

Jeremy M Hutson

List of Publications by Year in descending order

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240
papers

12,105
citations

20817

60
h-index

34986

98
g-index

241
all docs

241
docs citations

241
times ranked

3351
citing authors

#	ARTICLE	IF	CITATIONS
1	Theoretical studies of van der Waals molecules and intermolecular forces. Chemical Reviews, 1988, 88, 963-988.	47.7	552
2	Ultracold Dense Samples of Dipolar RbCs Molecules in the Rovibrational and Hyperfine Ground State. Physical Review Letters, 2014, 113, 205301.	7.8	419
3	Creation of Ultracold $\text{Rb}^{\infty}\text{Rb}$ Molecules. Physical Review Letters, 2013, 110, 135301.	7.8	369
4	An ultracold high-density sample of rovibronic ground-state molecules in an optical lattice. Nature Physics, 2010, 6, 265-270.	16.7	308
5	Vibrational dependence of the anisotropic intermolecular potential of $\text{Ar}^{\infty}\text{HF}$. Journal of Chemical Physics, 1992, 96, 6752-6767.	3.0	280
6	The intermolecular potential of $\text{Ar}^{\infty}\text{HCl}$: Determination from high-resolution spectroscopy. Journal of Chemical Physics, 1988, 89, 4550-4557.	3.0	229
7	Improved potential energy surfaces for the interaction of H_2 with Ar, Kr, and Xe. Journal of Chemical Physics, 1987, 86, 837-853.	3.0	204
8	Reactions of ultracold alkali-metal dimers. Physical Review A, 2010, 81, .	2.5	202
9	Anisotropic intermolecular forces. Molecular Physics, 1982, 45, 791-805.	1.7	184
10	Precise Characterization of $\text{Li}^{\infty}\text{Li}$ Feshbach Resonances Using Trap-Sideband-Resolved RF Spectroscopy of Weakly Bound Molecules. Physical Review Letters, 2013, 110, 135301.	7.8	183
11	Universality of the Three-Body Parameter for Efimov States in Ultracold Cesium. Physical Review Letters, 2011, 107, 120401.	7.8	180
12	Anisotropic intermolecular forces. Molecular Physics, 1982, 45, 769-790.	1.7	177
13	Vibrational dependence of the anisotropic intermolecular potential of argon-hydrogen chloride. The Journal of Physical Chemistry, 1992, 96, 4237-4247.	2.9	175
14	The dynamics of open-shell Van der Waals complexes. Journal of Chemical Physics, 1991, 94, 7602-7618.	3.0	161
15	Coupled channel methods for solving the bound-state Schrödinger equation. Computer Physics Communications, 1994, 84, 1-18.	7.5	140
16	Centrifugal distortion constants for diatomic molecules: an improved computational method. Journal of Physics B: Atomic and Molecular Physics, 1981, 14, 851-857.	1.6	133
17	Morphing ab initio potentials: A systematic study of $\text{Ne}^{\infty}\text{HF}$. Journal of Chemical Physics, 1999, 110, 8338-8347.	3.0	131
18	Quantum Dynamics of Ultracold $\text{Na}^{\infty}\text{Na}_2$ Collisions. Physical Review Letters, 2002, 89, 153201.	7.8	131

