

# Zbigniew Kisiel

## List of Publications by Year in descending order

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162  
papers

6,011  
citations

87888

38  
h-index

88630

70  
g-index

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.	12.6	377
2	Interstellar Glycine. <i>Astrophysical Journal</i> , 2003, 593, 848-867.	4.5	338
3	Least-squares mass-dependence molecular structures for selected weakly bound intermolecular clusters. <i>Journal of Molecular Spectroscopy</i> , 2003, 218, 58-67.	1.2	320
4	Concerted hydrogen-bond breaking by quantum tunneling in the water hexamer prism. <i>Science</i> , 2016, 351, 1310-1313.	12.6	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.	1.2	241
6	Broadband Fourier transform rotational spectroscopy for structure determination: The water heptamer. <i>Chemical Physics Letters</i> , 2013, 571, 1-15.	2.6	216
7	Re-exploring Molecular Complexity with ALMA (ReMoCA): interstellar detection of urea. <i>Astronomy and Astrophysics</i> , 2019, 628, A10.	5.1	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 <sub>2</sub> 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.	1.4	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.	1.2	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.	13.8	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.	13.7	92
12	Broadband rotational spectroscopy of acrylonitrile: Vibrational energies from perturbations. <i>Journal of Molecular Spectroscopy</i> , 2012, 280, 134-144.	1.2	91
13	Spectroscopic investigations of hydrogen bonding interactions in the gas phase. IV. The heterodimer H <sub>2</sub> 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.	1.4	90
14	Astronomical searches for nitrogen heterocycles. <i>Advances in Space Research</i> , 2005, 36, 137-145.	2.6	88
15	A rigorous detection of interstellar CH <sub>3</sub> NCO: An important missing species in astrochemical networks. <i>Astronomy and Astrophysics</i> , 2016, 587, L4.	5.1	87
16	Rotational Spectra of the Less Common Isotopomers, Electric Dipole Moment and the Double Minimum Inversion Potential of H <sub>2</sub> O ⋯ HCl. <i>Journal of Physical Chemistry A</i> , 2000, 104, 6970-6978.	2.5	83
17	Formation and photostability of N-heterocycles in space. <i>Astronomy and Astrophysics</i> , 2005, 433, 583-590.	5.1	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.	1.2	81

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19	Electric dipole moments of the cyclic trimers (H <sub>2</sub> O) <sub>2</sub> HCl and (H <sub>2</sub> O) <sub>2</sub> HBr from Stark effects in their rotational spectra. <i>Chemical Physics Letters</i> , 2000, 325, 523-530.	2.6	75
20	A search for interstellar pyrimidine. <i>Monthly Notices of the Royal Astronomical Society</i> , 2003, 345, 650-656.	4.4	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.	2.8	73
22	ETHYL CYANIDE ON TITAN: SPECTROSCOPIC DETECTION AND MAPPING USING ALMA. <i>Astrophysical Journal Letters</i> , 2015, 800, L14.	8.3	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.	1.2	68
24	Rotational spectra and structures of van der Waals dimers of Ar with a series of fluorocarbons: Ar⋯CH <sub>2</sub> CHF, Ar⋯CH <sub>2</sub> CF <sub>2</sub> , and Ar⋯CHF <sub>2</sub> . <i>Journal of Chemical Physics</i> , 1991, 95, 2283-2291.	3.0	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.	4.6	66
26	Rotational spectrum, structure, and chlorine nuclear quadrupole tensor of the vinyl fluoride-HCl dimer. <i>Journal of Chemical Physics</i> , 1990, 93, 3054-3062.	3.0	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.	5.1	60
28	Pre-reactive Complexes in Mixtures of Water Vapour with Halogens: Characterisation of H <sub>2</sub> O⋯ClF and H <sub>2</sub> O⋯F <sub>2</sub> by a Combination of Rotational Spectroscopy and Ab initio Calculations. <i>Chemistry - A European Journal</i> , 2001, 7, 2295-2305.	3.3	59
29	Rotational spectroscopy of iodobenzene and iodobenzene-neon with a direct digital 8GHz chirped-pulse Fourier transform microwave spectrometer. <i>Journal of Molecular Spectroscopy</i> , 2011, 269, 21-29.	1.2	58
30	ALMA detection and astrobiological potential of vinyl cyanide on Titan. <i>Science Advances</i> , 2017, 3, e1700022.	10.3	58
31	Structure and properties of the weakly bound trimer (H <sub>2</sub> O) <sub>2</sub> HCl observed by rotational spectroscopy. <i>Journal of Chemical Physics</i> , 2000, 112, 5767-5776.	3.0	56
32	Searches for interstellar molecules of potential prebiotic importance. <i>Advances in Space Research</i> , 2004, 33, 31-39.	2.6	55
33	Determination of precise relative energies of conformers of n-propanol by rotational spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 8329.	2.8	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.	4.6	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.	1.2	47
36	Assignment and Analysis of the mm-Wave Rotational Spectrum of Trichloroethylene: Observation of a New, Extended- $\nu_2$ -Band and an Overview of High-J, R-Type Bands. <i>Journal of Molecular Spectroscopy</i> , 1996, 178, 125-137.	1.2	45

