Jacek KÅ‚os

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5940236/publications.pdf

Version: 2024-02-01

177	4,502	94269	161609
papers	citations	37 h-index	54 g-index

179	179	179	1885
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Astronomical identification of CN⁻, the smallest observed molecular anion. Astronomy and Astrophysics, 2010, 517, L2.	2.1	207
2	BASECOL2012: A collisional database repository and web service within the Virtual Atomic and Molecular Data Centre (VAMDC). Astronomy and Astrophysics, 2013, 553, A50.	2.1	193
3	Observation of the isotope effect in sub-kelvin reactions. Nature Chemistry, 2014, 6, 332-335.	6.6	126
4	Spectroscopic observation of resonances in the F + H ₂ reaction. Science, 2015, 349, 510-513.	6.0	98
5	Can we estimate H$mathsf{_{2}}$(j = 0) rate coefficients from He rate coefficients? Application to the SiS molecule. Astronomy and Astrophysics, 2008, 478, 567-574.	2.1	90
6	Interference structures in the differential cross-sections for inelastic scattering of NO by Ar. Nature Chemistry, 2011, 3, 597-602.	6.6	90
7	Cold heteromolecular dipolar collisions. Physical Chemistry Chemical Physics, 2011, 13, 19059.	1.3	85
8	Cold<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi mathvariant="bold">N</mml:mi><mml:mo mathvariant="bold">+</mml:mo><mml:mi>NH</mml:mi></mml:math>Collisions in a Magnetic Trap. Physical Review Letters, 2011, 106, 053201.	2.9	82
9	Differential cross sections for collisions of hexapole state-selected NO with He. Journal of Chemical Physics, 2005, 123, 224305.	1.2	80
10	Interaction of NH(XÎ£â¯3) with He: Potential energy surface, bound states, and collisional Zeeman relaxation. Journal of Chemical Physics, 2005, 122, 094307.	1.2	74
11	Benchmarks for the generation of interaction potentials for scattering calculations: applications to rotationally inelastic collisions of C4 (X3Î£â¯g) with He. Physical Chemistry Chemical Physics, 2010, 12, 15672.	1.3	69
12	Rotational excitation of CN(Xâ€‰Î£2+) by He: Theory and comparison with experiments. Journal of Chemical Physics, 2010, 132, 024303.	1.2	62
13	State-to-state inelastic scattering of Stark-decelerated OH radicals with Ar atoms. Physical Chemistry Chemical Physics, 2010, 12, 10660.	1.3	57
14	Scattering resonances in bimolecular collisions between NO radicals and H2 challenge the theoretical gold standard. Nature Chemistry, 2018, 10, 435-440.	6.6	56
15	The rotational excitation of the interstellar HNC by para- and ortho-H2. Physical Chemistry Chemical Physics, 2011, 13, 8204.	1.3	54
16	Orientation and alignment depolarization in OH(Xâ€‰Î2)+Ar/He collisions. Journal of Chemical Physics, 2008, 129, 074304.	1.2	53
17	Suppression of Angular Forces in Collisions of Non-S-State Transition Metal Atoms. Physical Review Letters, 2005, 94, 013202.	2.9	51
18	Ab initio potential energy surface for the Ar(1S)+OH(X2Î) interaction and bound rovibrational states. Journal of Chemical Physics, 2000, 112, 4952-4958.	1.2	48

#	ARTICLE	IF	CITATIONS
19	Interaction of NO(Aâ€‰Î£+) with rare gas atoms: Potential energy surfaces and spectroscopy. Journal of Chemical Physics, 2008, 129, 244303.	1.2	47
20	Ab initio potential energy and dipole moment surfaces, infrared spectra, and vibrational predissociation dynamics of the 35Clâ¯â‹¯H2/D2 complexes. Journal of Chemical Physics, 2003, 119, 12931-12945.	1.2	46
21	First rate coefficients for an interstellar anion: application to the CNâ¯-H2 collisional system. Monthly Notices of the Royal Astronomical Society, 2011, 418, 271-275.	1.6	46
