

Millard H Alexander

List of Publications by Year in descending order

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175
papers

7,428
citations

44042

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Enhanced reactivity of fluorine with para-hydrogen in cold interstellar clouds by resonance-induced quantum tunnelling. <i>Nature Chemistry</i> , 2019, 11, 744-749.	6.6	34
2	Accurate characterization of the lowest triplet potential energy surface of SO ₂ with a coupled cluster method. <i>Journal of Chemical Physics</i> , 2019, 150, 144303.	1.2	2
3	Experimental and theoretical investigation of the temperature dependent electronic quenching of O(¹ D) atoms in collisions with Kr. <i>Journal of Chemical Physics</i> , 2018, 148, 124311.	1.2	12
4	Photoabsorption Assignments for the ¹ B ₂ ← ¹ A ₁ Vibronic Transitions of SO ₂ , Using New Ab Initio Potential Energy and Transition Dipole Surfaces. <i>Journal of Physical Chemistry A</i> , 2017, 121, 1012-1021.	1.1	18
5	Final State Resolved Quantum Predissociation Dynamics of SO ₂ (¹ A ₁ ← ¹ B ₂) and Its Isotopomers via a Crossing with a Singlet Repulsive State. <i>Journal of Physical Chemistry A</i> , 2017, 121, 4930-4938.	1.1	9
6	First-principles C band absorption spectra of SO ₂ and its isotopologues. <i>Journal of Chemical Physics</i> , 2017, 146, 154305.	1.2	7
7	The interaction of NO(X ² Π) with H ₂ : <i>Ab initio</i> potential energy surfaces and bound states. <i>Journal of Chemical Physics</i> , 2017, 146, 114301.	1.2	17
8	Accurate transport properties for O(³ P) + H and O(³ P) + H ₂ . <i>Journal of Chemical Physics</i> , 2016, 145, 164309.	1.2	11
9	New <i>ab initio</i> adiabatic potential energy surfaces and bound state calculations for the singlet ground ¹ A ₁ and excited ¹ B ₂ (² 1A ²) states of SO ₂ . <i>Journal of Chemical Physics</i> , 2016, 144, 174301.	1.2	17
10	Chemical Control and Spectral Fingerprints of Electronic Coupling in Carbon Nanostructures. <i>Journal of Physical Chemistry C</i> , 2016, 120, 29476-29483.	1.5	2
11	Publisher's Note: <i>Ab initio</i> adiabatic potential energy surfaces and bound state calculations for the singlet ground ¹ A ₁ and excited ¹ B ₂ (² 1A ²) states of SO ₂ . [<i>J. Chem. Phys.</i> 144, 174301 (2016)]. <i>Journal of Chemical Physics</i> , 2016, 144, 209901.		0
12	Resonances in rotationally inelastic scattering of NH ₃ and ND ₃ with H ₂ . <i>Journal of Chemical Physics</i> , 2015, 143, 044312.	1.2	34
13	Theoretical investigation of the dynamics of O(¹ D) + ³ P electronic quenching by collision with Xe. <i>Journal of Chemical Physics</i> , 2015, 143, 054306.	1.2	7
14	Electronic quenching of O(¹ D) by Xe: Oscillations in the product angular distribution and their dependence on collision energy. <i>Journal of Chemical Physics</i> , 2015, 143, 054307.	1.2	4
15	State-Specific Collision Dynamics of Molecular Super Rotors with Oriented Angular Momentum. <i>Journal of Physical Chemistry A</i> , 2015, 119, 12471-12479.	1.1	14
16	A finite-element visualization of quantum reactive scattering. II. Nonadiabaticity on coupled potential energy surfaces. <i>Journal of Chemical Physics</i> , 2015, 142, 034108.	1.2	1
17	Spectroscopic observation of resonances in the F + H ₂ reaction. <i>Science</i> , 2015, 349, 510-513.	6.0	98
18	Rotationally inelastic scattering of OH by molecular hydrogen: Theory and experiment. <i>Journal of Chemical Physics</i> , 2015, 142, 204310.	1.2	34

