Vladimir Spirko

List of Publications by Year
in descending order

164 papers	4,439 citations	117571 34 h-index	133188 59 g-index
165 all docs	165 docs citations	165 times ranked	2403 citing authors

#	Article	IF	Citations
1	The stability of covalent dative bond significantly increases with increasing solvent polarity. Nature Communications, 2022, 13, 2107.	5.8	13
2	Relating Binding Energy and Scattering Length of Weakly Bound Dimers of Strontium. Annalen Der Physik, 2021, 533, 2000588.	0.9	1
3	Radial molecular property functions of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si5.svg"><mml:mrow><mml:msup><mml:mi>A</mml:mi><mml:mn>2</mml:mn></mml:msup><mml:msup><mml:mi mathvariant="normal">Î£</mml:mi><mml:mo>+</mml:mo></mml:msup></mml:mrow></mml:math> state of hydroxyl. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 266, 107539.	2.1	1
4	Real-space imaging of anisotropic charge of Ïƒ-hole by means of Kelvin probe force microscopy. Science, 2021, 374, 863-867.	6.0	71
5	Dissociative recombination of N2H+ ions with electrons in the temperature range of 80â€“350 K. Journal of Chemical Physics, 2020, 152, 024301.	1.2	4
6	Morphing radial molecular property functions of hydroxyl. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 254, 107211.	1.1	6
7	Universal behavior of diatomic halo states and the mass sensitivity of their properties. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 025102.	0.6	4
8	Anomalous phosphine sensitivity coefficients as probes for a possible variation of the proton-to-electron mass ratio. Monthly Notices of the Royal Astronomical Society, 2018, 473, 4986-4992.	1.6	3
9	Morphing ab initio potential energy curve of beryllium monohydride. Journal of Molecular Spectroscopy, 2016, 330, 89-95.	0.4	3
10	EFFECTIVE HYPERFINE-STRUCTURE FUNCTIONS OF AMMONIA. Astrophysical Journal, 2016, 824, 147.	1.6	2
11	Enhanced sensitivity to a possible variation of the proton-to-electron mass ratio in ammonia. Physical Review A, 2016, 93, .	1.0	9
12	Accurate prediction of H₃O⁺and D₃O⁺sensitivity coefficients to probe a variable proton-to-electron mass ratio. Monthly Notices of the Royal Astronomical Society, 2015, 454, 2292-2298.	1.6	10
13	Accurate prediction of the ammonia probes of a variable proton-to-electron mass ratio. Monthly Notices of the Royal Astronomical Society, 2015, 450, 3191-3200.	1.6	17
14	Potential microwave probes of the proton-to-electron mass ratio at very high redshifts. Monthly Notices of the Royal Astronomical Society, 2014, 439, 1136-1139.	1.6	4
15	The role of molecular quadrupole transitions in the depopulation of metastable helium. Monthly Notices of the Royal Astronomical Society, 2014, 446, 2738-2743.	1.6	5
16	Localised quantum states of atomic and molecular particles physisorbed on carbon-based nanoparticles. Journal of Chemical Physics, 2014, 141, 114702.	1.2	1
17	Highly Sensitive Ammonia Probes of a Variable Proton-to-Electron Mass Ratio. Journal of Physical Chemistry Letters, 2014, 5, 919-923.	2.1	7
18	Effective potential energy curves of the ground electronic state of CH+. Journal of Chemical Physics, 2013, 138, 024315.	1.2	19

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19	Radiative association of He$_{2}^{+}$: the role of quartet states. Monthly Notices of the Royal Astronomical Society, 2013, 435, 1541-1546.	1.6	8
20	Relation between properties of long-range diatomic bound states. Physical Review A, 2013, 87, .	1.0	10
21	Radiative association of He⁺₂revisited. Astronomy and Astrophysics, 2013, 553, A42.	2.1	13
22	Radiative association of LiHe+. Chemical Physics Letters, 2012, 531, 59-63.	1.2	21
23	Vibrational Energies of LiH2+and LiD2+in the Ãƒ1Î£+Electronic State. Journal of Physical Chemistry A, 2011, 115, 11313-11320.	1.1	6