22	Ab initio properties of Li-group-II molecules for ultracold matter studies. Journal of Chemical Physics, 2011, 135, 164108.	1.2	45
23	The importance of non-LTE models for the interpretation of observations of interstellar NO. Astronomy and Astrophysics, 2009, 493, 557-563.	2.1	44
24	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, .	1.0	44
25	The rotational excitation of SiS by para- and ortho-H₂. Monthly Notices of the Royal Astronomical Society, 2008, 390, 239-244.	1.6	42
26	Ab initiocalculations of adiabatic and diabatic potential energy surfaces of Cl(2P)â¯HCl(1Î£+) van der Waals complex. Journal of Chemical Physics, 2001, 115, 3085-3098.	1.2	41
27	Inelastic scattering of OH(Xâ€‰2Î) with Ar and He: a combined polarization spectroscopy and quantum scattering study. Physical Chemistry Chemical Physics, 2007, 9, 4414.	1.3	41
28	Temperature dependence of rotational excitation rate coefficients of OH(X2Î) in collision with He. Chemical Physics Letters, 2007, 445, 12-16.	1.2	41
29	Collisional depolarization of OH(A) with Ar: Experiment and theory. Journal of Chemical Physics, 2009, 130, 044306.	1.2	41
30	Ultracold spin-polarized mixtures of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow /><mml:mn>2</mml:mn></mml:msup><mml:mi>Î£</mml:mi></mml:mrow></mml:math>molecules with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>S</mml:mi></mml:math>-state atoms: Collisional stability and implications for sympathetic cooling. Physical Review A, 2011, 84, .	1.0	41
31	The effect of parity conservation on the spinâ€“orbit conserving and spinâ€“orbit changing differential cross sections for the inelastic scattering of NO(X) by Ar. Physical Chemistry Chemical Physics, 2012, 14, 5420.	1.3	41
32	Hyperfine collisional rate coefficients of CN with H2(j= 0). Monthly Notices of the Royal Astronomical Society, 2012, 422, 812-818.	1.6	41
33	Ab initio computed diabatic potential energy surfaces of OHâ€“HCl. Journal of Chemical Physics, 2005, 122, 244325.	1.2	40
34	Fine and hyperfine interactions in cold YbF-He collisions in electromagnetic fields. Physical Review A, 2007, 75, .	1.0	40
35	Fully Î-doublet resolved state-to-state differential cross-sections for the inelastic scattering of NO(X) with Ar. Physical Chemistry Chemical Physics, 2012, 14, 5403.	1.3	39
36	Collisional excitation of CN(X2Î£+) by para- and ortho-H2: Fine-structure resolved transitions. Journal of Chemical Physics, 2013, 139, 074301.	1.2	39

#	Article	IF	Citations
37	Ab initio study of the van der Waals interaction of NH(Xâ€‰3Î£â^) with Ar(1S). Journal of Chemical Physics, 1998, 108, 3235-3242.	1.2	38
38	Paradigm pre-reactive van der Waals complexes: Xâ€“HX and Xâ€“H₂(Xâ€‰=â€‰F, Cl, Br). International Reviews in Physical Chemistry, 2004, 23, 541-571.	0.9	38
39	Interaction potentials of the RGâ€“I anions, neutrals, and cations (RG=He, Ne, Ar). Journal of Chemical Physics, 2005, 122, 194311.	1.2	38
40	Fully quantum state-resolved inelastic scattering between He and NO(XÎ2). Journal of Chemical Physics, 2007, 127, 031102.	1.2	36
41	The fully quantum state-resolved inelastic scattering of NO(X) + Ne: experiment and theory. Molecular Physics, 2013, 111, 1759-1771.	0.8	36
42	Inelastic Scattering of He Atoms and NO(X²Î) Molecules: The Role of Parity on the Differential Cross Section. Journal of Physical Chemistry A, 2009, 113, 14636-14649.	1.1	35
43	OH⁺IN ASTROPHYSICAL MEDIA: STATE-TO-STATE FORMATION RATES, EINSTEIN COEFFICIENTS AND INELASTIC COLLISION RATES WITH He. Astrophysical Journal, 2014, 794, 33.	1.6	35
44	Steric asymmetry and lambda-doublet propensities in state-to-state rotationally inelastic scattering of NO(2Î1/2) with He. Journal of Chemical Physics, 2004, 121, 11691-11701.	1.2	34