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19	Theoretical investigation of the relaxation of the bending mode of $\text{CH}_2(\tilde{X})$ by collisions with helium. <i>Journal of Chemical Physics</i> , 2014, 141, 214305.	1.2	2
20	Collision dynamics of symmetric top molecules: A comparison of the rotationally inelastic scattering of CD ₃ and ND ₃ with He. <i>Journal of Chemical Physics</i> , 2014, 140, 134308.	1.2	10
21	A MATLAB-based finite-element visualization of quantum reactive scattering. I. Collinear atom-diatom reactions. <i>Journal of Chemical Physics</i> , 2014, 141, 024118.	1.2	4
22	The interaction of OH(\tilde{X}) with H ₂ : <i>ab initio</i> potential energy surfaces and bound states. <i>Journal of Chemical Physics</i> , 2014, 141, 174309.	1.2	26
23	Transport Properties for Systems with Deep Potential Wells: H + O ₂ . <i>Journal of Physical Chemistry A</i> , 2014, 118, 11935-11942.	1.1	13
24	Theoretical investigation of intersystem crossing between the \tilde{A}^1 and \tilde{B}^1 states of CH ₂ induced by collisions with helium. <i>Journal of Chemical Physics</i> , 2014, 141, 064312.	1.2	4
25	The rate of the F + H ₂ reaction at very low temperatures. <i>Nature Chemistry</i> , 2014, 6, 141-145.	6.6	105
26	State-to-state quantum dynamics of the F + HCl ($v_i = 0, j_i = 0$) \rightarrow HF(v_f, j_f) + Cl reaction on the ground state potential energy surface. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 15347.	1.3	15
27	Rotationally inelastic scattering of CD ₃ and CH ₃ with He: comparison of velocity map-imaging data with quantum scattering calculations. <i>Chemical Science</i> , 2013, 4, 4199.	3.7	16
28	Exact quantum scattering calculations of transport properties: CH ₂ (\tilde{X}^3) + He. <i>Journal of Chemical Physics</i> , 2013, 139, 194309.	1.2	14
29	Exact quantum scattering calculations of transport properties for the H ₂ O + H system. <i>Journal of Chemical Physics</i> , 2013, 139, 194309.	1.2	16
30	Unlocking the Quantum Nature of Inelastic Molecular Collisions. <i>Science</i> , 2013, 341, 1076-1077.	6.0	11
31	Theoretical study of the vibrational relaxation of the methyl radical in collisions with helium. <i>Journal of Chemical Physics</i> , 2013, 138, 104317.	1.2	10
32	Theoretical investigation of rotationally inelastic collisions of CH ₂ (\tilde{X}) with helium. <i>Journal of Chemical Physics</i> , 2012, 136, 224306.	1.2	20
33	Resonances in rotationally inelastic scattering of OH(\tilde{X}) with helium and neon. <i>Journal of Chemical Physics</i> , 2012, 136, 144308.	1.2	24
34	Exact quantum scattering calculation of transport properties for free radicals: OH(\tilde{X}) + He. <i>Journal of Chemical Physics</i> , 2012, 137, 094306.	1.2	11
35	Spin-orbit quenching of Cl($2P_{1/2}$) by H ₂ . <i>Journal of Chemical Physics</i> , 2012, 136, 124312.	1.2	4
36	Theoretical investigation of rotationally inelastic collisions of the methyl radical with helium. <i>Journal of Chemical Physics</i> , 2011, 135, 064306.	1.2	20

