Millard H Alexander

List of Publications by Year
in descending order

175	7,428	44069	71685
papers	citations	48 h-index	76 g-index

179	179	179	1660
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rotationally inelastic collisions between a diatomic molecule in a2Î electronic state and a structureless target. Journal of Chemical Physics, 1982, 76, 5974-5988.	3.0	282
2	Quantum treatment of rotationally inelastic collisions involving molecules in II electronic states: New derivation of the coupling potential. Chemical Physics, 1985, 92, 337-344.	1.9	256
3	An investigation of the F+H2 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.	3.0	238
4	Adiabatic and diabatic potential energy surfaces for collisions of CN(Xâ€‰2Î£+,â€‰Aâ€‰2Î) with He. Journal of Chemical Physics, 1988, 89, 3139-3151.	3.0	208
5	Breakdown of the Born-Oppenheimer Approximation in the F+ o -D ₂ â†' DF + D Reaction. Science, 2007, 317, 1061-1064.	12.6	149
6	Rotationally inelastic collisions between a diatomic molecule in a 2Î£+ electronic state and a structureless target. Journal of Chemical Physics, 1982, 76, 3637-3645.	3.0	147
7	Theoretical Study of the Validity of the Born-Oppenheimer Approximation in the Cl + H2rightarrow HCl + H Reaction. Science, 2002, 296, 715-718.	12.6	138
8	Clarification of the electronic asymmetry in Îâ€state Î› doublets with some implications for molecular collisions. Journal of Chemical Physics, 1984, 80, 4325-4332.	3.0	136
9	Spinâ€“orbit effects in the reaction of F(2P) with H2. Journal of Chemical Physics, 1998, 109, 5710-5713.	3.0	131
10	The inelastic scattering of 2Î [case (b)] molecules and an understanding of the differing Î› doublet propensities for molecules of Ï€ vs Ï€3 orbital occupancy. Journal of Chemical Physics, 1989, 91, 839-848.	3.0	130
11	Spinâ€“orbit branching in the photofragmentation of HCl. Journal of Chemical Physics, 1993, 99, 1752-1764.	3.0	114
12	Quantum scattering studies of electronically inelastic collisions of CN (Xâ€‰2Î£+,â€‰Aâ€‰2Î) with He. Journal of Chemical Physics, 1989, 91, 5425-5439.	3.0	113
13	A new, fully ab initio investigation of the NO(Xâ€‰2Î)Ar system. I. Potential energy surfaces and inelastic scattering. Journal of Chemical Physics, 1999, 111, 7426-7434.	3.0	109
14	Fully State-Resolved Differential Cross Sections for the Inelastic Scattering of the Open-Shell NO Molecule by Ar. Science, 2001, 294, 832-834.	12.6	108
15	The rate of the FÂ+ÂH2 reaction at very low temperatures. Nature Chemistry, 2014, 6, 141-145.	13.6	105
16	Theoretical study of intramultiplet transitions in collisions of atoms inP3electronic states with structureless targets:Ca(P3)+He. Physical Review A, 1983, 28, 73-82.	2.5	103
17	Differential and integral cross sections for the inelastic scattering of NO (Xâ€‰2Î) by Ar based on a new ab initio potential energy surface. Journal of Chemical Physics, 1993, 99, 7725-7738.	3.0	99
18	Spectroscopic observation of resonances in the F + H ₂ reaction. Science, 2015, 349, 510-513.	12.6	98

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19	The Extent of Nonâ€“Born-Oppenheimer Coupling in the Reaction of Cl(² P) with para- H ₂. Science, 2008, 322, 573-576.	12.6	95
20	Collision induced transitions between2Î and2Î£ states of diatomic molecules: Quantum theory and collisional propensity rules. Journal of Chemical Physics, 1986, 84, 100-113.	3.0	94
21	Propensity rules in rotationally inelastic collisions of diatomic molecules in3Î£ electronic states. Journal of Chemical Physics, 1983, 79, 302-310.	3.0	86
22	Collisionâ€induced transitions between molecular hyperfine levels: Quantum formalism, propensity rules, and experimental study of CaBr(Xâ€‰2Î£+)+Ar. Journal of Chemical Physics, 1985, 83, 2191-2200.	3.0	86
