

Zbigniew Kisiel

List of Publications by Year in descending order

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162
papers

6,011
citations

87843

38
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88593

70
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163
all docs

163
docs citations

163
times ranked

2890
citing authors

#	ARTICLE	IF	CITATIONS
1	Structures of Cage, Prism, and Book Isomers of Water Hexamer from Broadband Rotational Spectroscopy. <i>Science</i> , 2012, 336, 897-901.	6.0	377
2	Interstellar Glycine. <i>Astrophysical Journal</i> , 2003, 593, 848-867.	1.6	338
3	Least-squares mass-dependence molecular structures for selected weakly bound intermolecular clusters. <i>Journal of Molecular Spectroscopy</i> , 2003, 218, 58-67.	0.4	320
4	Concerted hydrogen-bond breaking by quantum tunneling in the water hexamer prism. <i>Science</i> , 2016, 351, 1310-1313.	6.0	256
5	Rotational spectrum of trans-trans diethyl ether in the ground and three excited vibrational states. <i>Journal of Molecular Spectroscopy</i> , 2005, 233, 231-243.	0.4	241
6	Broadband Fourier transform rotational spectroscopy for structure determination: The water heptamer. <i>Chemical Physics Letters</i> , 2013, 571, 1-15.	1.2	216
7	Re-exploring Molecular Complexity with ALMA (ReMoCA): interstellar detection of urea. <i>Astronomy and Astrophysics</i> , 2019, 628, A10.	2.1	117
8	Spectroscopic investigations of hydrogen bonding interactions in the gas phase. VII. The equilibrium conformation and out-of-plane bending potential energy function of the hydrogen-bonded heterodimer H ₂ O ⋯ HF determined from its microwave rotational spectrum. <i>Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences</i> , 1982, 381, 419-442.	1.5	114
9	A new torsion-rotation fitting program for molecules with a sixfold barrier: Application to the microwave spectrum of toluene. <i>Journal of Molecular Spectroscopy</i> , 2010, 259, 26-38.	0.4	106
10	Hydrogen Bond Cooperativity and the Three-Dimensional Structures of Water Nonamers and Decamers. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 14368-14372.	7.2	106
11	The Hydrogen Bond between Water and Aromatic Bases of Biological Interest: An Experimental and Theoretical Study of the 1:1 Complex of Pyrimidine with Water. <i>Journal of the American Chemical Society</i> , 1998, 120, 11504-11509.	6.6	92
12	Broadband rotational spectroscopy of acrylonitrile: Vibrational energies from perturbations. <i>Journal of Molecular Spectroscopy</i> , 2012, 280, 134-144.	0.4	91
13	Spectroscopic investigations of hydrogen bonding interactions in the gas phase. IV. The heterodimer H ₂ O ⋯ HF: the observation and analysis of its microwave rotational spectrum and the determination of its molecular geometry and electric dipole moment. <i>Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences</i> , 1980, 372, 441-451.	1.5	90
14	Astronomical searches for nitrogen heterocycles. <i>Advances in Space Research</i> , 2005, 36, 137-145.	1.2	88
15	A rigorous detection of interstellar CH ₃ NCO: An important missing species in astrochemical networks. <i>Astronomy and Astrophysics</i> , 2016, 587, L4.	2.1	87
16	Rotational Spectra of the Less Common Isotopomers, Electric Dipole Moment and the Double Minimum Inversion Potential of H ₂ O ⋯ HCl. <i>Journal of Physical Chemistry A</i> , 2000, 104, 6970-6978.	1.1	83
17	Formation and photostability of N-heterocycles in space. <i>Astronomy and Astrophysics</i> , 2005, 433, 583-590.	2.1	82
18	The millimeter- and submillimeter-wave spectrum of the trans-gauche conformer of diethyl ether. <i>Journal of Molecular Spectroscopy</i> , 2004, 228, 314-328.	0.4	81