#	ARTICLE	IF	CITATIONS
19	Towards the production of ultracold ground-state RbCs molecules: Feshbach resonances, weakly bound states, and the coupled-channel model. <i>Physical Review A</i> , 2012, 85, .	2.5	131
20	Rotational predissociation of the Ar...HCl van der Waals complex: Close-coupled scattering calculations. <i>Journal of Chemical Physics</i> , 1983, 78, 4025-4039.	3.0	123
21	Observation of the Second Triatomic Resonance in Efimov's Scenario. <i>Physical Review Letters</i> , 2014, 112, 190401.	7.8	120
22	Molecule formation in ultracold atomic gases. <i>International Reviews in Physical Chemistry</i> , 2006, 25, 497-526.	2.3	114
23	The intermolecular potential energy surface of Ar-HCl. <i>Molecular Physics</i> , 1981, 43, 493-516.	1.7	113
24	Atom-asymmetric top van der Waals complexes: Angular momentum coupling in Ar-H ₂ O. <i>Journal of Chemical Physics</i> , 1990, 92, 157-168.	3.0	108
25	Feshbach resonances in ultracold atomic and molecular collisions: threshold behaviour and suppression of poles in scattering lengths. <i>New Journal of Physics</i> , 2007, 9, 152-152.	2.9	105
26	Ultracold RbSr Molecules Can Be Formed by Magnetoassociation. <i>Physical Review Letters</i> , 2010, 105, 153201.	7.8	105
27	Hyperfine energy levels of alkali-metal dimers: Ground-state polar molecules in electric and magnetic fields. <i>Physical Review A</i> , 2008, 78, .	2.5	100
28	Nonadditive intermolecular forces from the spectroscopy of van der Waals trimers: Calculations on Ar ₂ -HCl. <i>Journal of Chemical Physics</i> , 1993, 98, 5337-5351.	3.0	98
29	Ultracold Rb-OH Collisions and Prospects for Sympathetic Cooling. <i>Physical Review Letters</i> , 2006, 97, 183201.	7.8	97
30	Ultracold Li+Li ₂ Collisions: Bosonic and Fermionic Cases. <i>Physical Review Letters</i> , 2005, 94, 033201.	7.8	96
31	Ultracold molecules for quantum simulation: rotational coherences in CaF and RbCs. <i>Quantum Science and Technology</i> , 2019, 4, 014010.	5.8	96
32	Atom-molecule van der Waals complexes containing open-shell atoms. I. General theory and bending levels. <i>Journal of Chemical Physics</i> , 1994, 101, 1939-1958.	3.0	94
33	Signatures of large amplitude motion in a weakly bound complex: High-resolution IR spectroscopy and quantum calculations for HeCO ₂ . <i>Journal of Chemical Physics</i> , 1994, 101, 8351-8363.	3.0	90
34	Feshbach resonances, weakly bound molecular states, and coupled-channel potentials for cesium at high magnetic fields. <i>Physical Review A</i> , 2013, 87, .	2.5	88
35	Ultracold polar molecules as qudits. <i>New Journal of Physics</i> , 2020, 22, 013027.	2.9	84
36	The intermolecular potential energy surface for CO ₂ -Ar: Fitting to high-resolution spectroscopy of Van der Waals complexes and second virial coefficients. <i>Journal of Chemical Physics</i> , 1996, 105, 9130-9140.	3.0	80

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37	Ultracold atom-molecule collisions and bound states in magnetic fields: Tuning zero-energy Feshbach resonances in $\text{He} \sim \text{NH}(\tilde{1}\Sigma^+3)$. <i>Physical Review A</i> , 2007, 75, .	2.5	79
38	Sticky collisions of ultracold RbCs molecules. <i>Nature Communications</i> , 2019, 10, 3104.	12.8	79
39	On the long-range and short-range behavior of potentials from reproducing kernel Hilbert space interpolation. <i>Journal of Chemical Physics</i> , 2000, 112, 4415-4416.	3.0	76
40	Production of Ultracold NH Molecules by Sympathetic Cooling with Mg. <i>Physical Review Letters</i> , 2009, 103, 183201.	7.8	74
41	Ultracold quantum dynamics: Spin-polarized $\text{K}+\text{K}_2$ collisions with three identical bosons or fermions. <i>Physical Review A</i> , 2005, 71, .	2.5	72
42	Selective adsorption resonances in the scattering of helium atoms from xenon coated graphite: Close-coupling calculations and potential dependence. <i>Journal of Chemical Physics</i> , 1983, 79, 5179-5187.	3.0	71
43	Anisotropic intermolecular forces from Hartree-Fock plus damped dispersion (HFD) calculations. <i>Molecular Physics</i> , 1984, 52, 763-781.	1.7	71
44	Three-body nonadditive forces between spin-polarized alkali-metal atoms. <i>Physical Review A</i> , 2003, 67, .	2.5	71
45	Ultracold Collisions Involving Heteronuclear Alkali Metal Dimers. <i>Physical Review Letters</i> , 2005, 94, 200402.	7.8	71
46	Magnetically Tunable Feshbach Resonances in Ultracold Li-Yb Mixtures. <i>Physical Review Letters</i> , 2012, 108, 043201.	7.8	71
47	molscat: A program for non-reactive quantum scattering calculations on atomic and molecular collisions. <i>Computer Physics Communications</i> , 2019, 241, 9-18.	7.5	71
48	The $\text{Ar} \sim \text{HF}$ intermolecular potential: Overtone spectroscopy and ab initio calculations. <i>Journal of Chemical Physics</i> , 1993, 99, 9337-9349.	3.0	70
49	Atom-Molecule van der Waals Complexes Containing Open-Shell Atoms. 2. The Bound States of Cl-HCl . <i>The Journal of Physical Chemistry</i> , 1994, 98, 5844-5854.	2.9	70
50	Observation of Feshbach resonances between alkali and closed-shell atoms. <i>Nature Physics</i> , 2018, 14, 881-884.	16.7	70
51	Vibrational predissociation and infrared spectrum of the $\text{Ar} \sim \text{HCl}$ van der Waals molecule. <i>Journal of Chemical Physics</i> , 1984, 81, 2357-2362.	3.0	69
52	Microwave spectroscopy and interaction potential of the long-range $\text{He} \dots \text{Ar}^+$ ion. <i>Journal of Chemical Physics</i> , 1995, 102, 2379-2403.	3.0	69
53	Molecular collisions in ultracold atomic gases. <i>International Reviews in Physical Chemistry</i> , 2007, 26, 1-28.	2.3	68
54	Prospects of forming ultracold molecules in $\langle \text{math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mrow} \langle \text{msup} \langle \text{mrow} / \rangle \langle \text{mn} \rangle 2 \langle / \text{mn} \rangle \langle / \text{msup} \rangle \langle \text{mi} \rangle \tilde{1} \Sigma \langle / \text{mi} \rangle \langle / \text{mrow} \rangle \langle / \text{math} \rangle$ states by magnetoassociation of alkali-metal atoms with Yb. <i>Physical Review A</i> , 2013, 87, .	2.5	67