23	Quantum interpretation of fully stateâ€selected rotationally inelastic collision experiments. Journal of Chemical Physics, 1977, 66, 59-66.	3.0	82
24	Quantum studies of inelastic collisions of NO(Xâ€‰2Î) with Ar. Journal of Chemical Physics, 1983, 79, 6006-6016.	3.0	81
25	Energetics and spinâ€and Îâ€doublet selectivity in the infrared multiphoton dissociation HN3(XÌƒâ€‰1Aâ€™)â†’N2(Xâ€‰1Î£+g)+NH(X3Î£â¯,aâ€‰1Î”): Theory. Journal of Chemical Physics, 1988, 89, 1388-1400.	3.0	78
26	The infiniteâ€order sudden approximation for collisions involving molecules in Î electronic states: A new derivation and calculations of rotationally inelastic cross sections for NO(Xâ€‰2Î)+He and Ar. Journal of Chemical Physics, 1986, 85, 5652-5659.	3.0	77
27	A decoupled lâ€dominant approximation for ionâ€“molecule and atomâ€“molecule collisions. Journal of Chemical Physics, 1976, 64, 3009-3013.	3.0	75
28	A combined experimental and theoretical study of rotational energy transfer in collisions between NO(Xâ€‰2Î1/2, v=3,J) and He, Ar and N2 at temperatures down to 7 K. Journal of Chemical Physics, 1998, 109, 3882-3897.	3.0	74
29	Nonadiabatic Interactions in the Cl + H ₂ Reaction Probed by ClH ₂ ⁻ and ClD ₂ ⁻ Photoelectron Imaging. Science, 2008, 319, 72-75.	12.6	74
30	Adiabatic and approximate diabatic potential energy surfaces for the B...H2van der Waals molecule. Journal of Chemical Physics, 1993, 99, 6014-6026.	3.0	73
31	Rotationally inelastic scattering of two HF molecules. Journal of Chemical Physics, 1977, 66, 1334-1342.	3.0	70
32	Product multiplet branching in the O(1D)+H2â†’OH(2Î)+H reaction. Journal of Chemical Physics, 2004, 121, 5221-5235.	3.0	69
33	Anlâ€dominant simplification of the closeâ€coupled equations for collisions between atoms and diatomic molecules. Journal of Chemical Physics, 1975, 63, 3552-3559.	3.0	67
34	Theoretical study of Ca(4s5p 1P)â†’Ca(4s5p 3P) transitions in collisions with He: Integral cross sections and alignment effects. Journal of Chemical Physics, 1987, 86, 4790-4800.	3.0	67
35	Potential energy surfaces for the interaction of BH(Xâ€‰1Î£+,Aâ€‰1Î) with Ar and a theoretical investigation of the stretchâ€bend levels of the ArBH(A) van der Waals molecule. Journal of Chemical Physics, 1994, 101, 2887-2902.	3.0	67
36	Hybrid quantum scattering algorithms for longâ€range potentials. Journal of Chemical Physics, 1984, 81, 4510-4516.	3.0	65

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37	Semiempirical potential surfaces and dynamical considerations for collisions between alkali metals and molecular oxygen: Li+O2and Na+O2. Journal of Chemical Physics, 1978, 69, 3502-3517.	3.0	60
38	Dipolar model for collisional energy transfer between dark and radiating excited electronic states: CaO(Aâ€²â€‰1Î, aâ€‰3Î) +N2Oâ€‰â‡„â€‰CaO(Aâ€‰1Î£+)+N2O. Journal of Chemical Physics, 1982, 76, 429-444.	3.0	59
39	State-to-state inelastic scattering of Stark-decelerated OH radicals with Ar atoms. Physical Chemistry Chemical Physics, 2010, 12, 10660.	2.8	57
40	Fitting an ab initio HFâ€“HF potential surface. Journal of Chemical Physics, 1976, 65, 5009-5016.	3.0	56
41	Potential surface dependence of vibrationally inelastic collisions between He and H2. Journal of Chemical Physics, 1974, 60, 3950-3957.	3.0	55
42	Potential energy surfaces for the interaction of CH(Xâ€‰2Î,Bâ€‰2Î£â^') with Ar and an assignment of the stretchâ€bend levels of the ArCH(B) van der Waals molecule. Journal of Chemical Physics, 1994, 101, 4547-4560.	3.0	55