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19	Electric dipole moments of the cyclic trimers (H ₂ O) ₂ HCl and (H ₂ O) ₂ HBr from Stark effects in their rotational spectra. <i>Chemical Physics Letters</i> , 2000, 325, 523-530.	1.2	75
20	A search for interstellar pyrimidine. <i>Monthly Notices of the Royal Astronomical Society</i> , 2003, 345, 650-656.	1.6	73
21	The rotational spectra, electric dipole moments and molecular structures of anisole and benzaldehyde. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 1708-1715.	1.3	73
22	ETHYL CYANIDE ON TITAN: SPECTROSCOPIC DETECTION AND MAPPING USING ALMA. <i>Astrophysical Journal Letters</i> , 2015, 800, L14.	3.0	73
23	Rotational spectra of quinoline and of isoquinoline: spectroscopic constants and electric dipole moments. <i>Journal of Molecular Spectroscopy</i> , 2003, 217, 115-122.	0.4	68
24	Rotational spectra and structures of van der Waals dimers of Ar with a series of fluorocarbons: Arâ€¦â€¦â€¦CH ₂ CHF, Arâ€¦â€¦â€¦CH ₂ CF ₂ , and Arâ€¦â€¦â€¦CHFCF ₂ . <i>Journal of Chemical Physics</i> , 1991, 95, 2283-2291.	1.2	66
25	Wetting Camphor: Multi-Isotopic Substitution Identifies the Complementary Roles of Hydrogen Bonding and Dispersive Forces. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 154-160.	2.1	66
26	Rotational spectrum, structure, and chlorine nuclear quadrupole tensor of the vinyl fluorideâ€”HCl dimer. <i>Journal of Chemical Physics</i> , 1990, 93, 3054-3062.	1.2	63
27	Laboratory characterization and astrophysical detection of vibrationally excited states of vinyl cyanide in Orion-KL. <i>Astronomy and Astrophysics</i> , 2014, 572, A44.	2.1	60
28	Pre-reactive Complexes in Mixtures of Water Vapour with Halogens: Characterisation of H ₂ Oâ€¦â€¦â€¦ClF and H ₂ Oâ€¦â€¦â€¦F ₂ by a Combination of Rotational Spectroscopy and Ab initio Calculations. <i>Chemistry - A European Journal</i> , 2001, 7, 2295-2305.	1.7	59
29	Rotational spectroscopy of iodobenzene and iodobenzeneâ€”neon with a direct digital 2â€”8GHz chirped-pulse Fourier transform microwave spectrometer. <i>Journal of Molecular Spectroscopy</i> , 2011, 269, 21-29.	0.4	58
30	ALMA detection and astrobiological potential of vinyl cyanide on Titan. <i>Science Advances</i> , 2017, 3, e1700022.	4.7	58
31	Structure and properties of the weakly bound trimer (H ₂ O) ₂ HCl observed by rotational spectroscopy. <i>Journal of Chemical Physics</i> , 2000, 112, 5767-5776.	1.2	56
32	Searches for interstellar molecules of potential prebiotic importance. <i>Advances in Space Research</i> , 2004, 33, 31-39.	1.2	55
33	Determination of precise relative energies of conformers of n-propanol by rotational spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 8329.	1.3	51
34	Capturing the Elusive Water Trimer from the Stepwise Growth of Water on the Surface of the Polycyclic Aromatic Hydrocarbon Acenaphthene. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 5744-5750.	2.1	48
35	Investigation of the Rotational Spectrum of Pyrimidine from 3 to 337 GHz: Molecular Structure, Nuclear Quadrupole Coupling, and Vibrational Satellites. <i>Journal of Molecular Spectroscopy</i> , 1999, 195, 332-339.	0.4	47
36	Assignment and Analysis of the mm-Wave Rotational Spectrum of Trichloroethylene: Observation of a New, Extendedâ€”Band and an Overview of High-J,R-Type Bands. <i>Journal of Molecular Spectroscopy</i> , 1996, 178, 125-137.	0.4	45