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55	Nonadditive intermolecular forces from the spectroscopy of van der Waals trimers: A theoretical study of Ar ₂ -HF. <i>Physical Review A</i> , 1995, 51, 239-250.	2.5	66
56	Microwave Shielding of Ultracold Polar Molecules. <i>Physical Review Letters</i> , 2018, 121, 163401.	7.8	66
57	Spectroscopic properties and potential surfaces for atom-diatom van der Waals molecules. <i>Molecular Physics</i> , 1980, 41, 1123-1141.	1.7	63
58	Predissociation of weak-anisotropy Van der Waals molecules. Theory, approximations and practical predictions. <i>Faraday Discussions of the Chemical Society</i> , 1982, 73, 339.	2.2	63
59	The intermolecular potential of Ne-HCl: Determination from high-resolution spectroscopy. <i>Journal of Chemical Physics</i> , 1989, 91, 4448-4454.	3.0	63
60	Interactions and dynamics in Li+Li ₂ ultracold collisions. <i>Journal of Chemical Physics</i> , 2007, 127, 074302.	3.0	61
61	A new approach to perturbation theory for breakdown of the Born-Oppenheimer approximation. <i>Molecular Physics</i> , 1980, 41, 1113-1122.	1.7	60
62	An evaluation of existing potential energy surfaces for CO ₂ -Ar: Pressure broadening and high-resolution spectroscopy of van der Waals complexes. <i>Journal of Chemical Physics</i> , 1996, 104, 2156-2166.	3.0	60
63	Spectral line shape parameters for HF in a bath of Ar are accurately predicted by a potential inferred from spectra of the van der Waals dimer. <i>Journal of Chemical Physics</i> , 1994, 100, 891-898.	3.0	58
64	Large Effects of Electric Fields on Atom-Molecule Collisions at Millikelvin Temperatures. <i>Physical Review Letters</i> , 2011, 106, 193201.	7.8	58
65	Anisotropic intermolecular potentials. III. Rare-gas-hydrogen bromide systems. <i>Journal of Chemical Physics</i> , 1989, 91, 4455-4461.	3.0	57
66	Interaction of NH(X ¹ Σ ⁺) Molecules with Rubidium Atoms: Implications for Sympathetic Cooling and the Formation of Extremely Polar Molecules. <i>Physical Review Letters</i> , 2004, 92, 163202.	7.8	57
67	I-NoLLS: A program for interactive nonlinear least-squares fitting of the parameters of physical models. <i>Computer Physics Communications</i> , 1997, 102, 252-268.	7.5	56
68	A theoretical study of the Ar ₂ HCl van der Waals cluster. <i>Journal of Chemical Physics</i> , 1989, 90, 1337-1344.	3.0	55
69	Methods for calculating the bound state energies of van der Waals trimers: Applications to Ar ₃ . <i>Journal of Chemical Physics</i> , 1993, 98, 2160-2169.	3.0	55
70	Non-additive intermolecular forces from the spectroscopy of Van der Waals trimers: A comparison of Ar ₂ -HF and Ar ₂ -HCl, including H/D isotope effects. <i>Journal of Chemical Physics</i> , 1997, 106, 6288-6301.	3.0	55
71	Production of optically trapped RbCs Feshbach Low-energy collisions of NH_3	2.5	55
72	Production of optically trapped ND_3 ultracold Rb atoms. <i>Physical Review A</i> , 2009, 79, .	2.5	54