24	Vibrational dynamics of adsorbed CO2: Separability of the CO2 asymmetric stretching mode. Collection of Czechoslovak Chemical Communications, 2011, 76, 669-682.	1.0	1
25	Potential energy curve of N2 revisited. Collection of Czechoslovak Chemical Communications, 2011, 76, 327-341.	1.0	2
26	Ab initio vibrational dynamics of molecular hydrogen on graphene: An effective interaction potential. Journal of Chemical Physics, 2010, 132, 194708.	1.2	12
27	On the Elusive Twelfth Vibrational State of Beryllium Dimer. Science, 2009, 326, 1382-1384.	6.0	94
28	The structure and vibrational dynamics of the pyrrole dimer. Physical Chemistry Chemical Physics, 2009, 11, 3885.	1.3	13
29	The ab initio assigning of the vibrational probing modes of tryptophan: linear shifting of approximate anharmonic frequencies vs. multiplicative scaling of harmonic frequencies. Physical Chemistry Chemical Physics, 2009, 11, 3921.	1.3	10
30	Potential energy function of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si26.gif" overflow="scroll"><mml:mrow><mml:msup><mml:mrow><mml:mtext>CN</mml:mtext></mml:mrow><mml:mrow><mml:mo>-</mml:m Journal of Molecular Spectroscopy, 2008, 248, 77-80.	0.4	2
31	Assigning the NH Stretches of the Guanine Tautomers Using Adiabatic Separation:â€‰ CCSD(T) Benchmark Calculations. Journal of Physical Chemistry A, 2008, 112, 1854-1856.	1.1	11
32	Dependence of the <scp>l</scp>-Alanyl-<scp>l</scp>-Alanine Conformation on Molecular Charge Determined from Ab Initio Computations and NMR Spectra. Journal of Physical Chemistry B, 2008, 112, 1796-1805.	1.2	22
33	Quasiplanarity of the Peptide Bond. Journal of Physical Chemistry A, 2008, 112, 693-699.	1.1	15
34	Probing the Flexibility of Internal Rotation in Silylated Phenols with the NMR Scalar Spinâ^'Spin Coupling Constants. Journal of Physical Chemistry A, 2008, 112, 5167-5174.	1.1	6
35	Computed lifetimes of metastable states of the NO2+ dication. Journal of Chemical Physics, 2008, 128, 144301.	1.2	15
36	Energies and Electric Dipole Moments of the Bound Vibrational States of HN2+ and DN2+. Collection of Czechoslovak Chemical Communications, 2008, 73, 873-897.	1.0	10

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37	Tuning ab initio data to scattering length: The aÎ£+3 state of KRb. Journal of Chemical Physics, 2007, 127, 121101.	1.2	10
38	Radiative transition probabilities of CO²⁺. International Journal of Quantum Chemistry, 2007, 107, 2654-2664.	1.0	6
39	Theoretical study of the ground and excited states of 7-methyl guanine and 9-methyl guanine: comparison with experiment. Physical Chemistry Chemical Physics, 2006, 8, 3059-3065.	1.3	30
40	Theoretical study of photoacidity of HCN: the effect of complexation with water. Physical Chemistry Chemical Physics, 2006, 8, 4866-4873.	1.3	10
41	Bound and low-lying quasi-bound rotationâ€“vibration levels of the ground electronic state of. Chemical Physics, 2006, 330, 190-203.	0.9	29
42	Potential energy curve of Be2 in its ground electronic state. Journal of Molecular Spectroscopy, 2006, 235, 268-270.	0.4	31
43	A theoretical study of FeNC in the 6Î” electronic ground state. Journal of Molecular Spectroscopy, 2006, 236, 234-247.	0.4	35
44	Theoretical Investigations into the Blue-Shifting Hydrogen Bond in Benzene Complexes. ChemPhysChem, 2006, 7, 640-643.	1.0	27
45	Vibrational predissociation of H5+. Journal of Chemical Physics, 2006, 124, 244303.	1.2	12
46	Theoretical study of the CS2+ dication. Journal of Chemical Physics, 2006, 125, 164308.	1.2	11
47	Computed lifetimes of metastable states of CO2+. Journal of Chemical Physics, 2006, 124, 214303.	1.2	34