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37	Stark effects in the rotational spectrum of the dimer H <sub>2</sub> 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.	3.0	43
38	Nuclear quadrupole coupling in Cl <sub>2</sub> C=CHCl and Cl <sub>2</sub> C=CH <sub>2</sub> : 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.	3.0	43
39	The mm-Wave Rotational Spectrum of CBrClF <sub>2</sub> (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.	1.2	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.	1.2	40
41	Corannulene and its complex with water: a tiny cup of water. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 14214-14223.	2.8	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 <a href="http://www.rsc.org/suppdata/cp/b2/b212029a">http://www.rsc.org/suppdata/cp/b2/b212029a</a> . <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 820-826.	2.8	38
43	The millimeter-wave rotational spectrum of fluorobenzene. <i>Journal of Molecular Spectroscopy</i> , 2005, 232, 47-54.	1.2	37
44	First assignment of the rotational spectrum of a molecule containing two iodine nuclei: Spectroscopic constants and structure of CH <sub>2</sub> I <sub>2</sub> . <i>Journal of Chemical Physics</i> , 1996, 105, 1778-1785.	3.0	36
45	The rotational spectrum of acrylonitrile up to 1.67 THz. <i>Journal of Molecular Spectroscopy</i> , 2009, 258, 26-34.	1.2	36
46	Detection of Cyclopropenylidene on Titan with ALMA. <i>Astronomical Journal</i> , 2020, 160, 205.	4.7	36
47	The structure of cyclohexane, F-, Cl-, Br- and I-cyclohexane. <i>Journal of Molecular Structure</i> , 1995, 350, 247-254.	3.6	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.	1.2	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.	1.2	34
51	The rotational spectrum of the hydrogen-bonded heterodimer H <sub>2</sub> O⋯HF in the frequency range 40-80 GHz. <i>Chemical Physics Letters</i> , 1985, 117, 543-549.	2.6	33
52	Analysis of the rotational spectrum of pyruvitrile up to 324 GHz. <i>Journal of Molecular Spectroscopy</i> , 2010, 260, 57-65.	1.2	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.	1.2	32
54	Deep K-band Observations of TMC-1 with the Green Bank Telescope: Detection of HC <sub>7</sub> O, Nondetection of HC <sub>11</sub> N, and a Search for New Organic Molecules. <i>Astrophysical Journal</i> , 2017, 850, 187.	4.5	32