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37	Stark effects in the rotational spectrum of the dimer H ₂ O⋯HF and the variation of the electric dipole moment with excitation of the low-frequency, hydrogen-bond modes. <i>Journal of Chemical Physics</i> , 1983, 78, 2910-2914.	1.2	43
38	Nuclear quadrupole coupling in Cl ₂ C=CHCl and Cl ₂ C=CH ₂ : Evidence for systematic differences in orientations between internuclear and field gradient axes for terminal quadrupolar nuclei. <i>Journal of Chemical Physics</i> , 1998, 109, 10263-10272.	1.2	43
39	The mm-Wave Rotational Spectrum of CBrClF ₂ (Halon BCF): Observation of a New R-Type Band and Generalization of Conditions for Oblate-Type Band Formation. <i>Journal of Molecular Spectroscopy</i> , 1996, 177, 240-250.	0.4	41
40	The millimeter-wave rotational spectrum of chlorobenzene: Analysis of centrifugal distortion and of conditions for oblate-type bandhead formation. <i>Journal of Molecular Spectroscopy</i> , 1990, 144, 381-388.	0.4	40
41	Corannulene and its complex with water: a tiny cup of water. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 14214-14223.	1.3	39
42	The structure and electric dipole moment of camphor determined by rotational spectroscopy. Electronic supplementary information (ESI) available: Measured and fitted frequencies of field-free rotational transitions and of Stark components, and the results of fitting the molecular geometry. See http://www.rsc.org/suppdata/cp/b2/b212029a/ . <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 820-826.	1.3	38
43	The millimeter-wave rotational spectrum of fluorobenzene. <i>Journal of Molecular Spectroscopy</i> , 2005, 232, 47-54.	0.4	37
44	First assignment of the rotational spectrum of a molecule containing two iodine nuclei: Spectroscopic constants and structure of CH ₂ I ₂ . <i>Journal of Chemical Physics</i> , 1996, 105, 1778-1785.	1.2	36
45	The rotational spectrum of acrylonitrile up to 1.67 THz. <i>Journal of Molecular Spectroscopy</i> , 2009, 258, 26-34.	0.4	36
46	Detection of Cyclopropenylidene on Titan with ALMA. <i>Astronomical Journal</i> , 2020, 160, 205.	1.9	36
47	The structure of cyclohexane, F-, Cl-, Br- and I-cyclohexane. <i>Journal of Molecular Structure</i> , 1995, 350, 247-254.	1.8	35
48	The Gas-Phase Electric Dipole Moments of the Symmetric Top Tertiary Butyl Molecules tBuX, X=F, Cl, Br, I, CN, and NC. <i>Journal of Molecular Spectroscopy</i> , 2001, 208, 113-120.	0.4	35
49	A simple model for predicting structures of gas-phase van der Waals dimers containing a rare-gas atom. <i>The Journal of Physical Chemistry</i> , 1991, 95, 7605-7612.	2.9	34
50	The millimeter wave rotational spectrum of pyruvic acid. <i>Journal of Molecular Spectroscopy</i> , 2007, 241, 220-229.	0.4	34
51	The rotational spectrum of the hydrogen-bonded heterodimer H ₂ O⋯HF in the frequency range 40-80 GHz. <i>Chemical Physics Letters</i> , 1985, 117, 543-549.	1.2	33
52	Analysis of the rotational spectrum of pyruvitrile up to 324 GHz. <i>Journal of Molecular Spectroscopy</i> , 2010, 260, 57-65.	0.4	33
53	The rotational spectrum of acrylonitrile in excited states of the two low-frequency CCN bending vibrational modes. <i>Journal of Molecular Spectroscopy</i> , 1988, 130, 303-315.	0.4	32
54	Deep K-band Observations of TMC-1 with the Green Bank Telescope: Detection of HC ₇ O, Nondetection of HC ₁₁ N, and a Search for New Organic Molecules. <i>Astrophysical Journal</i> , 2017, 850, 187.	1.6	32

