

# Kenneth G Mckendrick

## List of Publications by Year in descending order

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98  
papers

2,459  
citations

186265

28  
h-index

265206

42  
g-index

104  
all docs

104  
docs citations

104  
times ranked

976  
citing authors

#	ARTICLE	IF	CITATIONS
1	Stereodynamics of rotational energy transfer in NO( $A_2^+$ ) + Kr collisions. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 6525-6534.	2.8	1
2	Surface Structure of Alkyl/Fluoroalkylimidazolium Ionic-Liquid Mixtures. <i>Journal of Physical Chemistry B</i> , 2022, 126, 1962-1979.	2.6	8
3	Inelastic Scattering of CN Radicals at the Gas-Liquid Interface Probed by Frequency-Modulated Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2020, 124, 16439-16448.	3.1	5
4	Real-space laser-induced fluorescence imaging applied to gas-liquid interfacial scattering. <i>Journal of Chemical Physics</i> , 2019, 151, .	3.0	5
5	Probing Conformational Heterogeneity at the Ionic Liquid-Vacuum Interface by Reactive-Atom Scattering. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 156-163.	4.6	11
6	10.1063/1.5110517.1., 2019, , .		0
7	10.1063/1.5110517.2., 2019, , .		0
8	Determining the composition of the vacuum-liquid interface in ionic-liquid mixtures. <i>Faraday Discussions</i> , 2018, 206, 497-522.	3.2	23
9	Collision-Energy Dependence of the Uptake of Hydroxyl Radicals at Atmospherically Relevant Liquid Surfaces. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6648-6660.	3.1	8
10	Non-intuitive rotational reorientation in collisions of NO( $A_2^+$ ) with Ne from direct measurement of a four-vector correlation. <i>Nature Chemistry</i> , 2018, 10, 1148-1153.	13.6	23
11	Pair-correlated stereodynamics for diatom-diatom rotational energy transfer: NO( $A_2^+$ ) + N <sub>2</sub> . <i>Journal of Chemical Physics</i> , 2017, 147, 013912.	3.0	15
12	Nanosegregation and Structuring in the Bulk and at the Surface of Ionic-Liquid Mixtures. <i>Journal of Physical Chemistry B</i> , 2017, 121, 6002-6020.	2.6	82
13	Hiding the Headgroup? Remarkable Similarity in Alkyl Coverage of the Surfaces of Pyrrolidinium- and Imidazolium-Based Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2016, 120, 27369-27379.	3.1	15
14	Experimental testing of ab initio potential energy surfaces: Stereodynamics of NO( $A_2^+$ ) + Ne inelastic scattering at multiple collision energies. <i>Journal of Chemical Physics</i> , 2016, 145, 174304.	3.0	11
15	Comparative stereodynamics in molecule-atom and molecule-molecule rotational energy transfer: NO( $A_2^+$ ) + He and D <sub>2</sub> . <i>Journal of Chemical Physics</i> , 2016, 145, 084312.	3.0	14
16	Atomic and Molecular Collisions at Liquid Surfaces. <i>Annual Review of Physical Chemistry</i> , 2016, 67, 515-540.	10.8	31
17	Reactive-Atom Scattering from Liquid Crystals at the Liquid-Vacuum Interface: [C <sub>12</sub> mim][BF <sub>4</sub> ] and 4-Cyano-4'-Octylbiphenyl (8CB). <i>Langmuir</i> , 2016, 32, 9938-9949.	3.5	9
18	Scattering Dynamics of Oxygen Atoms on Imidazolium Tetrafluoroborate Ionic Liquid Surfaces: Dependence on Alkyl Chain Length. <i>Journal of Physical Chemistry C</i> , 2016, 120, 12472-12483.	3.1	21