45	Electronic quenching of OH AÎ£+2 radicals in single collision events with molecular hydrogen: Quantum state distribution of the OH XÎ2 products. Journal of Chemical Physics, 2007, 126, 204316.	1.2	34
46	Rotationally inelastic scattering of OH by molecular hydrogen: Theory and experiment. Journal of Chemical Physics, 2015, 142, 204310.	1.2	34
47	Fine and hyperfine excitation of NH and ND by He: On the importance of calculating rate coefficients of isotopologues. Journal of Chemical Physics, 2012, 137, 114306.	1.2	33
48	Cyanide/isocyanide abundances in the interstellar medium â€“ II. Inelastic rate coefficients of Al and Mg compounds. Monthly Notices of the Royal Astronomical Society, 2013, 432, 468-477.	1.6	32
49	Fully quantum state-resolved inelastic scattering of NO(X) + Kr: Differential cross sections and product rotational alignment. Journal of Chemical Physics, 2014, 141, 164306.	1.2	32
50	Inelastic Scattering of NO by Kr: Rotational Polarization over a Rainbow. Journal of Physical Chemistry Letters, 2014, 5, 3296-3301.	2.1	32
51	An Experimental and Theoretical Investigation of the C(¹D) + N₂ â†' C(³P) + N₂ Quenching Reaction at Low Temperature. Journal of Physical Chemistry A, 2016, 120, 2504-2513.	1.1	32
52	Prospects for laser cooling of polyatomic molecules with increasing complexity. Physical Review Research, 2020, 2, .	1.3	32
53	The Al+â€“H2 cation complex: Rotationally resolved infrared spectrum, potential energy surface, and rovibrational calculations. Journal of Chemical Physics, 2007, 127, 164310.	1.2	31
54	Hyperfine excitation of CN by He. Monthly Notices of the Royal Astronomical Society: Letters, 2011, 413, L20-L23.	1.2	31

#	Article	IF	Citations
55	Enhanced molecular yield from a cryogenic buffer gas beam source via excited state chemistry. New Journal of Physics, 2020, 22, 022002.	1.2	31
56	The collisional depolarization of Î£2S+1 radicals by closed shell atoms: Theory and application to OH(Aâ€‰Î£2+)+Ar. Journal of Chemical Physics, 2009, 130, 044305.	1.2	30
57	The Na+â€“H2 cation complex: Rotationally resolved infrared spectrum, potential energy surface, and rovibrational calculations. Journal of Chemical Physics, 2008, 129, 184306.	1.2	28
58	Rotational excitation and de-excitation of PN molecules by He atoms. Astronomy and Astrophysics, 2007, 468, 1123-1127.	2.1	26
59	Elastic Depolarization of OH(A) by He and Ar: A Comparative Study. Journal of Physical Chemistry A, 2009, 113, 15156-15170.	1.1	26
60	The interaction of OH(X2Î) with H2: Ab initio potential energy surfaces and bound states. Journal of Chemical Physics, 2014, 141, 174309.	1.2	26
61	Collisional angular momentum depolarization of OH(A) and NO(A) by Ar: A comparison of mechanisms. Journal of Chemical Physics, 2011, 135, 084306.	1.2	25
62	Calculations of fine-structure resolved collisional rate coefficients for the NH(X $^{3}Sigma) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 T	1.2	25
63	Anisotropic dipole polarizability of transition metal atoms: Sc(D2), Ti(F3,P3), V(F4,P4,D6), Ni(F3) and ions: Sc2+(D2), Ti2+(F3,P3). Journal of Chemical Physics, 2005, 123, 024308.	1.2	23
64	Theoretical study of the multiplet branching of the SD product in the S(D1)+D2â†’SD(Î2)+D reaction. Journal of Chemical Physics, 2007, 127, 154321.	1.2	23
65	Quantum scattering of SiS with H2: Potential energy surface and rate coefficients at low temperature. Journal of Chemical Physics, 2008, 128, 034306.	1.2	23