43	LiH stateâ€toâ€state rotationally inelastic cross sections in collisions with HCl and DCl. Journal of Chemical Physics, 1979, 71, 1670-1682.	3.0	54
44	Ab initio potential energy surfaces and quantum scattering studies of NO(Xâ€‰2Î) with He: Î›â€doublet resolved rotational and electronic fineâ€structure transitions. Journal of Chemical Physics, 1995, 103, 6973-6983.	3.0	53
45	A joint experimental and theoretical study of Aâ€‰2Îâ†'Xâ€‰2Î£+ electronic energy transfer in the CN molecule induced by collisions with helium. Journal of Chemical Physics, 1993, 98, 8580-8592.	3.0	52
46	On the physical origin of propensity rules in collisions involving molecules in2Î£ electronic states. Journal of Chemical Physics, 1986, 84, 3049-3058.	3.0	51
47	Effective potential study of rotationallyâ€vibrationally inelastic collisions between He and H2. Journal of Chemical Physics, 1974, 61, 5167-5181.	3.0	50
48	Quantum closeâ€coupled studies of collisions of NO(Xâ€‰2Î) with a Ag(111) surface. Journal of Chemical Physics, 1987, 87, 3218-3231.	3.0	49
49	Rotationally inelastic collisions of LiH with He. II. Theoretical treatment of the dynamics. Journal of Chemical Physics, 1980, 72, 6452-6461.	3.0	48
50	Details and consequences of the nonadiabatic coupling in the Cl(2P)â€‰+â€‰H2reaction. Faraday Discussions, 2004, 127, 59-72.	3.2	48
51	Quantum flux redistribution during molecular photodissociation. Journal of Chemical Physics, 1992, 97, 2527-2535.	3.0	47
52	Quantum theory of inelastic collisions of a diatomic molecule in a 2Î electronic state with an uncorrugated surface: Î›â€doublet, spinâ€orbit, and polarization effects in NO (Xâ€‰2Î)â€“Ag (111) scattering. Journal of Chemical Physics, 1984, 80, 3485-3493.	3.0	46
53	Probabilities for classically forbidden transitions using classical and classical path methods. Journal of Chemical Physics, 1976, 65, 2416-2428.	3.0	45
54	Communication: Non-adiabatic coupling and resonances in the F + H2 reaction at low energies. Journal of Chemical Physics, 2011, 134, 231101.	3.0	45

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55	Theoretical investigation of weaklyâ€bound complexes of B with H2. Journal of Chemical Physics, 1995, 103, 7956-7965.	3.0	44
56	Low-energy inelastic collisions of OH radicals with He atoms and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">D</mml:mi><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>molecul Physical Review A, 2010, 82, .	2.5	44
57	Inelastic collisions of OH(Xâ€‰2Î) with paraâ€H2: Î›â€doublet and hyperfineâ€structure transitions. Journal of Chemical Physics, 1988, 88, 6931-6937.	3.0	43
58	Lack of Mâ€preserving propensities in rotationally inelastic collisions of NO(Xâ€‰2Î1/2). Journal of Chemical Physics, 1984, 80, 4133-4136.	3.0	40
59	Polarization and Mâ€dependent effects in rotationally inelastic collisions of openâ€shell diatomic molecules: Arâ€“NO(Xâ€‰2Î1/2). Journal of Chemical Physics, 1984, 80, 1506-1516.	3.0	40
60	Tensor cross sections and collisional depolarization of OH(Xâ€‰2Î) in collisions with helium. Journal of Chemical Physics, 2009, 130, 164315.	3.0	40
61	Scattering of NH3 by orthoâ€•and paraâ€H2: Expansion of the potential and collisional propensity rules. Journal of Chemical Physics, 1993, 98, 4662-4671.	3.0	38
62	Time-dependent wavepacket investigation of state-to-state reactive scattering of Cl with para-H2 including the open-shell character of the Cl atom. Journal of Chemical Physics, 2010, 132, 034308.	3.0	38
63	On the generation of preferential Î›â€doublet populations in the collisional relaxation of highly rotationally excited CH(Xâ€‰2Î). Journal of Chemical Physics, 1994, 101, 7468-7479.	3.0	36