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73	New vibration-rotation code for tetraatomic molecules exhibiting wide-amplitude motion: WAVR4. Computer Physics Communications, 2004, 163, 117-131.	7.5	53
74	Close-coupling calculations of transport and relaxation cross sections for H ₂ in Ar. Journal of Chemical Physics, 1984, 80, 1135-1149.	3.0	52
75	Morphing the He-OCS intermolecular potential. Journal of Chemical Physics, 2001, 115, 5059-5065.	3.0	52
76	Pairwise-additive models for atom-surface interaction potentials: An initial study of He-LiF. Physical Review B, 1986, 33, 3724-3735.	3.2	51
77	Parity doubling in open-shell van der Waals complexes. Chemical Physics Letters, 1992, 193, 355-363.	2.6	49
78	Cold collisions between OH and Rb: The field-free case. Physical Review A, 2007, 75, .	2.5	49
79	Potential energy surfaces for Ar-OH ($X^2\Sigma^+$) obtained by fitting to high-resolution spectroscopy. Journal of Chemical Physics, 1993, 99, 7477-7486.	3.0	48
80	Calculating energy levels of isomerizing tetra-atomic molecules. II. The vibrational states of acetylene and vinylidene. Journal of Chemical Physics, 2005, 122, 064309.	3.0	48
81	A spectroscopic puzzle in ArHF solved: The test of a new potential. Journal of Chemical Physics, 1992, 97, 8009-8018.	3.0	47
82	Modeling sympathetic cooling of molecules by ultracold atoms. Physical Review A, 2015, 92, .	2.5	47
83	Robust entangling gate for polar molecules using magnetic and microwave fields. Physical Review A, 2020, 101, .	2.5	47
84	Vibrational predissociation of the Ne-C ₂ H ₄ and Ar-C ₂ H ₄ van der Waals complexes. Journal of Chemical Physics, 1984, 81, 4474-4480.	3.0	46
85	Forming a Single Molecule by Magnetoassociation in an Optical Tweezer. Physical Review Letters, 2020, 124, 253401.	7.8	46
86	Vibrational predissociation of hydrogen, deuterium, and hydrogen deuteride-argon van der Waals molecules. The Journal of Physical Chemistry, 1983, 87, 2713-2720.	2.9	45
87	On the rotational constants of floppy molecules. Chemical Physics Letters, 1994, 222, 257-262.	2.6	44
88	Non-additive intermolecular forces from the spectroscopy of van der Waals trimers: far-infrared spectra and calculations on Ar ₂ -DCl. Molecular Physics, 1994, 81, 579-598.	1.7	44
89	The potential energy surface and near-dissociation states of He-H ₂ ⁺ . Journal of Chemical Physics, 1999, 110, 3418-3427.	3.0	44
90	High resolution radiofrequency spectroscopy of Ar...HCl. Journal of Chemical Physics, 1981, 74, 6520-6521.	3.0	43