66	Collisions of electronically excited molecules: differential cross-sections for rotationally inelastic scattering of NO(A²Î£⁺) with Ar and He. Molecular Physics, 2012, 110, 1693-1703.	0.8	23
67	Rotational Alignment of NO (A²Î£⁺) from Collisions with Ne. Journal of Physical Chemistry A, 2013, 117, 8163-8174.	1.1	23
68	Diabatic intermolecular potentials and bound states of open-shell atomâ€“molecule dimers: Application to the F([sup 2]P)â€“H[sub 2] complex. Journal of Chemical Physics, 2003, 118, 7340.	1.2	22
69	A new potential energy surface for OH(Aâ€‰Î£2+)â€“Ar: The van der Waals complex and scattering dynamics. Journal of Chemical Physics, 2008, 129, 054301.	1.2	22
70	Formation of slow molecules in chemical reactions in crossed molecular beams. Physical Review A, 2008, 78, .	1.0	22
71	Joint Experimentalâ^'Theoretical Investigation of the Lower Bound States of the NO(X²Î)-Kr Complex. Journal of Physical Chemistry A, 2009, 113, 7366-7375.	1.1	22
72	An ab initio study of the Arâ€“HCN complex. Journal of Chemical Physics, 1999, 110, 1416-1423.	1.2	21

#	Article	IF	Citations
73	Dynamics of O(3Pj)+Rg collisions on ab initio and scattering potentials. Journal of Chemical Physics, 2002, 116, 1457-1467.	1.2	21
74	Interactions of transition metal atoms with He. European Physical Journal D, 2004, 31, 429-437.	0.6	21
75	Theoretical determination of rate constants for vibrational relaxation and reaction of OH(XÎ2,v=1) with O(P3) atoms. Journal of Chemical Physics, 2008, 129, 064306.	1.2	21
76	Formation and dynamics of van der Waals molecules in buffer-gas traps. Physical Chemistry Chemical Physics, 2011, 13, 19125.	1.3	21
77	Ab Initio studies of the interaction potential for the Xeâ€“NO(Xâ€‰2Î) van der Waals complex: Bound states and fully quantum and quasi-classical scattering. Journal of Chemical Physics, 2012, 137, 014312.	1.2	21
78	Accurate Time-Dependent Wave Packet Calculations for the O⁺ + H₂ â†' OH⁺ + H Ionâ€“Molecule Reaction. Journal of Physical Chemistry A, 2015, 119, 11951-11962.	1.1	21
79	Bound States of the Cl(2P)â^'HCl van der Waals Complex from Coupled ab Initio Potential Energy Surfaces. Journal of Physical Chemistry A, 2003, 107, 5110-5121.	1.1	20
80	The <mml:math altimg="si8.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	1.2	20
81	Quantum scattering of NO(X2Î) with He(1S): Temperature dependence of rotational (de)-excitation rate coefficients. Chemical Physics Letters, 2008, 455, 1-5.	1.2	20
82	Depolarisation of rotational orientation and alignment in OH (X2Î) + Xe collisions. Physical Chemistry Chemical Physics, 2009, 11, 8804.	1.3	20
83	The k-j-jâ€² vector correlation in inelastic and reactive scattering. Journal of Chemical Physics, 2011, 135, 084305.	1.2	20
84	Understanding the quantum nature of low-energy C(3Pj) + He inelastic collisions. Nature Chemistry, 2018, 10, 519-522.	6.6	20
85	State-to-state scattering of highly vibrationally excited NO at broadly tunable energies. Nature Chemistry, 2020, 12, 528-534.	6.6	20
86	IR-REMPI Double Resonance Spectroscopy: The Near-IR Spectrum of NOâ^'Ar Revisited. Journal of Physical Chemistry A, 2008, 112, 9483-9493.	1.1	19
87	Nonadditive interactions in ns2 and spin-polarized ns metal atom trimers. Journal of Chemical Physics, 2008, 129, 134302.	1.2	18
88	Electronic Quenching of OH A ²Î£⁺ Induced by Collisions with Kr Atoms. Journal of Physical Chemistry A, 2013, 117, 13481-13490.	1.1	18
89	First-principle interaction potentials for metastable He(3S) and Ne(3P) with closed-shell molecules: Application to Penning-ionizing systems. Journal of Chemical Physics, 2013, 139, 014307.	1.2	18