64	Experimental and theoretical study of the Bâ€“Ne nonbonding interaction: The freeâ€boundBâ€‰2Î£+â€“Xâ€‰2Î electronic transition. Journal of Chemical Physics, 1995, 103, 2779-2786.	3.0	36
65	A new, fully ab initio investigation of the ArNO(Xâ€‰2Î) system. II. Bound states of the Arâ€“NO complex. Journal of Chemical Physics, 1999, 111, 7435-7439.	3.0	36
66	Experimental and theoretical study of rotationally inelastic collisions of highly rotationally excited CN(Aâ€Š2Î) with Ar. Journal of Chemical Physics, 2000, 112, 4474-4484.	3.0	36
67	The dynamics of the prototype abstraction reaction Cl(2P3/2,1/2)+ H2: 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.	2.8	36
68	Mechanism of and alignment effects in spinâ€“changing collisions involving atoms in 1P electronic states: Ca(4s5pâ€‰1P)+noble gases. Journal of Chemical Physics, 1989, 90, 5373-5385.	3.0	35
69	Theoretical investigation of weakly-bound complexes of O(3P) with H2. Journal of Chemical Physics, 1998, 108, 4467-4477.	3.0	35
70	lâ€dominant study of rotationally inelastic Li+â€“H2collisions. Journal of Chemical Physics, 1975, 63, 5327-5332.	3.0	34
71	Rotational alignment in inelastic collisions. Journal of Chemical Physics, 1977, 66, 4126-4132.	3.0	34
72	Resonances in rotationally inelastic scattering of NH3 and ND3 with H2. Journal of Chemical Physics, 2015, 143, 044312.	3.0	34

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73	Rotationally inelastic scattering of OH by molecular hydrogen: Theory and experiment. Journal of Chemical Physics, 2015, 142, 204310.	3.0	34
74	Enhanced reactivity of fluorine with para-hydrogen in cold interstellar clouds by resonance-induced quantum tunnelling. Nature Chemistry, 2019, 11, 744-749.	13.6	34
75	Further studies of4Heâ€“H2vibrational relaxation. Journal of Chemical Physics, 1977, 66, 4608-4615.	3.0	33
76	A collaborative theoretical and experimental study of the structure and electronic excitation spectrum of the Bar and Bar2 complexes. Journal of Chemical Physics, 1997, 106, 6320-6331.	3.0	33
77	The study of flux redistribution during molecular photodissociation: Adiabatic and diabatic analyses and application to the dissociation of CH3I. Journal of Chemical Physics, 1992, 97, 4836-4845.	3.0	31
78	A joint theoreticalâ€“experimental investigation of the lower bound states of the NO(Xâ€Š2Î)â€“Ar complex. Journal of Chemical Physics, 2000, 113, 73-85.	3.0	31
79	Potential energy surfaces for and energetics of the weakly-bound Alâ€“H2 and Bâ€“H2 complexes. Journal of Chemical Physics, 2000, 112, 5722-5730.	3.0	31
80	Sudden theories of rotationally inelastic LiHâ€“HCl and LiHâ€“DCl collisions. Journal of Chemical Physics, 1979, 71, 1683-1691.	3.0	30
81	Propensity rules for rotationally inelastic collisions of symmetric top molecules or linear polyatomic molecules with structureless atoms. Journal of Chemical Physics, 1982, 77, 1855-1865.	3.0	30
82	Theoretical study of Ca(4s5pâ€‰1P)â‡„Ca(4s5pâ€‰3P) transitions in collision with noble gases: Integral cross sections and alignment effects. Journal of Chemical Physics, 1989, 91, 1658-1667.	3.0	30
83	Quantum study of the redistribution of flux during inelastic collisions. Journal of Chemical Physics, 1991, 95, 8931-8940.	3.0	30
84	Theoretical investigation of the lower bend-stretch states of the Clâ¯H2 anion complex and its isotopomers. Journal of Chemical Physics, 2003, 118, 9637-9642.	3.0	30
85	Experimental and theoretical study of rotationally inelastic polar molecule collisions:7LiHâ€“HCN. Journal of Chemical Physics, 1980, 72, 6513-6520.	3.0	29
86	A selection rule for Mâ€dependent transitions in collisional excitation of open shell diatomics. Journal of Chemical Physics, 1983, 78, 800-806.	3.0	29