48	Potential Energy Curve of N2 in Its Ground Electronic State. Collection of Czechoslovak Chemical Communications, 2005, 70, 731-739.	1.0	4
49	A Complete Set of NMR Chemical Shifts and Spinâ^'Spin Coupling Constants forl-Alanyl-l-alanine Zwitterion and Analysis of Its Conformational Behavior. Journal of the American Chemical Society, 2005, 127, 17079-17089.	6.6	38
50	Sugar Pucker Modulates the Cross-Correlated Relaxation Rates across the Glycosidic Bond in DNA. Journal of the American Chemical Society, 2005, 127, 14663-14667.	6.6	24
51	Calculation of the photodetachment cross sections of the HCNâ^' and HNCâ^' dipole-bound anions as described by a one-electron Drude model. Journal of Chemical Physics, 2004, 121, 1824-1829.	1.2	8
52	New rotationâ€“vibration band and potential energy function of NeH+ in the ground electronic state. Journal of Molecular Structure, 2004, 695-696, 5-11.	1.8	11
53	First local minimum of the formic acid dimer exhibits simultaneously red-shifted Oâ€“Hâ‹¯O and improper blue-shifted Câ€“Hâ‹¯O hydrogen bonds. Physical Chemistry Chemical Physics, 2004, 6, 37-41.	1.3	384
54	The Infrared Spectrum of CN in Its Ground Electronic State. Collection of Czechoslovak Chemical Communications, 2004, 69, 73-89.	1.0	22

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55	Vibrational linestrengths for the ground and first excited electronic states of HeH2 +. Theoretical Chemistry Accounts, 2003, 110, 170-175.	0.5	10
56	Bound and continuum vibrational states of the bifluoride anion. Chemical Physics Letters, 2003, 376, 595-605.	1.2	4
57	Transforming from internal coordinates to Cartesian displacements in the Eckart frame: a Taylor series expansion approach. Journal of Molecular Spectroscopy, 2003, 217, 142-145.	0.4	11
58	Why is the N1â€“H stretch vibration frequency of guanine shifted upon dimerization to the red and the amino Nâ€“H stretch vibration frequency to the blue?. Physical Chemistry Chemical Physics, 2003, 5, 1290-1294.	1.3	44
59	Radiative association of HeH2+. Journal of Chemical Physics, 2003, 118, 10547-10560.	1.2	34
60	Bound and quasi-bound states of the Liâ‹¯FH van der Waals molecule: The effects of the potential energy surface and of the basis set superposition error. Computational and Theoretical Chemistry, 2002, 591, 151-174.	1.5	10
61	Dimensionality of proton transfer in the intramolecular hydrogen bond of formimidol. Chemical Physics Letters, 2002, 355, 319-326.	1.2	10
62	Improper, Blue-Shifting Hydrogen Bond between Fluorobenzene and Fluoroform. Journal of Physical Chemistry A, 2001, 105, 5560-5566.	1.1	138
63	Inversion splittings of SiH3âˆ’. An ab initio study. Computational and Theoretical Chemistry, 2001, 547, 139-143.	1.5	1
64	Multidimensional WKB approximation and the lifetime calculation. Physical Review A, 2001, 64, .	1.0	9
65	Can ordinary single-reference coupled-cluster methods describe potential energy surfaces with nearly spectroscopic accuracy? The renormalized coupled-cluster study of the vibrational spectrum of HF. Journal of Chemical Physics, 2001, 115, 5796-5804.	1.2	53
66	Lifetimes and dissociation pathways of the quasi-bound states of the Naâ‹¯FH van der Waals molecule. Journal of Molecular Structure, 2000, 555, 43-60.	1.8	6
67	Bound and quasibound states of the Naâ‹¯FH van der Waals molecule. Journal of Chemical Physics, 2000, 112, 189-202.	1.2	23
68	Double Tunneling: An Overlooked Quantum Effect in Anionic Molecular Clusters. Physical Review Letters, 2000, 84, 1140-1143.	2.9	5
69	Adiabatic energies and perturbative non-adiabatic corrections for Coulombic three-particle systems in the hyperspherical harmonics formalism. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, 429-441.	0.6	2
70	Brillouin-Wigner perturbation methods for coupled oscillators. Physical Review A, 1999, 61, .	1.0	7