90	Photoabsorption Assignments for the Cì„1B2 â†•Xì„1A1 Vibronic Transitions of SO2, Using New Ab Initio Potential Energy and Transition Dipole Surfaces. Journal of Physical Chemistry A, 2017, 121, 1012-1021.	1.1	18

#	Article	IF	Citations
91	isions of heavy <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">Î£</mml:mi><mml:mprescripts /><mml:none /><mml:mn>2</mml:mn></mml:mmultiscripts></mml:math> molecules with alkali-metal atoms in a magnetic field: Ab initio analysis and prospects for sympathetic cooling of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mml mathvariant="bold">SrOH<	1.0	18
92	Emulating optical cycling centers in polyatomic molecules. Communications Physics, 2019, 2, .	2.0	18
93	Modeling of adiabatic and diabatic potential energy surfaces of Cl(2P)â‹¯H2(1âˆ‘g+) prereactive complex from ab initio calculations. Journal of Chemical Physics, 2002, 117, 4709-4719.	1.2	17
94	An ab initio investigation of the O(3P)â€“H2(1Î£+g) van der Waals well. Physical Chemistry Chemical Physics, 2006, 8, 4420-4426.	1.3	17
95	New ab initio adiabatic potential energy surfaces and bound state calculations for the singlet ground Xl ƒ1A1 and excited Cl ƒ1B2(21Aâ€²) states of SO2. Journal of Chemical Physics, 2016, 144, 174301.	1.2	17
96	The interaction of NO(X2Î) with H2: Ab initio potential energy surfaces and bound states. Journal of Chemical Physics, 2017, 146, 114301.	1.2	17
97	Ab initiopotentials for the S(3Pj)â€“rare gas dimers: Implementation for elastic and inelastic collisions and comparison with scattering potentials. Journal of Chemical Physics, 2002, 116, 9269-9280.	1.2	16
98	Ab initio simulations of the KrOâ^' anion photoelectron spectra. Journal of Chemical Physics, 2002, 117, 2629-2634.	1.2	16
99	What is Wrong with the Steric Asymmetry in Atom-Molecule Collisions?. Physica Scripta, 2005, 72, C1-C5.	1.2	16
100	Interaction potentials for Brâ^'â€“Rg (Rg=Heâ€“Rn): Spectroscopy and transport coefficients. Journal of Chemical Physics, 2006, 125, 064305.	1.2	16
101	Ro-vibrational excitation of SiS by He. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 155702.	0.6	16
102	Accurate quantum wave packet calculations for the F + HCl â†' Cl + HF reaction on the ground 12Aâ€² potential energy surface. Journal of Chemical Physics, 2012, 136, 104304.	1.2	15
103	Theoretical Studies of Potential Energy Surface and Bound States of the Strongly Bound He(¹S)â€“BeO (¹Î£⁺) Complex. Journal of Physical Chemistry A, 2013, 117, 6657-6663.	1.1	15
104	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.	1.3	15
105	Collisional excitation of CH(X²Î) by He: new ab initio potential energy surfaces and scattering calculations. Physical Chemistry Chemical Physics, 2015, 17, 21583-21593.	1.3	15
106	Sign of the state-to-state steric asymmetry of rotationally inelastic atomâ€“molecule collisions. Chemical Physics, 2004, 301, 293-308.	0.9	14
107	Rotationally inelastic scattering of OH(2Î) by HCl(1Î£). Comparison of experiment and theory. Physical Chemistry Chemical Physics, 2004, 6, 4968-4974.	1.3	14
108	Interactions of transition metal atoms in high-spin states: Cr2, Scâ€“Cr, and Scâ€“Kr. Journal of Chemical Physics, 2007, 127, 244302.	1.2	13

#	Article	IF	Citations
109	A new potential energy surface for OH(A 2Î£+)â€“Kr: The van der Waals complex and inelastic scattering. Journal of Chemical Physics, 2012, 137, 154305.	1.2	13
110	Nonreactive scattering of the O++H2: A time dependent wave packet approach. Chemical Physics Letters, 2012, 532, 22-26.	1.2	13
111	Surface-hopping trajectories for OH(A2Î£+) + Kr: Extension to the 1Aâ€³ state. Journal of Chemical Physics, 2015, 142, 144307.	1.2	13