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37	Communication: Non-adiabatic coupling and resonances in the F + H ₂ reaction at low energies. Journal of Chemical Physics, 2011, 134, 231101.	1.2	45
38	Chemical Kinetics Under Test. Science, 2011, 331, 411-412.	6.0	9
39	Theoretical investigation of rotationally inelastic collisions of CH ₂ (\tilde{A}) with helium. Journal of Chemical Physics, 2011, 134, 154307.	1.2	27
40	Depolarization in H ₂ O ⁺ He collisions. Molecular Physics, 2010, 108, 1159-1169.	0.8	13
41	Low-energy inelastic collisions of OH radicals with He atoms and D_2 . Physical Review A, 2010, 82, .	1.0	44
42	Time-dependent wavepacket investigation of state-to-state reactive scattering of Cl with <i>para</i> -H ₂ including the open-shell character of the Cl atom. Journal of Chemical Physics, 2010, 132, 034308.	1.2	38
43	State-to-state inelastic scattering of Stark-decelerated OH radicals with Ar atoms. Physical Chemistry Chemical Physics, 2010, 12, 10660.	1.3	57
44	Joint Experimental [†] Theoretical Investigation of the Lower Bound States of the NO(X ²)-Kr Complex. Journal of Physical Chemistry A, 2009, 113, 7366-7375.	1.1	22
45	Tensor cross sections and collisional depolarization of OH(\tilde{X}^2) in collisions with helium. Journal of Chemical Physics, 2009, 130, 164315.	1.2	40
46	Nonadiabatic Interactions in the Cl + H ₂ Reaction Probed by ClH ₂ ⁺ and CID ⁺ Photoelectron Imaging. Science, 2008, 319, 72-75.	6.0	74
47	The Extent of Non [†] Born-Oppenheimer Coupling in the Reaction of Cl(² <i>P</i>) with <i>para</i> -H ₂ . Science, 2008, 322, 573-576.	6.0	95
48	Nonadiabatic effects in the photodetachment of ClH ₂ ⁺ . Journal of Chemical Physics, 2008, 128, 084312.	1.2	10
49	Role of van der Waals resonances in the vibrational relaxation of HF by collisions with H atoms. Journal of Chemical Physics, 2007, 127, 114301.	1.2	21
50	Breakdown of the Born-Oppenheimer Approximation in the F+ <i>o</i> -D ₂ ⁺ DF + D Reaction. Science, 2007, 317, 1061-1064.	6.0	149
51	An ab initio investigation of the O(3P) \tilde{A} H ₂ (1 \tilde{X} +g) van der Waals well. Physical Chemistry Chemical Physics, 2006, 8, 4420-4426.	1.3	17
52	Product multiplet branching in the O(1D)+H ₂ ⁺ OH(2 \tilde{I})+H reaction. Journal of Chemical Physics, 2004, 121, 5221-5235.	1.2	69
53	Angular distributions for the F+H ₂ ⁺ HF+H reaction: The role of the F spin-orbit excited state and comparison with molecular beam experiments. Journal of Chemical Physics, 2004, 121, 5812-5820.	1.2	24
54	Reactivity of the F spin [†] orbit excited state in the F + HD reaction: Product translational and rotational energy distributions. Physical Chemistry Chemical Physics, 2004, 6, 5018-5025.	1.3	12

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55	Details and consequences of the nonadiabatic coupling in the Cl(2P) \rightarrow H ₂ reaction. Faraday Discussions, 2004, 127, 59-72.	1.6	48
56	A simple theoretical study of the ClH ₂ ⁺ photoelectron spectrum. Physical Chemistry Chemical Physics, 2004, 6, 4984.	1.3	15
57	The dynamics of the prototype abstraction reaction Cl(2P _{3/2,1/2}) + H ₂ : A comparison of crossed molecular beam experiments with exact quantum scattering calculations on coupled ab initio potential energy surfaces. Physical Chemistry Chemical Physics, 2004, 6, 5007.	1.3	36
58	Experimental and theoretical investigation of the AlH ₃ ⁺ electronic transition. Journal of Chemical Physics, 2003, 118, 10477-10484.	1.2	9
59	Theoretical investigation of the lower bend-stretch states of the Cl ⁻ H ₂ anion complex and its isotopomers. Journal of Chemical Physics, 2003, 118, 9637-9642.	1.2	30
60	An ab initio based model for the simulation of multiple 2P atoms embedded in a cluster of spherical ligands, with application to Al in solid para-hydrogen. Journal of Chemical Physics, 2002, 117, 5311-5318.	1.2	2
61	Laser spectroscopic study of the SiAr van der Waals complex. Journal of Chemical Physics, 2002, 116, 9239-9248.	1.2	9
62	Theoretical Study of the Validity of the Born-Oppenheimer Approximation in the Cl + H ₂ \rightarrow HCl + H Reaction. Science, 2002, 296, 715-718.	6.0	138
63	Experimental and Theoretical Study of State-Resolved Electronically Inelastic Collisions of Highly Rotationally Excited CN(A ₂) with Argon and Helium: The Role of Gateway Levels. Journal of Physical Chemistry A, 2002, 106, 8345-8354.	1.1	12
64	Electronic spectroscopy and excited state dynamics of the Al ⁻ H ₂ /D ₂ complex. Faraday Discussions, 2001, 118, 387-404.	1.6	13
65	Fully State-Resolved Differential Cross Sections for the Inelastic Scattering of the Open-Shell NO Molecule by Ar. Science, 2001, 294, 832-834.	6.0	108
66	Experimental and theoretical investigation of the rotational structure of the Al ⁻ H ₂ /D ₂ complex. Journal of Chemical Physics, 2001, 114, 8938-8947.	1.2	15
67	Experimental and theoretical study of \hat{b} -doublet resolved rotationally inelastic collisions of highly rotationally excited CH(A ² Σ^+ , v=0) with Ar. Journal of Chemical Physics, 2001, 115, 800-809.	1.2	12
68	State-resolved rotationally inelastic collisions of highly rotationally excited CN(A ² Σ^+) with helium: Influence of the interaction potential. Journal of Chemical Physics, 2001, 115, 8393-8402.	1.2	28
69	State-to-state rate coefficients for transfer from the rotational levels J = 7.5, 20.5, 31.5 and 40.5 in NO(X ² $\Pi_{1/2}$, v = 2) in collisions with He, Ar and N ₂ and for J=7.5, 20.5 and 31.5 in collisions with NO: comparisons between experiment and theory. Physical Chemistry Chemical Physics, 2000, 2, 473-479.	1.3	18
70	An investigation of the F+H ₂ reaction based on a full ab initio description of the open-shell character of the F(2P) atom. Journal of Chemical Physics, 2000, 113, 11084-11100.	1.2	238
71	A joint theoretical ^{and} experimental investigation of the lower bound states of the NO(X ² Π) ⁻ Ar complex. Journal of Chemical Physics, 2000, 113, 73-85.	1.2	31
72	Experimental and theoretical study of the electronic spectrum of the BAr ₂ complex: Transition to the excited valence B(2s2p ² Σ^+ D) state. Journal of Chemical Physics, 2000, 112, 5037-5043.	1.2	14