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19	Rotationally inelastic scattering of NO( $A^2\tilde{\Sigma}^+$ ) + Ar: Differential cross sections and rotational angular momentum polarization. <i>Journal of Chemical Physics</i> , 2015, 143, 204301.	3.0	17
20	Ionic Liquidâ€“Vacuum Interfaces Probed by Reactive Atom Scattering: Influence of Alkyl Chain Length and Anion Volume. <i>Journal of Physical Chemistry C</i> , 2015, 119, 5491-5505.	3.1	43
21	Site and bond-specific dynamics of reactions at the gasâ€“liquid interface. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 173-183.	2.8	16
22	Complete State-Resolved Non-Adiabatic Dynamics of the O( $\langle^3\rangle P$ ) + D $\langle_{2}\rangle \hat{t}$ ' OD( $X\langle^2\rangle \hat{t}$ ) + D Reaction. <i>Journal of the American Chemical Society</i> , 2014, 136, 12371-12384.	13.7	12
23	Parity-Dependent Rotational Energy Transfer in CN( $A^2\tilde{\Sigma}^+, \hat{t}_{1/2} = 4, j F1\hat{t}$ ) + N $\langle_2\rangle$ , O $\langle_2\rangle$ , and CO $\langle_2\rangle$ Collisions. <i>Journal of Physical Chemistry A</i> , 2014, 118, 2007-2017.	2.5	4
24	Rotational Alignment of NO ( $A\langle^2\rangle \hat{t}\langle^+ \rangle$ ) from Collisions with Ne. <i>Journal of Physical Chemistry A</i> , 2013, 117, 8163-8174.	2.5	23
25	Inelastic scattering of OH radicals from organic liquids: isolating the thermal desorption channel. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 12852.	2.8	13
26	Product-state-resolved dynamics of the elementary reaction of atomic oxygen with molecular hydrogen, O( $3P$ ) + H $\langle_2\rangle \hat{t}$ ' OD( $X\langle_2\rangle \hat{t}$ ) + H $\langle_2\rangle$ . <i>Nature Chemistry</i> , 2013, 5, 315-319.	13.6	22
27	Parity-dependent oscillations in collisional polarization transfer: CN( $\langle^2\rangle \hat{t}, v = 4$ ) + Ar. <i>Journal of Chemical Physics</i> , 2013, 139, 124304.	3.0	7
28	Collisions of electronically excited molecules: differential cross-sections for rotationally inelastic scattering of NO( $A\langle^2\rangle \hat{t}\langle^+ \rangle$ ) with Ar and He. <i>Molecular Physics</i> , 2012, 110, 1693-1703.	1.7	23
29	Inelastic scattering of hydroxyl radicals with helium and argon by velocity-map imaging. <i>Nature Chemistry</i> , 2012, 4, 985-989.	13.6	29
30	Depolarization of rotational angular momentum in CN( $A^2\tilde{\Sigma}^+, v = 4$ ) + Ar collisions. <i>Journal of Chemical Physics</i> , 2012, 136, 164306.	3.0	8
31	Collisional depolarisation of rotational angular momentum: influence of the potential energy surface on the collision dynamics?. <i>International Reviews in Physical Chemistry</i> , 2012, 31, 69-109.	2.3	27
32	Collision dynamics and reactive uptake of OH radicals at liquid surfaces of atmospheric interest. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 8457.	2.8	37
33	Dynamics of the Gasâ€“Liquid Interfacial Reaction of O( $1D$ ) with a Liquid Hydrocarbon. <i>Journal of Physical Chemistry A</i> , 2011, 115, 7210-7219.	2.5	9
34	Reactive Scattering as a Chemically Specific Analytical Probe of Liquid Surfaces. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 12-18.	4.6	25
35	Communication: Direct angle-resolved measurements of collision dynamics with electronically excited molecules: NO( $A^2\tilde{\Sigma}^+$ ) + Ar. <i>Journal of Chemical Physics</i> , 2011, 134, 091101.	3.0	20
36	Rotationally elastic and inelastic dynamics of NO( $X^2\tilde{\Sigma}^+, v = 0$ ) in collisions with Ar. <i>Journal of Chemical Physics</i> , 2011, 135, 234304.	3.0	15

