
75	Infrared emission studies of the vibrational deactivation of benzene derivatives. International Reviews in Physical Chemistry, 1993, 12, 305-338.	2.3	95
76	Polycyclic Aromatic Hydrocarbon Formation in Carbon-rich Stellar Envelopes: Erratum. Astrophysical Journal, 1993, 413, 445.	4.5	9
77	Radiative recombination in the electronic ground state. The Journal of Physical Chemistry, 1992, 96, 7361-7367.	2.9	30
78	Isotope effects in the vibrational deactivation of large molecules. Journal of Chemical Physics, 1992, 97, 1809-1817.	3.0	71
79	Odd oxygen formation in the laser irradiation of O <sub>2</sub> at 248 nm: Evidence for reactions of O <sub>2</sub> in the Herzberg states with ground state O <sub>2</sub> . Journal of Geophysical Research, 1992, 97, 13039-13050.	3.3	21
80	Polycyclic aromatic hydrocarbons and molecular equilibria in carbon-rich stars. Astrophysical Journal, 1992, 394, 703.	4.5	61
81	Polycyclic aromatic hydrocarbon formation in carbon-rich stellar envelopes. Astrophysical Journal, 1992, 401, 269.	4.5	299
82	Infrared emission spectra of benzene and naphthalene - Implications for the interstellar polycyclic aromatic hydrocarbon hypothesis. Astrophysical Journal, 1992, 388, L39.	4.5	72
83	Excitation of CO <sub>2</sub> by energy transfer from highly vibrationally excited benzene derivatives. Journal of Chemical Physics, 1991, 95, 8108-8119.	3.0	50
84	Vibrational relaxation of highly excited toluene. Journal of Chemical Physics, 1991, 95, 176-188.	3.0	102
85	Polycyclic aromatic hydrocarbon optical properties and contribution to the acceleration of stellar outflows. Astrophysical Journal, 1991, 377, 541.	4.5	36
86	Collisional deactivation of highly vibrationally excited benzene pumped at 248 nm. The Journal of Physical Chemistry, 1990, 94, 6341-6350.	2.9	95
87	Incubation in cyclohexene decomposition at high temperatures. International Journal of Chemical Kinetics, 1990, 22, 187-206.	1.6	24
88	Kinetic studies of the deactivation of O <sub>2</sub> ( <sup>1</sup> g+) and O( <sup>1</sup> D). International Journal of Chemical Kinetics, 1990, 22, 1283-1301.	1.6	47
89	Quantum effects in large molecule collisional energy transfer?. Chemical Physics Letters, 1990, 174, 304-308.	2.6	38
90	Time dependent thermal lensing measurements of V <sub>0</sub> energy transfer from highly excited NO <sub>2</sub> . Journal of Chemical Physics, 1990, 92, 4793-4804.	3.0	48

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91	Emission from ozone excited electronic states. The Journal of Physical Chemistry, 1990, 94, 8390-8393.	2.9	16
92	Grains, or Molecules? Thermal, or non-Thermal?. Symposium - International Astronomical Union, 1989, 135, 197-205.	0.1	0
93	Reactant states model: Predicted $k(E, J)$ for $\text{NO}_2(2A_1) + \text{O}(3P) + \text{NO}(2\tilde{\Gamma})$ , based on spectroscopic data. Journal of Chemical Physics, 1989, 91, 2239-2253.	3.0	22
94	RO-Vibrational state densities based on spectroscopic data for non-separable systems. Chemical Physics Letters, 1989, 159, 499-504.	2.6	18
95	Symmetry-specific densities of rovibrational energy levels for nonseparable systems. The Journal of Physical Chemistry, 1989, 93, 6578-6581.	2.9	7
96	Grains, or Molecules? Thermal, or Non-Thermal?. , 1989, , 197-205.		7
97	PHOTOTHERMAL STUDIES OF ENERGY TRANSFER AND REACTION RATES. , 1989, , 155-190.		5
98	Infrared emission from a polycyclic aromatic hydrocarbon (PAH) excited by ultraviolet laser. Astrophysical Journal, 1989, 341, L21.	4.5	43
99	Interstellar polycyclic aromatic hydrocarbons - The infrared emission bands, the excitation/emission mechanism, and the astrophysical implications. Astrophysical Journal, Supplement Series, 1989, 71, 733.	7.7	1,143
100	Energy-dependent collisional deactivation of vibrationally excited azulene. Journal of Chemical Physics, 1988, 88, 6219-6227.	3.0	93
101	Energy dependence of infrared emission from azulene C-H stretching vibrations. Journal of Chemical Physics, 1988, 88, 6211-6218.	3.0	47