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73	Potential energy surfaces for and energetics of the weakly-bound Al ⁺ H ₂ and B ⁺ H ₂ complexes. Journal of Chemical Physics, 2000, 112, 5722-5730.	1.2	31
74	Experimental and theoretical study of rotationally inelastic collisions of highly rotationally excited CN(A ⁺ Σ ⁺) with Ar. Journal of Chemical Physics, 2000, 112, 4474-4484.	1.2	36
75	A new, fully ab initio investigation of the NO(X ⁺ Σ ⁺)Ar system. I. Potential energy surfaces and inelastic scattering. Journal of Chemical Physics, 1999, 111, 7426-7434.	1.2	109
76	A new, fully ab initio investigation of the ArNO(X ⁺ Σ ⁺) system. II. Bound states of the Ar ⁺ NO complex. Journal of Chemical Physics, 1999, 111, 7435-7439.	1.2	36
77	A combined experimental and theoretical study of rotational energy transfer in collisions between NO(X ⁺ Σ ⁺ 1/2, v=3,J) and He, Ar and N ₂ at temperatures down to 7 K. Journal of Chemical Physics, 1998, 109, 3882-3897.	1.2	74
78	Spin ⁺ orbit effects in the reaction of F(2P) with H ₂ . Journal of Chemical Physics, 1998, 109, 5710-5713.	1.2	131
79	Theoretical investigation of weakly-bound complexes of O(3P) with H ₂ . Journal of Chemical Physics, 1998, 108, 4467-4477.	1.2	35
80	Experimental and theoretical study of the AlNe complex. Journal of Chemical Physics, 1998, 108, 3522-3530.	1.2	26
81	Inelastic collisions of fine structure and $\hat{\nu}$ -doublet resolved rotational states of PH(A ⁺ Σ ⁺ 3 ⁺ , $\hat{\nu}$ =0) with helium. Journal of Chemical Physics, 1997, 106, 7642-7653.	1.2	18
82	A collaborative theoretical and experimental study of the structure and electronic excitation spectrum of the Bar and Bar ₂ complexes. Journal of Chemical Physics, 1997, 106, 6320-6331.	1.2	33
83	Adiabatic and diabatic potential-energy surfaces of the CN(X ⁺ Σ ⁺ 2 ⁺ , A ⁺ Σ ⁺ 2 ⁺)Ne complex and nonadiabatic predissociation dynamics. Journal of Chemical Physics, 1997, 107, 7148-7162.	1.2	27
84	State ⁺ resolved inelastic collisions of single rotational, fine ⁺ structure, and $\hat{\nu}$ doublet levels of NH(A ⁺ Σ ⁺ 3 ⁺) with helium: A combined experimental and theoretical study. Journal of Chemical Physics, 1996, 104, 1325-1337.	1.2	28
85	The rotational relaxation of NH(c ⁺ Σ ⁺ 1 ⁺) in collisions with Ar: A combined theoretical and experimental investigation. Journal of Chemical Physics, 1995, 102, 4069-4083.	1.2	28
86	Theoretical study of the interaction of AlH(X ⁺ Σ ⁺ 1 ⁺ , A ⁺ Σ ⁺ 1 ⁺) with Ar: Potential energy surfaces and bend ⁺ stretch levels of the ArAlH(X,A) van der Waals complex. Journal of Chemical Physics, 1995, 102, 2413-2425.	1.2	23
87	Fully ab initio investigation of bound and predissociating states of the NeOH(X) complex. Journal of Chemical Physics, 1995, 103, 3400-3417.	1.2	27
88	Ab initio potential energy surfaces and quantum scattering studies of NO(X ⁺ Σ ⁺ 2 ⁺) with He: $\hat{\nu}$ -doublet resolved rotational and electronic fine ⁺ structure transitions. Journal of Chemical Physics, 1995, 103, 6973-6983.	1.2	53
89	Experimental investigation of weakly bound B(2p,3s) ⁺ H ₂ /D ₂ complexes through laser fluorescence excitation spectroscopy. Journal of Chemical Physics, 1995, 103, 7966-7974.	1.2	28
90	Experimental and theoretical study of the B ⁺ Ne nonbonding interaction: The free ⁺ bound B ⁺ Σ ⁺ 2 ⁺ + ⁺ X ⁺ Σ ⁺ 2 ⁺ electronic transition. Journal of Chemical Physics, 1995, 103, 2779-2786.	1.2	36