71	Coupled-cluster methods with internal and semi-internal triply excited clusters: Vibrational spectrum of the HF molecule. Journal of Chemical Physics, 1999, 111, 6679-6692.	1.2	86
72	Ab InitioCalculated Rotationâ€“Vibration Line Strengths for the (vHH= 0 â† 1) Transition of HeH+2. Journal of Molecular Spectroscopy, 1998, 187, 206-209.	0.4	5

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73	Vibrational dependence of the dipole moment and radiative transition probabilities in the X1Sigma + state of HF: a linear-response coupled-cluster study. Molecular Physics, 1998, 94, 55-64.	0.8	13
74	Expectation Values of Quasibound States: Nuclear Quadrupole Coupling Constants of BH in the X1 Î£+ and B1 Î£+ States. Collection of Czechoslovak Chemical Communications, 1998, 63, 1309-1320.	1.0	0
75	Zero Kinetic Energy (ZEKE) Photoelectron Spectroscopic Study of Thioanisole and Its van der Waals Complexes with Argon. Journal of Physical Chemistry A, 1997, 101, 8631-8638.	1.1	26
76	The vibrational dependence of the hydrogen and oxygen nuclear magnetic shielding constants in OHâ^' and OHâ^' Â· H2O. Chemical Physics, 1997, 214, 91-101.	0.9	19
77	Ab initioCalculated Rotationâ€“Vibration Linestrengths for HeH2+. Journal of Molecular Spectroscopy, 1997, 182, 364-370.	0.4	18
78	Symmetry Analysis of the Vibrational Dynamics of the H3D2+and H2D3+Complexes. Journal of Molecular Spectroscopy, 1997, 183, 212-217.	0.4	3
79	Vibrational Dynamics of H5+and Its Deuterated Isotopomers. Journal of Molecular Spectroscopy, 1997, 183, 218-223.	0.4	7
80	Calculation of Rotationâ€“Vibration Energy Levels in Ground State C3by a Bornâ€“Oppenheimer-Type Separation of the Vibrational Motions. Journal of Molecular Spectroscopy, 1997, 183, 129-138.	0.4	18
81	Amino groups in nucleic acid bases, aniline, aminopyridines, and aminotriazine are nonplanar: Results of correlatedabinitioquantum chemical calculations and anharmonic analysis of the aniline inversion motion. Journal of Chemical Physics, 1996, 105, 11042-11050.	1.2	115
82	Method for calculating analytical solutions of the SchrÃ¶dinger equation: Anharmonic oscillators and generalized Morse oscillators. Physical Review A, 1996, 53, 2009-2020.	1.0	27
83	Effective characteristic polynomials and two-point PadÃ© approximants as summation techniques for the strongly divergent perturbation expansions of the ground state energies of anharmonic oscillators. Physical Review E, 1996, 53, 2925-2939.	0.8	36
84	Molecular quadrupole moment functions of HF and N2. I.Abinitiolinearâ€response coupledâ€cluster results. Journal of Chemical Physics, 1996, 104, 4699-4715.	1.2	79
85	Molecular quadrupole moment functions of HF and N2. II. Rovibrational effects. Journal of Chemical Physics, 1996, 104, 4716-4727.	1.2	20
86	Molecular quadrupole moment function of ammonia. Journal of Chemical Physics, 1996, 105, 11068-11074.	1.2	18
87	Calculation and Prediction of the Spectrum of Diatomic Molecules by the Generalized Reduced Potential Curve (GRPC) Method. Journal of Molecular Spectroscopy, 1995, 169, 555-582.	0.4	16
88	Ab Initio Predicted Rotation-Vibration Energy Levels of HeH+2. Journal of Molecular Spectroscopy, 1995, 172, 265-274.	0.4	29
89	Formation of HeH+ by radiative association of He+ + H. An advanced ab initio study. Chemical Physics Letters, 1995, 236, 177-183.	1.2	35
90	Ab initio determination of the rate coefficient for radiative association of. Chemical Physics, 1995, 193, 287-296.	0.9	37

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91	Nonadiabatic corrections for coupled Morse oscillators using Hutson and Howard perturbation theory. Journal of Chemical Physics, 1995, 102, 8916-8921.	1.2	14