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37	Collisional depolarization of rotational angular momentum: what are the observables and how can they be measured?. <i>Molecular Physics</i> , 2011, 109, 2565-2585.	1.7	17
38	Inelastic and Reactive Scattering Dynamics of Hyperthermal Oxygen Atoms on Ionic Liquid Surfaces: [emim][NTf <sub>2</sub> ] and [C <sub>12</sub> mim][NTf <sub>2</sub> ], 2011, , .		0
39	Elastic depolarization and polarization transfer in CN(A <sup>2</sup> Σ <sup>+</sup> , v= 4)+Ar collisions. <i>Molecular Physics</i> , 2010, 108, 847-863.	1.7	14
40	O( <sup>3</sup> P) Atoms as a Probe of Surface Ordering in 1-Alkyl-3-methylimidazolium-Based Ionic Liquids. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 429-433.	4.6	36
41	Scattering Dynamics of Hyperthermal Oxygen Atoms on Ionic Liquid Surfaces: [emim][NTf <sub>2</sub> ] and [C <sub>12</sub> mim][NTf <sub>2</sub> ]. <i>Journal of Physical Chemistry C</i> , 2010, 114, 4015-4027.	3.1	49
42	O( <sup>3</sup> P) Atoms as a Chemical Probe of Surface Ordering in Ionic Liquids. <i>Journal of Physical Chemistry A</i> , 2010, 114, 4896-4904.	2.5	45
43	How Penetrable Are Thioalkyl Self-Assembled Monolayers?. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 1917-1921.	4.6	29
44	Depolarization of rotational angular momentum in open-shell collisions: OH+rare gases. <i>Physica Scripta</i> , 2009, 80, 048111.	2.5	6
45	Nanosecond pulse width dependence of nonphotochemical laser-induced nucleation of potassium chloride. <i>Chemical Physics Letters</i> , 2009, 481, 25-28.	2.6	28
46	Depolarisation of rotational orientation and alignment in OH (X <sup>2</sup> Σ <sup>+</sup> ) + Xe collisions. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 8804.	2.8	20
47	Depolarisation of rotational orientation and alignment of OH (X <sup>2</sup> Σ <sup>+</sup> ) in collisions with molecular partners: N <sub>2</sub> and O <sub>2</sub> . <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 8813.	2.8	16
48	Dynamics of the Reaction of O( <sup>3</sup> P) Atoms with Alkylthiol Self-assembled Monolayers. <i>Journal of Physical Chemistry A</i> , 2009, 113, 4320-4329.	2.5	27
49	Elastic Depolarization of OH(A) by He and Ar: A Comparative Study. <i>Journal of Physical Chemistry A</i> , 2009, 113, 15156-15170.	2.5	26
50	Do vectors point the way to understanding energy transfer in molecular collisions?. <i>Chemical Society Reviews</i> , 2008, 37, 732.	38.1	52
51	Influence of Molecular and Supramolecular Structure on the Gas-Liquid Interfacial Reactivity of Hydrocarbon Liquids with O( <sup>3</sup> P) Atoms. <i>Journal of Physical Chemistry C</i> , 2008, 112, 1524-1532.	3.1	27
52	Dynamics of Inelastic Scattering of OH Radicals from Reactive and Inert Liquid Surfaces. <i>Journal of Physical Chemistry C</i> , 2008, 112, 10868-10877.	3.1	74
53	Rotational angular momentum polarization: The influence of stray magnetic fields. <i>Journal of Chemical Physics</i> , 2008, 128, 021101.	3.0	26
54	Orientation and alignment depolarization in OH(X <sup>2</sup> Σ <sup>+</sup> )+Ar/He collisions. <i>Journal of Chemical Physics</i> , 2008, 129, 074304.	3.0	53