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91	Theoretical investigation of weakly bound complexes of B with H ₂ . Journal of Chemical Physics, 1995, 103, 7956-7965.	1.2	44
92	Theoretical Study of Bound States of Ar-NO. The Journal of Physical Chemistry, 1994, 98, 1073-1079.	2.9	28
93	Theoretical studies of He(1S)+CH(X ² Σ ⁺). II. Fullyabinitiocross sections for the inelastic scattering and comparison with experiment. Journal of Chemical Physics, 1994, 100, 1338-1349.	1.2	23
94	Potential energy surfaces for the interaction of BH(X ² Σ ⁺ ,A ² Σ ⁺) with Ar and a theoretical investigation of the stretch-bend levels of the ArBH(A) van der Waals molecule. Journal of Chemical Physics, 1994, 101, 2887-2902.	1.2	67
95	Flux redistribution during the photodissociation of ClNO in the T ₁ state. Journal of Chemical Physics, 1994, 101, 4722-4734.	1.2	17
96	Potential energy surfaces for the interaction of CH(X ² Σ ⁺ ,B ² Σ ⁺) with Ar and an assignment of the stretch-bend levels of the ArCH(B) van der Waals molecule. Journal of Chemical Physics, 1994, 101, 4547-4560.	1.2	55
97	The use of the current density in the analysis of molecular photodissociation. Journal of Chemical Physics, 1994, 101, 8663-8673.	1.2	8
98	On the generation of preferential \hat{J} -doublet populations in the collisional relaxation of highly rotationally excited CH(X ² Σ ⁺). Journal of Chemical Physics, 1994, 101, 7468-7479.	1.2	36
99	Scattering of NH ₃ by ortho- and para-H ₂ : Expansion of the potential and collisional propensity rules. Journal of Chemical Physics, 1993, 98, 4662-4671.	1.2	38
100	A joint experimental and theoretical study of A ² Σ ⁺ +X ² Σ ⁺ + electronic energy transfer in the CN molecule induced by collisions with helium. Journal of Chemical Physics, 1993, 98, 8580-8592.	1.2	52
101	Differential and integral cross sections for the inelastic scattering of NO (X ² Σ ⁺) by Ar based on a new ab initio potential energy surface. Journal of Chemical Physics, 1993, 99, 7725-7738.	1.2	99
102	Spin-orbit branching in the photofragmentation of HCl. Journal of Chemical Physics, 1993, 99, 1752-1764.	1.2	114
103	Adiabatic and approximate diabatic potential energy surfaces for the B...H ₂ van der Waals molecule. Journal of Chemical Physics, 1993, 99, 6014-6026.	1.2	73
104	Adiabatic representations for the study of flux redistribution during photodissociation involving coupled electronic states: The effect of vibrational excitation on the photofragmentation of CH ₃ I. Journal of Chemical Physics, 1993, 98, 6196-6207.	1.2	21
105	Quantum flux redistribution during molecular photodissociation. Journal of Chemical Physics, 1992, 97, 2527-2535.	1.2	47
106	The study of flux redistribution during molecular photodissociation: Adiabatic and diabatic analyses and application to the dissociation of CH ₃ I. Journal of Chemical Physics, 1992, 97, 4836-4845.	1.2	31
107	Quantum flux studies of the mechanism of Ca(4s5p ³ P) ⁺ Ca(4s5p ³ P) collisions. Journal of Chemical Physics, 1992, 96, 6672-6680.	1.2	18
108	Potential energy hypersurfaces for the interaction of NO with the Ag(111) surface. Journal of Chemical Physics, 1991, 94, 8454-8467.	1.2	17