87	Inelastic collisions of CaCl(Xâ€‰2Î£+) with Ar: A collaborative theoretical and experimental study. Journal of Chemical Physics, 1985, 83, 556-566.	3.0	29
88	Closeâ€coupling studies of rotationally inelastic HFâ€“HF collisions at hyperthermal energies. Journal of Chemical Physics, 1980, 73, 5135-5146.	3.0	28
89	Theoretical Study of Bound States of Ar-NO. The Journal of Physical Chemistry, 1994, 98, 1073-1079.	2.9	28
90	The rotational relaxation of NH(câ€‰1Î) in collisions with Ar: A combined theoretical and experimental investigation. Journal of Chemical Physics, 1995, 102, 4069-4083.	3.0	28

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91	Experimental investigation of weakly bound B(2p,3s)â€“H2/D2complexes through laser fluorescence excitation spectroscopy. Journal of Chemical Physics, 1995, 103, 7966-7974.	3.0	28
92	Stateâ€resolved inelastic collisions of single rotational, fineâ€structure, and Î› doublet levels of NH(Aâ€‰3Î) with helium: A combined experimental and theoretical study. Journal of Chemical Physics, 1996, 104, 1325-1337.	3.0	28
93	State-resolved rotationally inelastic collisions of highly rotationally excited CN(Aâ€Š2Î) with helium: Influence of the interaction potential. Journal of Chemical Physics, 2001, 115, 8393-8402.	3.0	28
94	Fullyab initioinvestigation of bound and predissociating states of the NeOH(X) complex. Journal of Chemical Physics, 1995, 103, 3400-3417.	3.0	27
95	Adiabatic and diabatic potential-energy surfaces of the CN(Xâ€‰2Î£+,Aâ€‰2Î)Ne complex and nonadiabatic predissociation dynamics. Journal of Chemical Physics, 1997, 107, 7148-7162.	3.0	27
96	Theoretical investigation of rotationally inelastic collisions of CH2(Ã£) with helium. Journal of Chemical Physics, 2011, 134, 154307.	3.0	27
97	Experimental and theoretical study of the AlNe complex. Journal of Chemical Physics, 1998, 108, 3522-3530.	3.0	26
98	The interaction of OH(X2Î) with H2: Ab initio potential energy surfaces and bound states. Journal of Chemical Physics, 2014, 141, 174309.	3.0	26
99	Angular distributions for the F+H2â†'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.	3.0	24
100	Resonances in rotationally inelastic scattering of OH(X2Î) with helium and neon. Journal of Chemical Physics, 2012, 136, 144308.	3.0	24
101	Theoretical studies of He(1S)+CH(Xâ€‰2Î). II. Fullyabinitiocross sections for the inelastic scattering and comparison with experiment. Journal of Chemical Physics, 1994, 100, 1338-1349.	3.0	23
102	Theoretical study of the interaction of AlH(Xâ€‰1Î£+,Aâ€‰1Î) with Ar: Potential energy surfaces and bendâ€“stretch levels of the ArAlH(X,A) van der Waals complex. Journal of Chemical Physics, 1995, 102, 2413-2425.	3.0	23
103	Clarification of the electronic asymmetry of Î› doublets in 3Î electronic states of diatomic molecules. Journal of Chemical Physics, 1987, 87, 7118-7124.	3.0	22
104	A theoretical study of alignment effects in collisions of N2 with a Ag surface. Journal of Chemical Physics, 1987, 87, 4937-4947.	3.0	22
105	Joint Experimentalâ^'Theoretical Investigation of the Lower Bound States of the NO(X²Î)-Kr Complex. Journal of Physical Chemistry A, 2009, 113, 7366-7375.	2.5	22
106	Adiabatic representations for the study of flux redistribution during photodissociation involving coupled electronic states: The effect of vibrational excitation on the photofragmentation of CH3I. Journal of Chemical Physics, 1993, 98, 6196-6207.	3.0	21
107	Role of van der Waals resonances in the vibrational relaxation of HF by collisions with H atoms. Journal of Chemical Physics, 2007, 127, 114301.	3.0	21