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55	Investigation of the rotational spectrum of the hydrogen-bonded dimer CF ₂ CH ₂ ⋯HCl. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 3385-3391.	1.7	31
56	The millimetre-wave rotational spectrum of phenylacetylene. Journal of Molecular Spectroscopy, 2010, 262, 82-88.	0.4	31
57	High frequency rotational mode in liquid methyl chloride. Molecular Physics, 1985, 54, 97-117.	0.8	30
58	Investigation of the rotational spectrum of the hydrogen-bonded dimer formed between methylenecyclopropane and HCl. Journal of Chemical Physics, 1994, 101, 4635-4643.	1.2	30
59	Structure and properties of the weakly bound cyclic trimer (H ₂ O) ₂ HBr observed by rotational spectroscopy. Journal of Chemical Physics, 2003, 119, 5907-5917.	1.2	28
60	Potential constants for the hydrogen-bonded dimer H ₂ O⋯HF: Directional character of the hydrogen bond. Journal of Molecular Structure, 1984, 112, 1-8.	1.8	25
61	Comprehensive analysis of the FASSST rotational spectrum of S(CN) ₂ . Journal of Molecular Spectroscopy, 2007, 246, 39-56.	0.4	25
62	New measurements and global analysis of rotational spectra of Cl-, Br-, and I-benzene: Spectroscopic constants and electric dipole moments. Journal of Molecular Spectroscopy, 2007, 246, 228-232.	0.4	25
63	Ground state rotational spectrum of toluene. Journal of Molecular Spectroscopy, 2004, 227, 109-113.	0.4	24
64	Millimeter-Wave Spectrum of Nitrosyl Bromide in the Low-Lying Excited States: Equilibrium Structure and Cubic Force Field. Journal of Molecular Spectroscopy, 1995, 170, 582-600.	0.4	23
65	Free jet rotational spectrum of propylene oxide⋯krypton and modelling and ab initio calculations for propylene oxide⋯rare gas dimers Electronic supplementary information (ESI) available: Tables S1 and S2: Experimental transition frequencies of PRO⋯ ⁸⁴ Kr and PRO⋯ ⁸⁶ Kr complexes. See http://www.rsc.org/suppdata/cp/b3/b300386h/ . Physical Chemistry Chemical Physics, 2003, 5, 1359-1364.	1.3	23
66	The millimeter wave rotational spectrum of lactic acid. Journal of Molecular Spectroscopy, 2005, 234, 106-112.	0.4	23
67	An investigation of hydrogen bonding between HCl and vinylacetylene: A molecule with two different H-bond acceptor sites. Journal of Chemical Physics, 1990, 93, 6249-6255.	1.2	22
68	The 103⋯360 GHz rotational spectrum of benzonitrile, the first interstellar benzene derivative detected by radioastronomy. Journal of Molecular Spectroscopy, 2018, 351, 39-48.	0.4	22
69	The rotational spectrum of chlorine nitrate (ClONO ₂) in the four lowest n ¹ / ₂ /29 polyads. Journal of Molecular Spectroscopy, 2009, 254, 78-86.	0.4	21
70	Mapping Vinyl Cyanide and Other Nitriles in Titan's Atmosphere Using ALMA. Astronomical Journal, 2017, 154, 206.	1.9	21
71	Analysis of a coriolis interaction between the in-plane and out-of-plane hydrogen bond bending modes in the dimer of oxirane and hydrogen fluoride. Chemical Physics Letters, 1989, 155, 447-454.	1.2	20
72	Rotational Spectrum of CD ₂ I ₂ . Journal of Molecular Spectroscopy, 1998, 189, 283-290.	0.4	20