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109	Collisions of NO($X\hat{\epsilon}\%2\hat{i}$) with a Ag(111) surface: New quantum scattering studies based on a semiempirical potential energy surface. <i>Journal of Chemical Physics</i> , 1991, 94, 8468-8478.	1.2	15
110	Quantum study of the redistribution of flux during inelastic collisions. <i>Journal of Chemical Physics</i> , 1991, 95, 8931-8940.	1.2	30
111	Energetics and spin selectivity in the infrared multiphoton dissociation $\text{HN}_3(X\hat{\epsilon}\%1A\hat{\epsilon}\%TM)\hat{\epsilon}\%N_2(X\hat{\epsilon}\%g)+\text{NH}(X\hat{\epsilon}\%a_1\hat{\epsilon}\%P)$. AIP Conference Proceedings, 1989, , .	0.3	0
112	Rotational energy transfer in HF: A computational study. <i>Journal of Chemical Physics</i> , 1989, 91, 7563-7589.	1.2	9
113	The inelastic scattering of $2\hat{i}$ [case (b)] molecules and an understanding of the differing \hat{i} doublet propensities for molecules of \hat{i} vs \hat{i} orbital occupancy. <i>Journal of Chemical Physics</i> , 1989, 91, 839-848.	1.2	130
114	A log-derivative propagation scheme for the exact solution of two-state curve crossing problems. <i>Journal of Chemical Physics</i> , 1989, 91, 2388-2395.	1.2	16
115	Quantum scattering studies of electronically inelastic collisions of CN ($X\hat{\epsilon}\%2\hat{i}+$, $\hat{\epsilon}\%A\hat{\epsilon}\%2\hat{i}$) with He. <i>Journal of Chemical Physics</i> , 1989, 91, 5425-5439.	1.2	113
116	A semiclassical treatment of rotationally electronically inelastic scattering of NO from Ag(111). <i>Journal of Chemical Physics</i> , 1989, 90, 575-586.	1.2	20
117	Theoretical study of Ca($4s5p\hat{\epsilon}\%1P$), Ca($4s5p\hat{\epsilon}\%3P$) transitions in collision with noble gases: Integral cross sections and alignment effects. <i>Journal of Chemical Physics</i> , 1989, 91, 1658-1667.	1.2	30
118	Mechanism of and alignment effects in spin-changing collisions involving atoms in 1P electronic states: Ca($4s5p\hat{\epsilon}\%1P$)+noble gases. <i>Journal of Chemical Physics</i> , 1989, 90, 5373-5385.	1.2	35
119	Inelastic collisions of OH($X\hat{\epsilon}\%2\hat{i}$) with para- H_2 : \hat{i} doublet and hyperfine structure transitions. <i>Journal of Chemical Physics</i> , 1988, 88, 6931-6937.	1.2	43
120	Adiabatic and diabatic potential energy surfaces for collisions of CN($X\hat{\epsilon}\%2\hat{i}+$, $\hat{\epsilon}\%A\hat{\epsilon}\%2\hat{i}$) with He. <i>Journal of Chemical Physics</i> , 1988, 89, 3139-3151.	1.2	208
121	Inelastic collisions of CaF($A\hat{\epsilon}\%2\hat{i}$) with He and Ar: Quantum calculations and adiabatic analysis. <i>Journal of Chemical Physics</i> , 1988, 88, 3581-3589.	1.2	13
122	Energetics and spin- and \hat{i} doublet selectivity in the infrared multiphoton dissociation $\text{HN}_3(X\hat{\epsilon}\%1A\hat{\epsilon}\%TM)\hat{\epsilon}\%N_2(X\hat{\epsilon}\%g)+\text{NH}(X\hat{\epsilon}\%a_1\hat{\epsilon}\%P)$: Theory. <i>Journal of Chemical Physics</i> , 1988, 89, 1388-1400. ⁷⁸	1.2	78
123	Quantum theory and collisional propensity rules for rotationally inelastic collisions between polyatomic molecules (NH ₃ and CO ₂) and an uncorrugated surface. <i>Journal of Chemical Physics</i> , 1988, 89, 790-800.	1.2	5
124	Clarification of the electronic asymmetry of \hat{i} doublets in $3\hat{i}$ electronic states of diatomic molecules. <i>Journal of Chemical Physics</i> , 1987, 87, 7118-7124.	1.2	22
125	A theoretical study of alignment effects in collisions of N ₂ with a Ag surface. <i>Journal of Chemical Physics</i> , 1987, 87, 4937-4947.	1.2	22
126	Quantum close-coupled studies of collisions of NO($X\hat{\epsilon}\%2\hat{i}$) with a Ag(111) surface. <i>Journal of Chemical Physics</i> , 1987, 87, 3218-3231.	1.2	49