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55	Dynamics of interfacial reactions between O( <sup>3</sup> P) atoms and long-chain liquid hydrocarbons. <i>Physica Scripta</i> , 2007, 76, C42-C47.	2.5	23
56	Differential scattering cross-sections for CNA <sup>+</sup> +Ar. <i>Journal of Chemical Physics</i> , 2007, 126, 041103.	3.0	20
57	Inelastic scattering of OH(X <sup>2</sup> ) with Ar and He: a combined polarization spectroscopy and quantum scattering study. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 4414.	2.8	41
58	The effects of energy-level resonance on collision-induced electronic energy transfer: CD (A <sup>2</sup> + B <sup>2</sup> ) coupling. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 1568-1578.	2.8	0
59	Temperature Dependence of OH Yield, Translational Energy, and Vibrational Branching in the Reaction of O( <sup>3</sup> P)(g) with Liquid Squalane. <i>Journal of Physical Chemistry C</i> , 2007, 111, 14833-14842.	3.1	34
60	Efficiencies of state and velocity-changing collisions of superthermal CN A <sup>2</sup> with He, Ar, N <sub>2</sub> and O <sub>2</sub> . <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 747-754.	2.8	17
61	Direct Gas-Liquid Interfacial Dynamics: The Reaction between O(3P) and a Liquid Hydrocarbon. <i>Journal of Physical Chemistry B</i> , 2006, 110, 2771-2776.	2.6	45
62	Molecular Dynamics Study to Identify the Reactive Sites of a Liquid Squalane Surface. <i>Journal of Physical Chemistry B</i> , 2006, 110, 11717-11724.	2.6	41
63	Frequency modulated spectroscopy as a probe of molecular collision dynamics. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2006, 63, 910-922.	3.9	17
64	The effects of surface temperature on the gas-liquid interfacial reaction dynamics of O(3P)+squalane. <i>Journal of Chemical Physics</i> , 2005, 122, 024712.	3.0	45
65	Orientation and alignment moments in two-color polarization spectroscopy. <i>Journal of Chemical Physics</i> , 2005, 122, 164309.	3.0	33
66	Collision-Partner Dependence of Energy Transfer between the CH A <sup>2</sup> and B <sup>2</sup> -States. <i>Journal of Physical Chemistry A</i> , 2005, 109, 542-553.	2.5	15
67	Measurement of orientation and alignment moment relaxation by polarization spectroscopy: Theory and experiment. <i>Journal of Chemical Physics</i> , 2004, 120, 7910-7926.	3.0	39
68	Dynamics of the gas-liquid interfacial reaction of O(3P) atoms with hydrocarbons. <i>Journal of Chemical Physics</i> , 2003, 119, 9985-9988.	3.0	51
69	Effect of collisions on one-color polarization spectroscopy of OH A <sup>2</sup> +X <sup>2</sup> . <i>Journal of Chemical Physics</i> , 2003, 119, 9461-9468.	3.0	33
70	The dynamics of O(3P)+deuterated hydrocarbons: influences on product rotation and fine-structure state partitioning. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 473-481.	2.8	24
71	Rotational energy transfer in collisions of CH A <sup>2</sup> , v=0 with Ar, N <sub>2</sub> and CO <sub>2</sub> . <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 5768-5777.	2.8	9
72	The Dynamics of Reactions of O( <sup>3</sup> P) Atoms with Saturated Hydrocarbons and Related Compounds. <i>Progress in Reaction Kinetics and Mechanism</i> , 2000, 25, 299-370.	2.1	64