92	Nonadiabatic corrections for coupled oscillators using Rayleighâ€“SchrÃ¶dinger perturbation theory of very high orders. Journal of Chemical Physics, 1995, 102, 8906-8915.	1.2	24
93	Abinitiocalculations of anharmonic vibrational transition intensities oftransâ€2,3â€dideuteriooxirane. Journal of Chemical Physics, 1995, 103, 10110-10115.	1.2	23
94	Ab initio study of the phenolâ€water cation radical. Journal of Chemical Physics, 1994, 101, 990-997.	1.2	74
95	The vibrational and temperature dependence of the magnetic properties of the oxonium ion (H3O+). Chemical Physics, 1994, 184, 1-11.	0.9	26
96	Extended ab Initio Study of the Vibrational Dynamics of H+5 and D+5 Including All Vibrational Modes. Journal of Molecular Spectroscopy, 1994, 164, 500-509.	0.4	23
97	Ab initio calculations on Arâ€“NO+: Structure and vibrational frequencies. Journal of Chemical Physics, 1994, 100, 5403-5410.	1.2	30
98	Ab Initio Study of Linestrengths of Vibration-Rotation Transitions of Ammonia and Methyl Cations. Journal of Molecular Spectroscopy, 1993, 158, 433-444.	0.4	10
99	Vibrational Dynamics of H+5: Ab Initio Calculation of the Low-Lying Vibrational States. Journal of Molecular Spectroscopy, 1993, 159, 521-533.	0.4	12
100	The Temperature Dependence and Isotope Shift of Nitrogen Shielding in Ammonia. Journal of Molecular Spectroscopy, 1993, 160, 311-314.	0.4	6
101	On the use of divergent series in vibrational spectroscopy. Twoâ€and threeâ€dimensional oscillators. Journal of Chemical Physics, 1993, 99, 7331-7336.	1.2	38
102	Frequencyâ€dependent polarizabilities and first hyperpolarizabilities of H2O. Journal of Chemical Physics, 1993, 98, 7159-7164.	1.2	103
103	Dipole hyperpolarizability surfaces of ammonia. Journal of Chemical Physics, 1993, 99, 9815-9819.	1.2	13
104	Theoretical17O nuclear quadrupole coupling surface for the hydroxonium ion. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 2811-2814.	1.7	2
105	The vibrational dependence of the magnetic hyperfine interaction constants of ammonia. Journal of Molecular Spectroscopy, 1992, 152, 342-354.	0.4	20
106	Ab initio potential energy function and geometry of the state of ammonia. Journal of Molecular Spectroscopy, 1992, 152, 199-204.	0.4	2
107	Potential energy function and rotation-vibration energy levels of NH3+. Journal of Molecular Spectroscopy, 1992, 153, 276-284.	0.4	17
108	Inversion/out-of-plane bending rovibrational energy levels of partially deuterated SiH3, CH3, CH3+, and NH3+. Journal of Molecular Spectroscopy, 1992, 153, 285-287.	0.4	6

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109	Rotation-vibration energies of FHFâ^' and ClHClâ^' from high-level correlated calculations of potential energy surfaces. Chemical Physics, 1991, 151, 45-58.	0.9	19
110	Anharmonic potential function, geometry, and energy levels of SiH3. Journal of Molecular Spectroscopy, 1991, 147, 478-487.	0.4	8
111	Inversion-vibration energies of CH3â^' and adiabatic electron affinity of CH3. Journal of Molecular Spectroscopy, 1991, 147, 526-540.	0.4	11
112	Potential energy function and rotation-vibration energy levels of CH3+. Journal of Molecular Spectroscopy, 1991, 149, 235-241.	0.4	16
113	Theoretical calculations of the nuclear quadrupole coupling in the spectra of D3+, H2D+, and HD2+. Journal of Molecular Spectroscopy, 1991, 150, 137-163.	0.4	6
114	An ab initio investigation of the potential energy function and rotationâ€"vibration energies of H2OÂ·Na+. Chemical Physics Letters, 1991, 185, 265-269.	1.2	7
115	The magnetizability and g-factor surfaces of ammonia. Chemical Physics, 1991, 153, 189-200.	0.9	35
116	Ab initio calculations of vibrational spectra of nonrigid molecules. The Journal of Physical Chemistry, 1990, 94, 5493-5496.	2.9	13