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91	The atom-surface interaction potential for He-NaCl: A model based on pairwise additivity. <i>Surface Science</i> , 1986, 173, 337-350.	1.9	43
92	Rotationally inelastic scattering in CH ₄ +He, Ne, and Ar: State-to-state cross sections via direct infrared laser absorption in crossed supersonic jets. <i>Journal of Chemical Physics</i> , 1996, 105, 3497-3516.	3.0	43
93	The potential energy surface of He-HCN determined by fitting to high-resolution spectroscopic data. <i>Journal of Chemical Physics</i> , 1996, 105, 440-450.	3.0	43
94	Predissociation of HD-Ar van der Waals molecules by internal rotation. <i>Journal of Chemical Physics</i> , 1983, 78, 4040-4043.	3.0	41
95	Atom-spherical top van der Waals complexes: A theoretical study. <i>Journal of Chemical Physics</i> , 1994, 100, 2505-2521.	3.0	41
96	Controlling the rotational and hyperfine state of ultracold RbCs molecules. <i>Physical Review A</i> , 2008, 78, .	2.5	41
97	Avoided crossings between bound states of ultracold cesium dimers. <i>Physical Review A</i> , 2008, 78, .	2.5	40
98	Manipulating ultracold polar molecules with microwave radiation: The influence of hyperfine structure. <i>Physical Review A</i> , 2009, 80, .	2.5	40
99	Prospects for sympathetic cooling of polar molecules: NH with alkali-metal and alkaline-earth atoms - a new hope. <i>Faraday Discussions</i> , 2009, 142, 191.	3.2	40
100	The prospects of sympathetic cooling of NH molecules with Li atoms. <i>European Physical Journal D</i> , 2011, 65, 151-160.	1.3	40
101	Contrasting the wide Feshbach resonances in Li_6 and Li_7 . <i>Physical Review A</i> , 2014, 89, .	2.5	40
102	Prospects for producing ultracold NH_3 molecules by sympathetic cooling: A survey of interaction potentials. <i>Physical Review A</i> , 2008, 78, .	2.5	38
103	Cold and ultracold NH-NH collisions in magnetic fields. <i>Physical Review A</i> , 2011, 83, .	2.5	38
104	Robust storage qubits in ultracold polar molecules. <i>Nature Physics</i> , 2021, 17, 1149-1153.	16.7	38
105	Calculating nuclear quadrupole coupling constants for van der Waals complexes. <i>Molecular Physics</i> , 1995, 84, 185-199.	1.7	36
106	Observation of a microwave spectrum of the long-range He-H ₂ ⁺ complex. <i>Chemical Physics Letters</i> , 1996, 260, 395-405.	2.6	36
107	Stimulating the production of deeply bound RbCs molecules with laser pulses: the role of spin-orbit coupling in forming ultracold molecules. <i>New Journal of Physics</i> , 2009, 11, 055011.	2.9	36
108	Interaction between LiH molecule and Li atom from state-of-the-art electronic structure calculations. <i>Journal of Chemical Physics</i> , 2011, 134, 114109.	3.0	36

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109	Devil's Yang effects in the ultracold mixture of Na^{23} and Rb^{87} with attractive interspecies interactions. <i>Physical Review Research</i> , 2021, 3, .	3.6	36
110	Hyperfine energy levels of alkali-metal dimers: Ground-state homonuclear molecules in magnetic fields. <i>Physical Review A</i> , 2009, 79, .	2.5	35
111	Cold collisions of N^4S atoms and $\text{NH}^3\hat{\Sigma}$ molecules in magnetic fields. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 3669-3680.	2.8	35
112	Multichannel quantum defect theory for cold molecular collisions. <i>Physical Review A</i> , 2011, 84, .	2.5	35
113	Hyperfine structure of alkali-metal diatomic molecules. <i>Physical Review A</i> , 2017, 96, .	2.5	34
114	Microwave spectroscopy and interaction potential of the long-range He^-Kr^+ ion: An example of Hund's case (e). <i>Journal of Chemical Physics</i> , 1996, 105, 8602-8614.	3.0	33
115	Ultracold Chemistry. <i>Science</i> , 2010, 327, 788-789.	12.6	32
116	Vibrational relaxation of $\text{CO}(\nu=1)$ by inelastic collisions with ^3He and ^4He . <i>Journal of Chemical Physics</i> , 1995, 103, 2528-2537.	3.0	31
117	Nonadditive intermolecular forces in Ar^-HF van der Waals clusters: Effects on the HF vibrational frequency shift. <i>Journal of Chemical Physics</i> , 1999, 111, 8378-8383.	3.0	31
118	Long range intermolecular forces in triatomic systems: connecting the atom-diatom and atom-atom representations. <i>Molecular Physics</i> , 2006, 104, 23-31.	1.7	31
119	Feshbach resonances in ultracold Rb . <i>Physical Review A</i> , 2013, 87, .	2.5	31
120	Collisions between Ultracold Molecules and Atoms in a Magnetic Trap. <i>Physical Review Letters</i> , 2021, 126, 153401.	7.8	31
121	Bound-state wave functions from coupled channel calculations using log-derivative propagators: Application to spectroscopic intensities in Ar^-HF . <i>Journal of Chemical Physics</i> , 1994, 101, 5578-5584.	3.0	30
122	Line shape, transport and relaxation properties from intermolecular potential energy surfaces: The test case of CO_2^-Ar . <i>Journal of Chemical Physics</i> , 1997, 107, 1824-1834.	3.0	30
123	The intermolecular potential of Ar -acetylene. Information from infrared and microwave spectroscopy. <i>Chemical Physics Letters</i> , 1992, 198, 1-8.	2.6	29
124	Regular and irregular vibrational states: Localized anharmonic modes in Ar_3 . <i>Journal of Chemical Physics</i> , 1999, 110, 902-911.	3.0	29
125	Dramatic Reductions in Inelastic Cross Sections for Ultracold Collisions near Feshbach Resonances. <i>Physical Review Letters</i> , 2009, 103, 163201.	7.8	29
126	Prospects for sympathetic cooling of molecules in electrostatic, ac and microwave traps. <i>European Physical Journal D</i> , 2011, 65, 141-149.	1.3	29