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73	Rotational-state resolved coupling of CH A 2 $\hat{\nu}$ and B 2 $\hat{\nu}$ - in collisions with CO <sub>2</sub> . Physical Chemistry Chemical Physics, 2000, 2, 5553-5559.	2.8	9
74	State-specific collisional coupling of the CH A 2 $\hat{\nu}$ and B 2 $\hat{\nu}$ - states. Physical Chemistry Chemical Physics, 2000, 2, 461-471.	2.8	27
75	Polarisation effects in electronically inelastic collisions: SiFC2 $\hat{\nu}$ +H2 $\hat{\nu}$ SiFB $\hat{\nu}$ +H2. Chemical Physics, 1998, 233, 45-55.	1.9	9
76	What determines the disposal of energy in the products of electronically inelastic collisions? A comparative case study of SiCl and SiF. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 1921-1932.	1.7	19
77	Rotational State-Specific Dynamics of SiF C2 $\hat{\nu}$ $\hat{\nu}$ B2 $\hat{\nu}$ + Collision-Induced Transfer. Journal of Physical Chemistry A, 1998, 102, 51-59.	2.5	10
78	Rotational and spin-orbit effects in the dynamics of O(3Pj)+hydrocarbon reactions. II. Models for spin-orbit propensities. Journal of Chemical Physics, 1997, 106, 9182-9189.	3.0	44
79	Rotational and spin-orbit effects in the dynamics of O(3Pj)+hydrocarbon reactions. I. Experimental results. Journal of Chemical Physics, 1997, 106, 9172-9181.	3.0	91
80	Quantitative Laser-Induced Fluorescence Spectroscopy of the CF A2 $\hat{\nu}$ + $\hat{\nu}$ X2 $\hat{\nu}$ Transition: $\hat{\nu}$ Electronic Transition Dipole Moment Function and Predissociation. The Journal of Physical Chemistry, 1996, 100, 47-53.	2.9	28
81	Large rotational energy release in collision-induced SiF C2 $\hat{\nu}$ -B2 $\hat{\nu}$ + valence-Rydberg transfer. Chemical Physics Letters, 1995, 243, 564-570.	2.6	4
82	State-specific collisional energy transfer in electronically excited SiF radicals: dramatic contrasts with SiCl. Chemical Physics, 1994, 187, 79-86.	1.9	7
83	Vibrational transition probabilities in the B-X and C-X systems of the SiF radical. Chemical Physics, 1994, 187, 87-95.	1.9	15
84	Phosphorus-31 NMR investigation of the comparative hydrolytic breakdown of nickel(II) and cadmium(II) versus zinc(II) bis(O,O-diethyl dithiophosphates) in an aqueous medium. Journal of the Chemical Society Perkin Transactions II, 1994, , 373.	0.9	6
85	Velocity-averaging effects on polarisation measurements in hot atom reactions. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 1527.	1.7	15
86	Rate constants for the de-excitation of the bending vibrational levels of NCO(X) by helium, neon, argon, krypton and xenon. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 405.	1.7	14
87	State-to-state collisional energy transfer in electronically excited silicon monochloride radicals. The Journal of Physical Chemistry, 1993, 97, 1389-1399.	2.9	10
88	Vibrational transition probabilities in the B-X and B'-X systems of the chlorosilylydyne radical. The Journal of Physical Chemistry, 1992, 96, 9703-9709.	2.9	8
89	Superthermal widths of the collision energy distributions in hot atom reactions. The Journal of Physical Chemistry, 1991, 95, 8205-8207.	2.9	115
90	Velocity-averaging effects in beam-gas dynamics experiments. The Journal of Physical Chemistry, 1991, 95, 8255-8263.	2.9	7

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91	Comparison of the Ca+HF(DF) and Sr+HF(DF) reaction dynamics. Journal of Chemical Physics, 1988, 89, 6283-6294.	3.0	47
92	Intramolecular rearrangement in the infrared multiple-photon dissociation of dichlorodifluoroethylene. The Journal of Physical Chemistry, 1988, 92, 1839-1846.	2.9	7
93	Dynamics of the reaction atomic oxygen(3P) + hydrogen bromide: experimental investigation and theoretical modeling. The Journal of Physical Chemistry, 1988, 92, 5530-5540.	2.9	60
94	Rovibronic state to rovibronic state reaction dynamics: O(3P)+HCl(v=2,J)→OH(v=2,N=2)+Cl(2P). Journal of Chemical Physics, 1987, 87, 7341-7342.	3.0	64
95	Laser-induced fluorescence and vibrational relaxation of the phenyl nitrene radical. Journal of the Chemical Society, Faraday Transactions 2, 1987, 83, 2011.	1.1	8
96	Product state distributions from the reaction O(3 P)+ HBr. Faraday Discussions of the Chemical Society, 1987, 84, 39.	2.2	28
97	Vibrational relaxation of NCO(X̃ <sup>1</sup> ) by rare gases, and rate constant measurement of the NCO + NO reaction. Chemical Physics Letters, 1986, 127, 125-129.	2.6	30
98	Reactions of CHF(X̃ <sup>1</sup> ) and NCO(X̃ <sup>2</sup> ) Radicals. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1985, 89, 335-336.	0.9	35