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73	Electric dipole moments of acrylonitrile and of propionitrile measured in supersonic expansion. <i>Journal of Molecular Spectroscopy</i> , 2011, 270, 83-87.	0.4	20
74	Lowest vibrational states of acrylonitrile from microwave and synchrotron radiation spectra. <i>Journal of Molecular Spectroscopy</i> , 2015, 315, 83-91.	0.4	20
75	Exploring the Rich Potential Energy Surface of (H ₂ O) ₁₁ and Its Physical Implications. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 1141-1153.	2.3	20
76	The Millimeter- and Submillimeter-Wave Spectrum of the trans-trans Conformer of Diethyl Ether (C ₂ H ₅) ₂ O. <i>Journal of Molecular Spectroscopy</i> , 2019, 319, 1-10.	3.0	19
77	The millimetre-wave rotational spectrum of tertiary butyl cyanide. <i>Chemical Physics Letters</i> , 1985, 118, 334-339.	1.2	18
78	The Rotational Spectrum of Tertiary Butyl Isocyanide up to 730 GHz - The Observation and Classification of the h ₃ Splitting. <i>Journal of Molecular Spectroscopy</i> , 1993, 162, 467-473.	0.4	18
79	Analysis of the High-Resolution FT-IR and Millimeter-Wave Spectra of the $\hat{v}_5 = 1$ State of CHF ₂ Cl. <i>Journal of Molecular Spectroscopy</i> , 1996, 178, 108-112.	0.4	18
80	Spectroscopic Constants for HCFC-22 from Rotational and High-Resolution Vibration-rotation Spectra: CHF ₂ ³⁷ Cl and ¹³ CHF ₂ ³⁵ Cl Isotopomers. <i>Journal of Molecular Spectroscopy</i> , 1997, 184, 150-155.	0.4	18
81	Influence of the geometry of a hydrogen bond on conformational stability: a theoretical and experimental study of ethyl carbamate. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 1719.	1.3	18
82	Terahertz spectroscopy of isotopic acrylonitrile. <i>Journal of Molecular Structure</i> , 2011, 1006, 20-27.	1.8	18
83	The Millimeter-Wave Rotational Spectrum and Coriolis Interaction in the Two Lowest Excited Vibrational States of CHClF ₂ . <i>Journal of Molecular Spectroscopy</i> , 1995, 173, 477-487.	0.4	17
84	Millimeter-Wave Rotational Spectra of the ³⁷ Cl Species of 1,1,1-Trichloroethane. <i>Journal of Molecular Spectroscopy</i> , 1997, 181, 48-55.	0.4	17
85	Structure and properties of the weakly bound trimer (H ₂ O) ₂ HCl. Theoretical predictions and comparison with high-resolution rotational spectroscopy. <i>Chemical Physics</i> , 2001, 271, 267-282.	0.9	17
86	Interferometric Imaging of Titan's HC ₃ N, H ¹³ CCN, and HCCC ¹⁵ N. <i>Astrophysical Journal Letters</i> , 2018, 859, L15.	3.0	17
87	The $\hat{\nu}_{10}$ Bending Satellites in the Millimeter-Wave Rotational Spectra of CH ₂ I ₂ and CD ₂ I ₂ . <i>Journal of Molecular Spectroscopy</i> , 2000, 199, 5-12.	0.4	16
88	Assignment and analysis of the rotational spectrum of bromoform enabled by broadband FTMW spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2009, 257, 177-186.	0.4	16
89	Interactions between Freons: A Rotational Study of CH ₂ F ₂ ...CH ₂ Cl ₂ . <i>Chemistry - an Asian Journal</i> , 2014, 9, 1032-1038.	1.7	16
90	Analysis of the mm- and submm-wave rotational spectra of isotopic cyanamide: New isotopologues and molecular geometry. <i>Journal of Molecular Spectroscopy</i> , 2011, 267, 144-149.	0.4	15