117	Ab initio calculations of nuclear quadrupole coupling constants of low-lying rovibrational levels in theX1Î£+anda1Î£+states of all isotopic species of LiH. International Journal of Quantum Chemistry, 1990, 38, 283-295.	1.0	18
118	Theoretical description of nuclear quadrupole coupling in light diatomic molecules. International Journal of Quantum Chemistry, 1990, 38, 357-372.	1.0	12
119	Dipole polarizability surfaces of ammonia. Chemical Physics, 1990, 144, 343-351.	0.9	9
120	Variational calculations on the Ag vibrational states, the automerization, and the predicted Raman spectrum of cyclobutadiene. Journal of Chemical Physics, 1990, 92, 6069-6076.	1.2	10
121	Theoretical14N nuclear quadrupole coupling surface for ammonia. Journal of the Chemical Society, Faraday Transactions, 1990, 86, 1991-1994.	1.7	7
122	Propargylene: A C3H2 isomer with unusual bonding. Journal of Chemical Physics, 1989, 91, 4763-4773.	1.2	76
123	Extended measurements of the Î½2 band of CD3 and the determination of the vibrational potential function for methyl. Journal of Chemical Physics, 1989, 90, 2125-2133.	1.2	43
124	Vibrational dynamics of hydrogen bonds: The system OHâ^'Â·H2O. Journal of Molecular Spectroscopy, 1989, 136, 340-355.	0.4	16
125	Vibrational spectrum of FHFâ^' from high-level correlated calculations of potential energy surfaces. Chemical Physics Letters, 1989, 161, 519-527.	1.2	13
126	Ab initio calculation of deuteron quadrupole coupling constants for low-lying rovibrational levels of HD in its X 1Î£g+ and B 1Î£u+ states. Chemical Physics Letters, 1989, 157, 337-342.	1.2	19

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127	Anharmonic potential function and effective geometries for the NH3 molecule. Journal of Molecular Spectroscopy, 1989, 133, 331-344.	0.4	106
128	Electric dipole moment function of ammonia. Journal of Molecular Spectroscopy, 1989, 136, 317-332.	0.4	23
129	Ab initio calculations on the energy of activation and tunneling in the automerization of cyclobutadiene. Journal of Chemical Physics, 1988, 89, 3008-3015.	1.2	69
130	Thev2=1 inversional dependence of the rotationalg-tensors in14NH3,15NH3, and15ND3. Molecular Physics, 1988, 64, 1233-1249.	0.8	21
131	A new Morse-oscillator based Hamiltonian for H3+: Explicit expressions for some vibrational matrix elements. Journal of Molecular Spectroscopy, 1987, 124, 430-436.	0.4	9
132	Prediction of the nÎ½2 inversional energy levels of the phosphine, arsine, and stibine molecules. Journal of Molecular Spectroscopy, 1986, 119, 426-432.	0.4	11
133	The Î”k = Â±2 and Î”k = Â±3 forbidden transitions in the vibrational-rotational spectra of symmetric top molecules NH3 and H3O+. Journal of Molecular Structure, 1986, 141, 361-366.	1.8	10
134	A new Morse-oscillator based Hamiltonian for H3+: Extension to H2D+ and D2H+. Journal of Molecular Spectroscopy, 1986, 115, 269-293.	0.4	24
135	An ab initio investigation of the potential function of PH3. Journal of Molecular Spectroscopy, 1986, 118, 88-95.	0.4	6
136	A new Morse-oscillator based Hamiltonian for H3+: Calculation of line strengths. Journal of Molecular Spectroscopy, 1986, 118, 208-231.	0.4	32
137	The development of a new Morse-oscillator based rotation-vibration Hamiltonian for H3+. Journal of Molecular Spectroscopy, 1985, 112, 183-202.	0.4	84
138	A preliminary determination of the equilibrium geometry and inversion potential in H3O+ from experiment. Journal of Molecular Spectroscopy, 1984, 107, 208-211.	0.4	39
139	An ab initio investigation of the potential function and rotationâ€“vibration energies of NH₃. Canadian Journal of Physics, 1984, 62, 1801-1805.	0.4	28
140	Vibrational anharmonicity and the inversion potential function of NH3. Journal of Molecular Spectroscopy, 1983, 101, 30-47.	0.4	179