102	Sums of quantum states of nonseparable degrees of freedom: multidimensional Monte Carlo integration. The Journal of Physical Chemistry, 1987, 91, 3849-3854.	2.9	47
103	Anharmonicity and the interstellar polycyclic aromatic hydrocarbon infrared emission spectrum. Astrophysical Journal, 1987, 315, L61.	4.5	111
104	Vibrationally excited populations from IR-multiphoton absorption. 3. Energy transfer between 1,1,2-trifluoroethane and argon. The Journal of Physical Chemistry, 1986, 90, 461-465.	2.9	25
105	Experimental Studies of Population Distributions Produced by Infrared Multiphoton Absorption. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1985, 89, 301-303.	0.9	7
106	N <sub>2</sub> O <sub>5</sub> photolysis products investigated by fluorescence and optoacoustic techniques. International Journal of Chemical Kinetics, 1985, 17, 991-1006.	1.6	12
107	Vibrationally excited populations from IR-multiphoton absorption. II. Infrared fluorescence measurements. Journal of Chemical Physics, 1985, 83, 6261-6267.	3.0	26
108	Collisional energy transfer and macroscopic disequilibrium. Application to azulene. Journal of Chemical Physics, 1985, 83, 124-132.	3.0	40

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109	Vibrationally excited populations from IR-multiphoton absorption. I. Absorbed energy and reaction yield measurements. <i>Journal of Chemical Physics</i> , 1985, 83, 6251-6260.	3.0	25
110	Polycyclic aromatic hydrocarbons and the unidentified infrared emission bands - Auto exhaust along the Milky Way. <i>Astrophysical Journal</i> , 1985, 290, L25.	4.5	1,035
111	Temperature-dependent energy transfer: direct experiments using azulene. <i>The Journal of Physical Chemistry</i> , 1984, 88, 1012-1017.	2.9	72
112	Continuity and growth: An editorial. <i>International Journal of Chemical Kinetics</i> , 1984, 16, i-ii.	1.6	0
113	Computational study of the hydroperoxo + hydroperoxo and hydroperoxo-d + hydroperoxo-d reactions. <i>The Journal of Physical Chemistry</i> , 1984, 88, 128-136.	2.9	33
114	Direct measurements of energy-transfer involving large molecules in the electronic ground state. <i>The Journal of Physical Chemistry</i> , 1984, 88, 11-18.	2.9	120
115	Monte Carlo calculations on unimolecular reactions, energy transfer, and IR-multiphoton decomposition. <i>Chemical Physics</i> , 1983, 77, 301-318.	1.9	90
116	Optoacoustic measurements of IR multiphoton excitation of cis-1,4-dichlorocyclobutene. <i>Journal of Chemical Physics</i> , 1983, 78, 2163-2169.	3.0	21
117	Energy-dependent energy transfer: Deactivation of azulene ( $S_0, \text{Evib}$ ) by 17 collider gases. <i>Journal of Chemical Physics</i> , 1983, 78, 6695-6708.	3.0	159
118	Infrared multiphoton photophysics: Decomposition of $C_nF_{2n+1}I$ ( $n = 1, 2, 3$ ). <i>Journal of Chemical Physics</i> , 1982, 76, 406-416.	3.0	18
119	Reaction rate constant for $OH + HOONO_2$ products over the temperature range 246 to 324 K. <i>The Journal of Physical Chemistry</i> , 1982, 86, 1661-1669.	2.9	14
120	Theory of the time-dependent-thermal-lensing (TDTL) technique as used in energy-transfer experiments. <i>Chemical Physics</i> , 1982, 68, 331-339.	1.9	43
121	Laser-induced chemical kinetics: Absolute rate constants for the reactions $CF_2 + Br_2 \rightarrow C_2F_5Br + F_2$ and $n-C_3F_7 + Br_2 \rightarrow n-C_3F_7Br + F_2$ . <i>International Journal of Chemical Kinetics</i> , 1982, 14, 499-506.	1.6	7
122	IR photochemistry: A unified approach for single-channel reactions. A simple approximate solution of the master equation. <i>Chemical Physics Letters</i> , 1982, 86, 55-58.	2.6	7
123	Infrared fluorescence and collisional energy transfer parameters for vibrationally excited azulene* ( $S_0$ ): dependence on internal energy ( $E_{vib}$ ). <i>Chemical Physics Letters</i> , 1982, 85, 21-26.	2.6	45
124	Level-to-level vibrational energy transfer studies: energy dependence and observation of product species for azulenes ( $S_0, E_{vib}$ ) + $CO_2$ . <i>Chemical Physics Letters</i> , 1982, 90, 99-104.	2.6	22