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91	Sextic centrifugal distortion in fluorobenzene and phenylacetylene from cm-wave rotational spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2019, 359, 16-21.	0.4	15
92	Hydrogen bonding between vinylacetylene and HF: the role of steric effects in the geometry of vinylacetylene-HX complexes. <i>Chemical Physics Letters</i> , 1991, 176, 446-452.	1.2	14
93	The structures of CO-CH ₃ CCH and N ₂ -CH ₃ CCH: Spectroscopic measurements and modeling. <i>Journal of Chemical Physics</i> , 1994, 100, 3415-3421.	1.2	14
94	Rotational spectrum and spectroscopic constants of ³⁶ Ar-H ³⁵ Cl and ⁴⁰ Ar-HCl. <i>Chemical Physics Letters</i> , 1998, 291, 190-196.	1.2	14
95	The observation and characterization by rotational spectroscopy of the weakly bound trimer Ar ₂ HBr. <i>Journal of Chemical Physics</i> , 2002, 117, 8248-8255.	1.2	14
96	The anomeric effect in 1,3-benzodioxole: additional evidence from the rotational, vibration-rotation and rovibronic spectra. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 5469-5475.	1.3	14
97	Rotation-vibration interactions in the spectra of polycyclic aromatic hydrocarbons: Quinoline as a test-case species. <i>Journal of Chemical Physics</i> , 2015, 142, 104310.	1.2	14
98	High-J rotational spectrum of toluene in m = 3 torsional states. <i>Journal of Molecular Spectroscopy</i> , 2017, 339, 31-39.	0.4	14
99	Identification of Trace 2-Chloropropene with a New Chirped Pulse Microwave Spectrometer. <i>Acta Physica Polonica A</i> , 2017, 131, 311-317.	0.2	14
100	Conformations of some bicyclic monoterpenes based on bicyclo[3.1.0]hexane from their low-resolution microwave spectra. <i>Journal of the American Chemical Society</i> , 1978, 100, 8166-8169.	6.6	13
101	Vibrational satellites in the J = 3 → 2 rotational transitions of D ₂ O-DF: confirmation of the form of the potential energy function for the out-of-plane bending mode. <i>Journal of Molecular Structure</i> , 1985, 131, 201-213.	1.8	12
102	Microwave Spectrum, Structure, and Internal Motions of the Ketene-Ethylene Complex. <i>Journal of the American Chemical Society</i> , 1994, 116, 5285-5294.	6.6	12
103	Fourier transform rotational spectrum and molecular structure of vinylcyclopropane. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1996, 92, 907.	1.7	12
104	Nuclear quadrupole coupling in chloroform and calibration of ab initio calculations. <i>Journal of Molecular Spectroscopy</i> , 2006, 238, 72-78.	0.4	12
105	The rotational spectrum of chlorine nitrate (ClONO ₂): The 1/2 ← 1/2 dyad. <i>Journal of Molecular Spectroscopy</i> , 2007, 243, 1-9.	0.4	12
106	Structure and properties of the (HCl) ₂ H ₂ O cluster observed by chirped-pulse Fourier transform microwave spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 13912.	1.3	12
107	The Millimeter-Wave Rotational Spectrum of Chloroacetonitrile. <i>Journal of Molecular Spectroscopy</i> , 1993, 158, 318-327.	0.4	11
108	The Millimeter-Wave Rotational Spectrum of 2-Chloroacrylonitrile. <i>Journal of Molecular Spectroscopy</i> , 1994, 166, 32-40.	0.4	11

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109	The High-Frequency Rotational Spectrum of 1,1,1-Trichloroethane and the Observation of $K=3$ Splitting. <i>Journal of Molecular Spectroscopy</i> , 1995, 174, 425-432.	0.4	11
110	Nuclear Quadrupole Coupling in 2-Chloroacrylonitrile: Inertial and Principal Quadrupole Tensors for Cl and N. <i>Journal of Molecular Spectroscopy</i> , 1997, 184, 215-220.	0.4	11
111	The Rotational Spectrum of CBrClF ₂ (Halon BCF): II. The Lowest Excited Vibrational States and Nuclear Quadrupole Coupling Tensors. <i>Journal of Molecular Spectroscopy</i> , 1997, 185, 71-78.	0.4	11
112	Nuclear Quadrupole Coupling in 1,1,1-Trichloroethane: Inertial and Principal Tensors for ³⁵ Cl and ³⁷ Cl. <i>Journal of Molecular Spectroscopy</i> , 1998, 189, 228-234.	0.4	11
113	Millimetre wave rotational spectrum of glycolic acid. <i>Journal of Molecular Spectroscopy</i> , 2016, 321, 13-22.	0.4	11
114	Detection of CH ₃ C ₃ N in Titan's Atmosphere. <i>Astrophysical Journal Letters</i> , 2020, 903, L22.	3.0	11
115	The eight lowest-energy vibrational states of benzonitrile: analysis of Coriolis and Darling-Dennison couplings by millimeter-wave and far-infrared spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2022, 383, 111568.	0.4	11
116	Refractive index measurements in liquids within the frequency region 50 to 600 GHz; complex permittivity of C ₆ H ₅ Cl, CH ₃ Cl and CH ₂ Cl ₂ . <i>Journal of Physics E: Scientific Instruments</i> , 1984, 17, 240-245.	0.7	10
117	Rotational spectrum of ¹⁴ N ₂ · ³⁵ Cl and ¹⁴ N ₂ · ³⁷ Cl: electric field gradients at the nitrogen nuclei. <i>Chemical Physics Letters</i> , 1997, 276, 202-209.	1.2	10
118	The experimental electric dipole moments of the Ar _n HX van der Waals clusters. <i>Chemical Physics Letters</i> , 2001, 333, 381-386.	1.2	10
119	Far-Infrared Spectrum of S(CN) ₂ Measured with Synchrotron Radiation: Global Analysis of the Available High-Resolution Spectroscopic Data. <i>Journal of Physical Chemistry A</i> , 2013, 117, 13815-13824.	1.1	10
120	Rotation and Rotation-Vibration Spectroscopy of the ⁰ + ⁰ Inversion Doublet in Deuterated Cyanamide. <i>Journal of Physical Chemistry A</i> , 2013, 117, 9889-9898.	1.1	10
121	The complete molecular geometry and electric dipole moment of salicyl aldehyde from rotational spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2017, 335, 3-12.	0.4	10
122	Glycinamide, a Glycine Precursor, Caught in the Gas Phase: A Laser-ablation Jet-cooled Rotational Study. <i>Astrophysical Journal</i> , 2018, 861, 70.	1.6	10
123	Water Triggers Hydrogen-Bond Network Reshaping in the Glycoaldehyde Dimer. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8401-8405.	7.2	10
124	The rotational spectrum of tertiary butyl cyanide in the lowest vibrationally excited states. <i>Journal of Molecular Spectroscopy</i> , 1989, 135, 223-233.	0.4	9
125	The rotational spectrum and structure of the hydrogen-bonded dimer formed between methylenecyclopropane and HF. <i>Chemical Physics Letters</i> , 1995, 232, 187-191.	1.2	9
126	Comprehensive analysis of the rotational spectrum of 2,2-dichloropropane. <i>Journal of Molecular Spectroscopy</i> , 2015, 308-309, 20-27.	0.4	9