141	The inversion potential and rotation-inversion energy levels of H3O+ and CH3â¯. Journal of Molecular Spectroscopy, 1982, 95, 226-235.	0.4	51
142	High and very high resolution spectroscopy of the vibrational-rotational states of non-rigid molecules with particular emphasis on ammonia. Journal of Molecular Structure, 1982, 80, 1-13.	1.8	4
143	An Ab initio study of the transition dipole moments of NH3 and PH3 in excited inversional states. Journal of Molecular Spectroscopy, 1981, 87, 584-586.	0.4	4
144	A simultaneous analysis of the microwave, submillimeterwave, far infrared, and infrared-microwave two-photon transitions between the ground and Î½2 inversion-rotation levels of 14NH3. Journal of Molecular Spectroscopy, 1981, 88, 274-292.	0.4	125

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145	The diode laser spectrum of the Î½2 band of 14ND3 and 15ND3. Journal of Molecular Spectroscopy, 1981, 88, 293-299.	0.4	27
146	Magnetic interactions in1Î£ states of molecules with one large-amplitude motion coordinate. Molecular Physics, 1981, 43, 723-735.	0.8	13
147	Coriolis and l-type interactions in the Î½2, 2Î½2, and Î½4 states of 14NH3. Journal of Molecular Spectroscopy, 1980, 79, 455-495.	0.4	154
148	Inversion and inversion-rotation spectrum of 14NH3 in the Î½2 excited state. Journal of Molecular Spectroscopy, 1980, 84, 288-304.	0.4	76
149	The inversional dependence of hyperfine quadrupole coupling in14NH3. Molecular Physics, 1979, 38, 1761-1766.	0.8	21
150	Electric anharmonicity in XY3 pyramidal molecules. Journal of Molecular Spectroscopy, 1979, 74, 456-464.	0.4	23
151	Prediction of the inversion splittings of thenv2vibrational levels in phosphine (PH3, PD3and PMu3). Molecular Physics, 1978, 36, 791-796.	0.8	13
152	Calibration of high-resolution infrared spectra using spline functions. Journal of Molecular Spectroscopy, 1977, 64, 162-164.	0.4	2
153	Penning ionization electron spectra of HCN and DCN. Journal of Electron Spectroscopy and Related Phenomena, 1976, 8, 339-341.	0.8	7
154	Vibration-inversion-rotation spectra of ammonia: Centrifugal distortion, Coriolis interactions, and force field in 14NH3, 15NH3, 14ND3, and 14NT3. Journal of Molecular Spectroscopy, 1976, 60, 159-178.	0.4	75
155	Application of the Monte Carlo method to anharmonic force constant calculations. Journal of Molecular Spectroscopy, 1975, 56, 104-123.	0.4	22
156	The application of the Monte Carlo method to anharmonic force constant calculations. Journal of Molecular Spectroscopy, 1975, 55, 151-162.	0.4	9
157	Vibration-inversion-rotation spectra of ammonia. Journal of Molecular Spectroscopy, 1975, 54, 339-349.	0.4	48
158	Vibration-inversion-rotation spectra of ammonia. A vibration-inversion-rotation Hamiltonian for NH3. Journal of Molecular Spectroscopy, 1973, 48, 17-37.	0.4	100
159	Vibration-inversion-rotation spectra of ammonia. The â€œinverseâ€•eigenvalue problem for the one-dimensional SchrÃ¶dinger equation. Journal of Molecular Spectroscopy, 1973, 48, 38-46.	0.4	26
160	Solution of the inverse secular problem by â€œMonte Carloâ€•method. Journal of Molecular Spectroscopy, 1970, 33, 368-374.	0.4	4
161	Unambiguous analysis of three-spin spectra. Journal of Molecular Spectroscopy, 1969, 29, 426-431.	0.4	3
162	Anharmonic potential functions of polyatomic molecules. Journal of Molecular Spectroscopy, 1967, 23, 331-342.	0.4	48

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163	Analysis of NMR spectra by damped least squares. Journal of Molecular Spectroscopy, 1966, 21, 106-107.	0.4	11
164	Relating Binding Energy and Scattering Length of Cold Hybrid Ionâ€Atom Systems. Annalen Der Physik, 0, , 2100429.	0.9	0