112	Quantum Spin State Selectivity and Magnetic Tuning of Ultracold Chemical Reactions of Triplet Alkali-Metal Dimers with Alkali-Metal Atoms. Physical Review Letters, 2021, 127, 103402.	2.9	13
113	Magnetic tuning of ultracold barrierless chemical reactions. Physical Review Research, 2020, 2, .	1.3	13
114	Collisional properties of cold spin-polarized nitrogen gas: Theory, experiment, and prospects as a sympathetic coolant for trapped atoms and molecules. Physical Review A, 2010, 82, .	1.0	12
115	Cyanides/isocyanides abundances in the interstellar medium â€“ IV. Temperature dependence of SiCN/SiNC rate coefficients and astrophysical applications. Monthly Notices of the Royal Astronomical Society, 2015, 451, 1199-1211.	1.6	12
116	Low-Temperature Reactivity of C_{2n+1}N^{â€“} Anions with Polar Molecules. Journal of Physical Chemistry Letters, 2016, 7, 2957-2961.	2.1	12
117	Cold Anisotropically Interacting van der Waals Molecule: TiHe. Physical Review Letters, 2017, 118, 213401.	2.9	12
118	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.	1.2	12
119	From Intermolecular Interactions to Incipient Chemical Bond. Collection of Czechoslovak Chemical Communications, 1998, 63, 1473-1484.	1.0	11
120	Ab initio calculations and modeling of three-dimensional adiabatic and diabatic potential energy surfaces of F(2P)Â·Â·Â·H2(1Î£+) Van der Waals complex. International Journal of Quantum Chemistry, 2002, 90, 1038-1048.	1.0	11
121	Ab initiopotential energy surface, infrared spectra, and dynamics of the ion-molecule complexes between Brâ¯ and H2, D2, and HD. Journal of Chemical Physics, 2006, 125, 114313.	1.2	11
122	Accurate transport properties for O(3P)â€“H and O(3P)â€“H2. Journal of Chemical Physics, 2016, 145, 164309.	1.2	11
123	Ab initio studies of the Rgâ€“NO+(X1Î£+) van der Waals complexes (Rg = He, Ne, Ar, Kr, and Xe). Journal of Chemical Physics, 2016, 144, 204303.	1.2	11
124	Quantum Defects: What Pairs with the Aryl Group When Bonding to the sp²Carbon Lattice of Single-Wall Carbon Nanotubes?. Journal of the American Chemical Society, 2022, 144, 13234-13241.	6.6	11
125	Nonadiabatic effects in the photodetachment of ClH2â¯. Journal of Chemical Physics, 2008, 128, 084312.	1.2	10
126	Cold collisions of polyatomic molecular radicals with S-state atoms in a magnetic field: An ab initio study of He + ${m CH}_2(ilde{X})$ CH 2(Xl*f*) collisions. Journal of Chemical Physics, 2012, 137, 104302.	1.2	10

#	Article	IF	Citations
127	Probing the electrical double layer by operando Xâ€ray photoelectron spectroscopy through a <scp>grapheneâ€carbon</scp> nanotube composite window. EcoMat, 2020, 2, e12023.	6.8	10
128	Bound States of the Cl(2P)â¨HCl van der Waals Complex from Coupled ab Initio Potential Energy Surfaces. Journal of Physical Chemistry A, 2004, 108, 9319-9322.	1.1	9
129	Final State Resolved Quantum Predissociation Dynamics of SO₂(Cl¹B₂) and Its Isotopomers via a Crossing with a Singlet Repulsive State. Journal of Physical Chemistry A, 2017, 121, 4930-4938.	1.1	9
130	Rotationally resolved infrared spectrum of the Na+-D2 complex: An experimental and theoretical study. Journal of Chemical Physics, 2011, 134, 214302.	1.2	8
131	Near-IR Spectrum of NO(X²Î)â€“Xe: A Joint Experimentalâ€“Theoretical Investigation. Journal of Physical Chemistry A, 2013, 117, 11906-11914.	1.1	8
132	Interaction of the Beryllium Cation with Molecular Hydrogen and Deuterium. Journal of Physical Chemistry A, 2014, 118, 6711-6720.	1.1	8
133	Nonadiabatic collisions of CaH with Li: Importance of spin-orbit-induced spin relaxation in spin-polarized sympathetic cooling of CaH. Physical Review A, 2015, 92, .	1.0	8