108	A semiclassical treatment of rotationally electronically inelastic scattering of NO from Ag(111). Journal of Chemical Physics, 1989, 90, 575-586.	3.0	20

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109	Theoretical investigation of rotationally inelastic collisions of the methyl radical with helium. Journal of Chemical Physics, 2011, 135, 064306.	3.0	20
110	Theoretical investigation of rotationally inelastic collisions of CH2(Xì*f*) with helium. Journal of Chemical Physics, 2012, 136, 224306.	3.0	20
111	Rotationally inelastic collisions between a molecule in a 2S+1Î£ electronic state and an openâ€shell target: General quantum analysis and experimental measurement of stateâ€resolved cross sections for CaCl(Xâ€‰2Î£+)+NO(Xâ€‰2Î£). Journal of Chemical Physics, 1986, 84, 1547-1553.	3.0	19
112	The failure of rigid shell models for rotationally inelastic LiHâ€“He collisions. Journal of Chemical Physics, 1980, 73, 1233-1237.	3.0	18
113	Quantum flux studies of the mechanism of Ca(4s5pâ€‰1P)â†'Ca(4s5pâ€‰3P) collisions. Journal of Chemical Physics, 1992, 96, 6672-6680.	3.0	18
114	Inelastic collisions of fine structure and Î›-doublet resolved rotational states of PH(Aâ€‰3Î ,â€‰v=0) with helium. Journal of Chemical Physics, 1997, 106, 7642-7653.	3.0	18
115	State-to-state rate coefficients for transfer from the rotational levels J = 7.5, 20.5, 31.5 and 40.5 in NO(X 2Î1/2, v = 2) in collisions with He, Ar and N2 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.	2.8	18
116	Photoabsorption Assignments for the Cì*f*1B2 â†•Xì*f*1A1 Vibronic Transitions of SO2, Using New Ab Initio Potential Energy and Transition Dipole Surfaces. Journal of Physical Chemistry A, 2017, 121, 1012-1021.	2.5	18
117	Fully quantum study of vibrational energy transfer between H2and D2. Journal of Chemical Physics, 1974, 60, 4274-4278.	3.0	17
118	Theory of Stark spectroscopy of molecules in1Î electronic states: Coherence effects and quantum beats. Journal of Chemical Physics, 1986, 85, 134-145.	3.0	17
119	Potential energy hypersurfaces for the interaction of NO with the Ag(111) surface. Journal of Chemical Physics, 1991, 94, 8454-8467.	3.0	17
120	Flux redistribution during the photodissociation of ClNO in theT1state. Journal of Chemical Physics, 1994, 101, 4722-4734.	3.0	17
121	An ab initio investigation of the O(3P)â€“H2(1Î£+g) van der Waals well. Physical Chemistry Chemical Physics, 2006, 8, 4420-4426.	2.8	17
122	New ab initio adiabatic potential energy surfaces and bound state calculations for the singlet ground Xì*f*1A1 and excited Cì*f*1B2(21Aâ€²) states of SO2. Journal of Chemical Physics, 2016, 144, 174301.	3.0	17
123	The interaction of NO(X2Î) with H2: Ab initio potential energy surfaces and bound states. Journal of Chemical Physics, 2017, 146, 114301.	3.0	17
124	A logâ€derivative propagation scheme for the exact solution of twoâ€state curve crossing problems. Journal of Chemical Physics, 1989, 91, 2388-2395.	3.0	16
125	Rotationally inelastic scattering of CD3 and CH3 with He: comparison of velocity map-imaging data with quantum scattering calculations. Chemical Science, 2013, 4, 4199.	7.4	16
126	Exact quantum scattering calculations of transport properties for the H2Oâ€“H system. Journal of Chemical Physics, 2013, 139, 194309.	3.0	16

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127	Validity of energy gap representations of rotationally inelastic cross sections between polar molecules. Journal of Chemical Physics, 1980, 73, 3797-3803.	3.0	15
128	Collisional effects in Stark spectroscopy of molecules in1Î electronic states. Journal of Chemical Physics, 1985, 83, 3340-3348.	3.0	15