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127	Effective-range approximations for resonant scattering of cold atoms. <i>Physical Review A</i> , 2014, 89, .	2.5	29
128	Two-photon photoassociation spectroscopy of CsYb: Ground-state interaction potential and interspecies scattering lengths. <i>Physical Review A</i> , 2018, 98, .	2.5	29
129	bound and field: Programs for calculating bound states of interacting pairs of atoms and molecules. <i>Computer Physics Communications</i> , 2019, 241, 1-8.	7.5	29
130	Use of calculated centrifugal distortion constants ($D_1^{1/2}$, $H_1^{1/2}$, $L_1^{1/2}$ and $M_1^{1/2}$) in the analysis of the $B \hat{a}^1 \Sigma^+$ system of I_2 . <i>Journal of Molecular Spectroscopy</i> , 1982, 96, 266-278.	1.2	28
131	Calculations of the spectra of rare gas dimers and trimers: Implications for additive and nonadditive intermolecular forces in $Ne_2 \hat{a}^1 \Sigma^+$, $Ne_2 \hat{a}^1 \Sigma^+$, $Ne_2 \hat{a}^1 \Sigma^+$, $Ar_2 \hat{a}^1 \Sigma^+$, Ar_3 , $Ar_2 \hat{a}^1 \Sigma^+$ and $Ar_2 \hat{a}^1 \Sigma^+$. <i>Journal of Chemical Physics</i> , 1995, 103, 3386-3391.	3.0	28
132	Long Rotational Coherence Times of Molecules in a Magnetic Trap. <i>Physical Review Letters</i> , 2020, 124, 063001.	7.8	28
133	Coupled channel bound state calculations: Calculating expectation values without wavefunctions. <i>Chemical Physics Letters</i> , 1988, 151, 565-569.	2.6	27
134	ac Stark effect in ultracold polar Rb Cs molecules. <i>Physical Review A</i> , 2017, 96, .	2.5	27
135	Microwave electronic spectrum of the $Ne \hat{a}^1 \Sigma^+$ long-range complex: The interaction potential. <i>Journal of Chemical Physics</i> , 2002, 116, 3662-3669.	3.0	26
136	Calculating energy levels of isomerizing tetra-atomic molecules. I. The rovibrational bound states of Ar_2HF . <i>Journal of Chemical Physics</i> , 2003, 118, 4896-4904.	3.0	26
137	Production of Ultracold $Rb^{133}Cs$ in the Absolute Ground State: Complete Characterisation of the Stimulated Raman Adiabatic Passage Transfer. <i>ChemPhysChem</i> , 2016, 17, 3811-3817.	2.1	26
138	Deviations from Born-Oppenheimer mass scaling in spectroscopy and ultracold molecular physics. <i>Journal of Molecular Spectroscopy</i> , 2016, 330, 43-56.	1.2	26
139	The secular equation/perturbation theory method for calculating spectra of van der Waals complexes. <i>Journal of Chemical Physics</i> , 1985, 83, 1197-1203.	3.0	25
140	Physical origin of oscillations in the three-dimensional collision amplitudes of heavy-light-heavy systems. Semiclassical quantization of chaotic scattering. <i>Journal of Chemical Physics</i> , 1993, 98, 3929-3944.	3.0	25
141	On the choice of inertial axes for interpreting spectroscopic properties of van der Waals complexes. <i>Journal of Chemical Physics</i> , 1994, 101, 5438-5440.	3.0	25
142	Intermolecular potential energy surfaces and bound states in $F \hat{a}^1 \Sigma^+$ HF. <i>Journal of Chemical Physics</i> , 2000, 112, 592-600.	3.0	25
143	Feshbach spectroscopy of an ultracold mixture of Rb and Cs molecules. <i>Physical Review A</i> , 2013, 87, .	2.5	25
144	Cold atomic and molecular collisions: approaching the universal loss regime. <i>New Journal of Physics</i> , 2015, 17, 045019.	2.9	25