134	The near-IR spectrum of NO(X$^2\Pi$)-He detected through excitation into the A$^2\Sigma^+$-state continuum: A joint experimental and theoretical study. Journal of Chemical Physics, 2016, 145, 124318.	1.2	8
135	Roaming pathways and survival probability in real-time collisional dynamics of cold and controlled bialkali molecules. Scientific Reports, 2021, 11, 10598.	1.6	8
136	High-Resolution Imaging of C + He Collisions using Zeeman Deceleration and Vacuum-Ultraviolet Detection. Journal of Physical Chemistry Letters, 2021, 12, 12210-12217.	2.1	8
137	Structure and energetics of ArnNOâ¨ clusters from ab initio calculations. Journal of Chemical Physics, 2000, 112, 10895-10904.	1.2	7
138	Ab Initio Calculations and Modeling of Three-Dimensional Adiabatic and Diabatic Potential Energy Surfaces of Br(2P)Â·Â·Â·H2(1Î£+) Pre-Reactive Complex. Journal of Physical Chemistry A, 2002, 106, 7362-7368.	1.1	7
139	Ab initio calculations and modeling of diabatic potential energy surfaces for the Van der Waals complex Cl(2P)â‹¯CH4(X1A1). Chemical Physics Letters, 2002, 359, 309-313.	1.2	7
140	Interactions in Open-Shell Clusters:Â Ab Initio Study of Pre-reactive Complex O(3P) + HClâ€. Journal of Physical Chemistry A, 2005, 109, 11484-11494.	1.1	7
141	Temperature dependence of rotational excitation rate coefficients of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si7.gif" display="inline" overflow="scroll"><mml:mrow><mml:mtext>SH</mml:mtext><mml:mo stretchy="false">(</mml:mo><mml:msup><mml:mrow><mml:mtext>X</mml:mtext></mml:mrow><mml:mrow><mml:mn>2</mml:m	1.2	7
142	2009, 476, 135-137. Experimental and Theoretical Study of Rotationally Inelastic Collisions of CN(A²Î) with N₂. Journal of Physical Chemistry A, 2009, 113, 3922-3931.	1.1	7
143	Properties of the B+-H2and B+-D2complexes: A theoretical and spectroscopic study. Journal of Chemical Physics, 2012, 137, 124312.	1.2	7
144	Theoretical investigation of the dynamics of O(1Dâ†'3P) electronic quenching by collision with Xe. Journal of Chemical Physics, 2015, 143, 054306.	1.2	7

#	Article	IF	Citations
145	Quantum mechanical calculations of state-to-state cross sections and rate constants for the F + DCl â†' Cl + DF reaction. Journal of Chemical Physics, 2015, 142, 214310.	1.2	7
146	First-principles C band absorption spectra of SO₂ and its isotopologues. Journal of Chemical Physics, 2017, 146, 154305.	1.2	7
147	Full-dimensional quantum scattering calculations on ultracold atom-molecule collisions in magnetic fields: The role of molecular vibrations. Physical Review Research, 2020, 2, .	1.3	7
148	Ab initio study of the Br([sup 2]P)â€"HBr van der Waals complex. Journal of Chemical Physics, 2009, 130, 184304.	1.2	6
149	New findings regarding the NO angular momentum orientation in Arâ€"NO(2Î1/2) collisions. Physical Chemistry Chemical Physics, 2012, 14, 9826.	1.3	6
150	The effect of initial rotation in the N(2D)+H2â†'NH(3Î£â^')+H reaction. Chemical Physics, 2014, 441, 53-58.	0.9	6
151	The collisional depolarization of OH(AÂ2Î£+) and NO(AÂ2Î£+) with Kr. Journal of Chemical Physics, 2014, 140, 054306.	1.2	6
152	New XDM-corrected potential energy surfaces for Arâ€"NO(X2Î): A comparison with CCSD(T) calculations and experiments. Journal of Chemical Physics, 2015, 142, 024302.	1.2	6
153	The near-IR spectrum of NO(XÌƒ2Î)-Ne detected through excitation into the Ãƒ-state continuum: A joint experimental and theoretical study. Journal of Chemical Physics, 2016, 144, 114307.	1.2	6
154	Quantum Behavior of Spin-Orbit Inelastic Scattering of C-Atoms by D2 at Low Energy. Frontiers in Chemistry, 2019, 7, 164.	1.8	6