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127	Theoretical study of Ca(4s5p 1P) → Ca(4s5p 3P) transitions in collisions with He: Integral cross sections and alignment effects. <i>Journal of Chemical Physics</i> , 1987, 86, 4790-4800.	1.2	67
128	The infinite-order sudden approximation for collisions involving molecules in $\hat{1}$ electronic states: A new derivation and calculations of rotationally inelastic cross sections for NO($X\hat{2}\hat{1}$)+He and Ar. <i>Journal of Chemical Physics</i> , 1986, 85, 5652-5659.	1.2	77
129	Theory of Stark spectroscopy of molecules in $\hat{1}$ electronic states: Coherence effects and quantum beats. <i>Journal of Chemical Physics</i> , 1986, 85, 134-145.	1.2	17
130	Rotationally inelastic collisions between a molecule in a $2S+1\hat{1}$ electronic state and an open-shell target: General quantum analysis and experimental measurement of state-resolved cross sections for CaCl($X\hat{2}\hat{1}+$)+NO($X\hat{2}\hat{1}$). <i>Journal of Chemical Physics</i> , 1986, 84, 1547-1553.	1.2	19
131	Rotationally inelastic collisions between a molecule in a $2\hat{1}$ electronic state and a 2S atom: Sudden factorization, scaling, and symmetry relations. <i>Journal of Chemical Physics</i> , 1986, 85, 1859-1865.	1.2	7
132	Collision induced transitions between $2\hat{1}$ and $2\hat{1}$ states of diatomic molecules: Quantum theory and collisional propensity rules. <i>Journal of Chemical Physics</i> , 1986, 84, 100-113.	1.2	94
133	On the physical origin of propensity rules in collisions involving molecules in $2\hat{1}$ electronic states. <i>Journal of Chemical Physics</i> , 1986, 84, 3049-3058.	1.2	51
134	Quantum treatment of rotationally inelastic collisions involving molecules in Π electronic states: New derivation of the coupling potential. <i>Chemical Physics</i> , 1985, 92, 337-344.	0.9	256
135	Collisional effects in Stark spectroscopy of molecules in $\hat{1}$ electronic states. <i>Journal of Chemical Physics</i> , 1985, 83, 3340-3348.	1.2	15
136	Rotationally inelastic collisions between a diatomic molecule in a $2S+1\hat{1}$ electronic state and a 2S atom: The optimal choice for the total \hat{J} representation. <i>Journal of Chemical Physics</i> , 1985, 83, 5060-5067.	1.2	15
137	Inelastic collisions of CaCl($X\hat{2}\hat{1}+$) with Ar: A collaborative theoretical and experimental study. <i>Journal of Chemical Physics</i> , 1985, 83, 556-566.	1.2	29
138	Collision-induced transitions between molecular hyperfine levels: Quantum formalism, propensity rules, and experimental study of CaBr($X\hat{2}\hat{1}+$)+Ar. <i>Journal of Chemical Physics</i> , 1985, 83, 2191-2200.	1.2	86
139	Clarification of the electronic asymmetry in $\hat{1}$ state $\hat{1}$ doublets with some implications for molecular collisions. <i>Journal of Chemical Physics</i> , 1984, 80, 4325-4332.	1.2	136
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