129	Rotationally inelastic collisions between a diatomic molecule in a 2S+1Î£ electronic state and a 2S atom: The optimal choice for the totalâ€¦ representation. Journal of Chemical Physics, 1985, 83, 5060-5067.	3.0	15
130	Collisions of NO(Xâ€‰2Î) with a Ag(111) surface: New quantum scattering studies based on a semiempirical potential energy surface. Journal of Chemical Physics, 1991, 94, 8468-8478.	3.0	15
131	Experimental and theoretical investigation of the rotational structure of the Alâ€“H2/D2 complex. Journal of Chemical Physics, 2001, 114, 8938-8947.	3.0	15
132	A simple theoretical study of the ClH2? photoelectron spectrum. Physical Chemistry Chemical Physics, 2004, 6, 4984.	2.8	15
133	State-to-state quantum dynamics of the F + HCl (vi = 0, ji = 0) â†' HF(vf, jf) + Cl reaction on the ground state potential energy surface. Physical Chemistry Chemical Physics, 2013, 15, 15347.	2.8	15
134	Semiclassical Sâ€matrix theory of vibrationally inelastic collisions between two diatomic molecules. Journal of Chemical Physics, 1974, 61, 3967-3976.	3.0	14
135	Model studies of the kinetics of collisional population transfer between dark and radiating excited electronic states: CaO(Aâ€²â€‰1Î)+N2Oâ‡„CaO(Aâ€‰1Î£+)+N2O. Journal of Chemical Physics, 1982, 77, 839-853.	3.0	14
136	Experimental and theoretical study of the electronic spectrum of the BAr2 complex: Transition to the excited valence B(2s2p2â€Š2D) state. Journal of Chemical Physics, 2000, 112, 5037-5043.	3.0	14
137	Exact quantum scattering calculations of transport properties: CH2($ilde{X}^3$Xìƒ3B1,) Tj ETQq1 1 0.784314 rgBT /Overlock	3.0	14
138	State-Specific Collision Dynamics of Molecular Super Rotors with Oriented Angular Momentum. Journal of Physical Chemistry A, 2015, 119, 12471-12479.	2.5	14
139	Inelastic collisions of CaF(Aâ€‰2Î) with He and Ar: Quantum calculations and adiabatic analysis. Journal of Chemical Physics, 1988, 88, 3581-3589.	3.0	13
140	Electronic spectroscopy and excited state dynamics of the Alâ€“H2/D2 complex. Faraday Discussions, 2001, 118, 387-404.	3.2	13
141	Depolarization in H₂Oâ€“He collisions. Molecular Physics, 2010, 108, 1159-1169.	1.7	13
142	Transport Properties for Systems with Deep Potential Wells: H + O₂. Journal of Physical Chemistry A, 2014, 118, 11935-11942.	2.5	13
143	Inelastic contributions to ionâ€“molecule diffusion cross sections: Li+â€“H2. Journal of Chemical Physics, 1976, 64, 4498-4503.	3.0	12
144	Experimental and theoretical study of Î›-doublet resolved rotationally inelastic collisions of highly rotationally excited CH(Aâ€Š2Î”,v=0) with Ar. Journal of Chemical Physics, 2001, 115, 800-809.	3.0	12

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145	Experimental and Theoretical Study of State-Resolved Electronically Inelastic Collisions of Highly Rotationally Excited CN(A2Î) with Argon and Helium:â€‰ The Role of Gateway Levels. Journal of Physical Chemistry A, 2002, 106, 8345-8354.	2.5	12
146	Reactivity of the F spinâ€“orbit excited state in the F + HD reaction: Product translational and rotational energy distributions. Physical Chemistry Chemical Physics, 2004, 6, 5018-5025.	2.8	12
147	Experimental and theoretical investigation of the temperature dependent electronic quenching of O(1D) atoms in collisions with Kr. Journal of Chemical Physics, 2018, 148, 124311.	3.0	12
148	Exact quantum scattering calculation of transport properties for free radicals: OH(X2Î)â€“helium. Journal of Chemical Physics, 2012, 137, 094306.	3.0	11
149	Uncloaking the Quantum Nature of Inelastic Molecular Collisions. Science, 2013, 341, 1076-1077.	12.6	11
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