155	Possibility of buffer-gas cooling of paramagnetic carbon to ultracold temperatures. Physical Review A, 2002, 66, .	1.0	5
156	Probing Nonadiabatic Effects in Low-Energy C(³P_j) + H₂ Collisions. Journal of Physical Chemistry Letters, 2018, 9, 6496-6501.	2.1	5
157	Electronic quenching of O(1D) by Xe: Oscillations in the product angular distribution and their dependence on collision energy. Journal of Chemical Physics, 2015, 143, 054307.	1.2	4
158	Theoretical study of the buffer-gas cooling and trapping of CrH(X6Î£+) by 3He atoms. Journal of Chemical Physics, 2016, 145, 214305.	1.2	4
159	Product rotational alignment in NO(X)+Kr collisions. Chemical Physics Letters, 2011, 512, 161-166.	1.2	3
160	Interaction of the NO 3pÏ€ Rydberg state with Ar: Potential energy surfaces and spectroscopy. Journal of Chemical Physics, 2013, 138, 214313.	1.2	3
161	Interaction of the NO 3pÏ€ (Câ€‰2Î) Rydberg state with RG (RG = Ne, Kr, and Xe): Potential energy surfaces and spectroscopy. Journal of Chemical Physics, 2015, 142, 034311.	1.2	3
162	The effect of nonadiabaticity on the C+ + HF reaction. Journal of Chemical Physics, 2018, 149, 204309.	1.2	3

#	ARTICLE	IF	CITATIONS
163	Differential cross sections and collision-induced rotational alignment in inelastic scattering of NO(X) by Xe. Chinese Journal of Chemical Physics, 2020, 33, 217-233.	0.6	3
164	Inelastic Scattering of the NCO(X2Î) Radical with the He Atom on an Ab Initio Potential Energy Surface. Journal of Physical Chemistry A, 2009, 113, 14480-14487.	1.1	2
165	Chemical Control and Spectral Fingerprints of Electronic Coupling in Carbon Nanostructures. Journal of Physical Chemistry C, 2016, 120, 29476-29483.	1.5	2
166	Accurate characterization of the lowest triplet potential energy surface of SO2 with a coupled cluster method. Journal of Chemical Physics, 2019, 150, 144303.	1.2	2
167	NO+Â+ÂH2: Potential energy surface and bound state calculations. Chemical Physics Letters, 2021, 771, 138511.	1.2	2
168	Publisherâ€™s Note: Formation of van der Waals Molecules in Buffer-Gas-Cooled Magnetic Traps [Phys. Rev. Lett.105, 033001 (2010)]. Physical Review Letters, 2010, 105, .	2.9	1
169	A finite-element visualization of quantum reactive scattering. II. Nonadiabaticity on coupled potential energy surfaces. Journal of Chemical Physics, 2015, 142, 034108.	1.2	1
170	Effects of conical intersections on hyperfine quenching of hydroxyl OH in collision with an ultracold Sr atom. Scientific Reports, 2020, 10, 14130.	1.6	1
171	Collisional excitation of C+(2P) spin-orbit levels by molecular hydrogen revisited. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 501, L38-L42.	1.2	1
172	Ab initio calculations and modeling of three-body forces in Ar2H2O. International Journal of Quantum Chemistry, 2002, 90, 1215-1231.	1.0	0
173	Paradigm Pre-Reactive Van Der Waals Complexes: Xâ€”HX and Xâ€”H2 (X: F, Cl, Br). ChemInform, 2005, 36, no.	0.1	0
174	Publisher's Note: Suppression of Angular Forces in Collisions of Non-S-State Transition Metal Atoms [Phys. Rev. Lett.94, 013202 (2005)]. Physical Review Letters, 2005, 94, .	2.9	0
175	Cold atoms by kinematic cooling. Physical Review A, 2010, 82, .	1.0	0
176	Publisherâ€™s Note: â€œNew ab initio adiabatic potential energy surfaces and bound state calculations for the singlet ground Xlf1A1 and excited Clf1B2(21Aâ€²) states of SO2â€•[J. Chem. Phys. 144, 174301 (2016)]. Journal of Chemical Physics, 2016, 144, 209901.	3.1	0
177	Universal stereodynamics of cold atom-molecule collisions in electric fields. Physical Review A, 2021, 103, .	1.0	0