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145	Production of ultracold molecules by photoassociation. <i>Physical Review A</i> , 2018, 97, .		
146	Magnetic Feshbach resonances in collisions of $^{23}\text{Na}^{40}\text{K}$ with ^{40}K . <i>New Journal of Physics</i> , 2021, 23, 115010.	2.9	25
147	The augmented secular equation method for calculating spectra of van der Waals complexes. Application to the infrared spectrum of Ar^-HCl . <i>Journal of the Chemical Society, Faraday Transactions 2</i> , 1986, 82, 1163-1171.	1.1	24
148	Non-additive intermolecular forces from the spectroscopy of Van der Waals trimers: the effect of monomer vibrational excitation in Ar_2^-HF and Ar_2^-HCl . <i>Faraday Discussions</i> , 1994, 97, 119-129.	3.2	24
149	Large-amplitude quantum mechanics in polyatomic hydrides. II. A particle-on-a-sphere model for $\text{XH}_n^-(n=4,5)$. <i>Journal of Chemical Physics</i> , 2008, 128, 094306.	3.0	24
150	Effect of hyperfine interactions on ultracold molecular collisions: $\text{NH}(3^1\Sigma^+)$ with $\text{Mg}(1\text{S})$ in magnetic fields. <i>Physical Review A</i> , 2011, 84, .	2.5	24
151	Approach to chaos in ultracold atomic and molecular physics: Statistics of near-threshold bound states for $\text{Li}+\text{CaH}$ and $\text{Li}+\text{CaF}$. <i>Physical Review A</i> , 2016, 93, .	2.5	24
152	Observation of interspecies Feshbach resonances in an ultracold $\text{K}^{39}\text{K}^{41}\text{Cs}$ mixture and refinement of interaction potentials. <i>Physical Review A</i> , 2017, 95, .	2.5	24
153	Free-body parameter for Efimov states in $\text{Li}^-\text{Li}^-\text{Li}$. <i>Physical Review A</i> , 2017, 95, .	2.5	23
154	Observation of Efimov Universality across a Nonuniversal Feshbach Resonance in $\text{K}^{39}\text{K}^{41}\text{Cs}$. <i>Physical Review Letters</i> , 2020, 125, 243401.	7.8	23
155	A semiempirical model for atom-surface dispersion coefficients. <i>Surface Science</i> , 1986, 165, 289-302.	1.9	22
156	Potential energy surfaces and bound states for the open-shell van der Waals cluster Br^-HF . <i>Journal of Chemical Physics</i> , 2003, 119, 8873-8881.	3.0	22
157	Feshbach resonances, molecular bound states, and prospects of ultracold-molecule formation in mixtures of ultracold K and Cs . <i>Physical Review A</i> , 2014, 90, .	2.5	22
158	Quadrupolar contributions to the atom-surface Van Der Waals interaction. <i>Surface Science</i> , 1986, 175, L775-L781.	1.9	21
159	Close-coupling calculations of transport and relaxation cross sections for H_2 in Ar . <i>Journal of Chemical Physics</i> , 1987, 86, 854-857.	3.0	21
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