125	Time-dependent-thermal-lensing (TDTL) studies on gas-phase azulene. <i>Chemical Physics</i> , 1982, 68, 341-349.	1.9	29
126	Infrared multiphoton decomposition: photochemistry and photophysics. <i>Accounts of Chemical Research</i> , 1981, 14, 56-62.	15.6	56



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127	O(3P) + HOONO2 ? products: Temperature-dependent rate constant. International Journal of Chemical Kinetics, 1981, 13, 1151-1161.	1.6	3
128	H + HOONO2 ? products: Temperature-dependent rate constant. International Journal of Chemical Kinetics, 1981, 13, 1163-1174.	1.6	3
129	Energy transfer rates for vibrationally excited gas-phase azulene in the electronic ground state. Chemical Physics Letters, 1981, 78, 253-258.	2.6	55
130	IR photochemistry: A unified approach for single-channel reactions. II. Treatment of experimental data. Journal of Chemical Physics, 1981, 74, 3823-3830.	3.0	31
131	IR photochemistry: A unified approach for single-channel reactions. I. Theory and computational examples. Journal of Chemical Physics, 1981, 74, 3813-3822.	3.0	31
132	Infrared multiphoton decomposition: A comparison of approximate models and exact solutions of the energy-grained master equation. Journal of Chemical Physics, 1980, 72, 3686-3694.	3.0	75
133	Infrared multiphoton dissociation yields via a versatile new technique: intensity, fluence, and wavelength dependence for CF3I. Chemical Physics Letters, 1979, 65, 523-526.	2.6	46
134	Chlorine nitrate photolysis by a new technique: very low pressure photolysis. Chemical Physics Letters, 1979, 60, 385-390.	2.6	41
135	Reaction of NO with hypochlorous acid. International Journal of Chemical Kinetics, 1979, 11, 843-851.	1.6	11
136	Infrared multiphoton chemistry: Comparison of theory and experiment, solution of the master equation. Chemical Physics Letters, 1979, 62, 178-180.	2.6	36
137	Infrared multiphoton generation of radicals: A new technique for obtaining absolute rate constants. Application to reactions of CF3. Journal of Chemical Physics, 1979, 71, 3722-3727.	3.0	59
138	Photochemical smog. Rate parameter estimates and computer simulations. The Journal of Physical Chemistry, 1977, 81, 2483-2492.	2.9	127
139	Infrared photodecomposition of ethyl vinyl ether. A chemical probe of multiphoton dynamics. Journal of the American Chemical Society, 1977, 99, 8063-8064.	13.7	30
140	The decomposition of dimethyl peroxide and the rate constant for CH3O + O2 ? CH2O + HO2. International Journal of Chemical Kinetics, 1977, 9, 31-53.	1.6	82
141	A modified model for quenching and electronic-vibrational energy transfer. Chemical Physics, 1976, 18, 175-188.	1.9	24
142	Energy-dependent cross sections for quenching of Na(3p <sup>2</sup> P) by several gases. Journal of Chemical Physics, 1976, 65, 1427-1442.	3.0	76
143	VLPP unimolecular rate theory. International Journal of Chemical Kinetics, 1975, 7, 943-949.	1.6	1
144	Failure of intramolecular energy relaxation in unimolecular reaction systems. Journal of Chemical Physics, 1974, 60, 2932-2933.	3.0	24

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145	Intramolecular vibrational energy relaxation. Decomposition of a series of chemically activated fluoroalkyl cyclopropanes. <i>The Journal of Physical Chemistry</i> , 1974, 78, 2535-2543.	2.9	45
146	Energy-dependent cross sections for Na(3 P, ) quenched by nitrogen. <i>Chemical Physics Letters</i> , 1973, 19, 235-239.	2.6	16
147	Reaction H+C <sub>2</sub> H <sub>4</sub> : Comparison of Three Experimental Techniques. <i>Journal of Chemical Physics</i> , 1970, 52, 2079-2088.	3.0	57
148	Reaction of Hydrogen Atoms with Ethylene. <i>Journal of Chemical Physics</i> , 1969, 51, 850-851.	3.0	10
149	Experimental Estimate of the Oscillator Strength of the P <sub>2_32,12</sub> †S <sub>2_12</sub> Transition of the Hydrogen Atom. <i>Journal of the Optical Society of America</i> , 1968, 58, 1615.	1.2	17