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127	The Millimeter-Wave Rotational Spectrum of Trichloroacetonitrile: A Study of h ₃ Splitting in a Near-Spherical Molecule. <i>Journal of Molecular Spectroscopy</i> , 1993, 159, 96-102.	0.4	8
128	The millimeter-wave spectrum of chlorine nitrate (ClONO ₂): The $\hat{1}/2_6$ vibrational state. <i>Journal of Molecular Spectroscopy</i> , 2007, 244, 113-116.	0.4	8
129	Measurement of CH ₃ D on Titan at Submillimeter Wavelengths. <i>Astronomical Journal</i> , 2019, 157, 219.	1.9	8
130	Microsolvation of ethyl carbamate conformers: effect of carrier gas on the formation of complexes. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 18351-18360.	1.3	8
131	Hydrogen versus tetrel bonds in complexes of 3-oxetanone with water and formaldehyde. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 7295-7301.	1.3	8
132	High-Resolution Infrared and Millimeter-Wave Study of D ₃ SiF: The Ground and v ₃ =1 States of the ²⁹ Si and ³⁰ Si Species, and the v ₃ =v ₆ =1 and v ₃ =2 States of D ₃ ²⁸ SiF. <i>Journal of Molecular Spectroscopy</i> , 2001, 208, 101-109.	0.4	7
133	Bridgehead distortion at the C1 position of 1-fluoroadamantane revealed by rotational spectroscopy and ab initio calculations. <i>Journal of Molecular Structure</i> , 2002, 612, 83-91.	1.8	7
134	Strong Coriolis coupling between and states of studied by millimeter-wave spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2008, 251, 235-240.	0.4	7
135	The pure rotational spectrum of Difluoroiodomethane, CHF ₂ I. <i>Journal of Molecular Spectroscopy</i> , 2010, 261, 82-86.	0.4	7
136	Rotational spectra of hydrazoic acid. <i>Journal of Molecular Spectroscopy</i> , 2017, 337, 27-31.	0.4	7
137	Observation of ³⁶ ArH ³⁷ Cl, ³⁸ ArH ³⁵ Cl and ³⁸ ArH ³⁷ Cl in natural abundance using CP-FTMW spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2018, 344, 34-38.	0.4	7
138	Propionitrile in the two lowest excited vibrational states in the laboratory and on Titan. <i>Journal of Molecular Spectroscopy</i> , 2020, 372, 111324.	0.4	7
139	Improved centrifugal and hyperfine analysis of ND ₂ H and NH ₂ D and its application to the spectral line survey of L1544. <i>Journal of Molecular Spectroscopy</i> , 2021, 377, 111431.	0.4	7
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