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55	Investigation of the rotational spectrum of the hydrogen-bonded dimer CF <sub>2</sub> CH <sub>2</sub> ⋯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.	1.2	31
57	High frequency rotational mode in liquid methyl chloride. Molecular Physics, 1985, 54, 97-117.	1.7	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.	3.0	30
59	Structure and properties of the weakly bound cyclic trimer (H <sub>2</sub> O) <sub>2</sub> HBr observed by rotational spectroscopy. Journal of Chemical Physics, 2003, 119, 5907-5917.	3.0	28
60	Potential constants for the hydrogen-bonded dimer H <sub>2</sub> O⋯HF: Directional character of the hydrogen bond. Journal of Molecular Structure, 1984, 112, 1-8.	3.6	25
61	Comprehensive analysis of the FASSST rotational spectrum of S(CN) <sub>2</sub> . Journal of Molecular Spectroscopy, 2007, 246, 39-56.	1.2	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.	1.2	25
63	Ground state rotational spectrum of toluene. Journal of Molecular Spectroscopy, 2004, 227, 109-113.	1.2	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.	1.2	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⋯ <sup>84</sup> Kr and PRO⋯ <sup>86</sup> Kr complexes. See <a href="http://www.rsc.org/suppdata/cp/b3/b300386h/">http://www.rsc.org/suppdata/cp/b3/b300386h/</a> . Physical Chemistry Chemical Physics, 2003, 5, 1359-1364.	2.8	23
66	The millimeter wave rotational spectrum of lactic acid. Journal of Molecular Spectroscopy, 2005, 234, 106-112.	1.2	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.	3.0	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.	1.2	22
69	The rotational spectrum of chlorine nitrate (ClONO <sub>2</sub> ) in the four lowest n <sup>1</sup> / <sub>2</sub> /29 polyads. Journal of Molecular Spectroscopy, 2009, 254, 78-86.	1.2	21
70	Mapping Vinyl Cyanide and Other Nitriles in Titan's Atmosphere Using ALMA. Astronomical Journal, 2017, 154, 206.	4.7	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.	2.6	20
72	Rotational Spectrum of CD <sub>2</sub> I <sub>2</sub> . Journal of Molecular Spectroscopy, 1998, 189, 283-290.	1.2	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.	1.2	20
74	Lowest vibrational states of acrylonitrile from microwave and synchrotron radiation spectra. <i>Journal of Molecular Spectroscopy</i> , 2015, 315, 83-91.	1.2	20
75	Exploring the Rich Potential Energy Surface of (H <sub>2</sub> O) <sub>11</sub> and Its Physical Implications. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 1141-1153.	5.3	20
76	The Millimeter- and Submillimeter-Wave Spectrum of the trans-trans Conformer of Diethyl Ether (C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> O. <i>Journal of Molecular Spectroscopy</i> , 2019, 319, 1-10.	7.7	19
77	The millimetre-wave rotational spectrum of tertiary butyl cyanide. <i>Chemical Physics Letters</i> , 1985, 118, 334-339.	2.6	18
78	The Rotational Spectrum of Tertiary Butyl Isocyanide up to 730 GHz - The Observation and Classification of the h <sub>3</sub> Splitting. <i>Journal of Molecular Spectroscopy</i> , 1993, 162, 467-473.	1.2	18
79	Analysis of the High-Resolution FT-IR and Millimeter-Wave Spectra of the $\nu_5 = 1$ State of CHF <sub>2</sub> Cl. <i>Journal of Molecular Spectroscopy</i> , 1996, 178, 108-112.	1.2	18
80	Spectroscopic Constants for HCFC-22 from Rotational and High-Resolution Vibration-rotation Spectra: CHF <sub>2</sub> <sup>37</sup> Cl and <sup>13</sup> CHF <sub>2</sub> <sup>35</sup> Cl Isotopomers. <i>Journal of Molecular Spectroscopy</i> , 1997, 184, 150-155.	1.2	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.	2.8	18
82	Terahertz spectroscopy of isotopic acrylonitrile. <i>Journal of Molecular Structure</i> , 2011, 1006, 20-27.	3.6	18
83	The Millimeter-Wave Rotational Spectrum and Coriolis Interaction in the Two Lowest Excited Vibrational States of CHClF <sub>2</sub> . <i>Journal of Molecular Spectroscopy</i> , 1995, 173, 477-487.	1.2	17
84	Millimeter-Wave Rotational Spectra of the <sup>37</sup> Cl Species of 1,1,1-Trichloroethane. <i>Journal of Molecular Spectroscopy</i> , 1997, 181, 48-55.	1.2	17
85	Structure and properties of the weakly bound trimer (H <sub>2</sub> O) <sub>2</sub> HCl. Theoretical predictions and comparison with high-resolution rotational spectroscopy. <i>Chemical Physics</i> , 2001, 271, 267-282.	1.9	17
86	Interferometric Imaging of Titan's HC <sub>3</sub> N, H <sup>13</sup> CCN, and HCCC <sup>15</sup> N. <i>Astrophysical Journal Letters</i> , 2018, 859, L15.	8.3	17
87	The $\nu_7$ Cl Bending Satellites in the Millimeter-Wave Rotational Spectra of CH <sub>2</sub> I <sub>2</sub> and CD <sub>2</sub> I <sub>2</sub> . <i>Journal of Molecular Spectroscopy</i> , 2000, 199, 5-12.	1.2	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.	1.2	16
89	Interactions between Freons: A Rotational Study of CH <sub>2</sub> F <sub>2</sub> -CH <sub>2</sub> Cl <sub>2</sub> . <i>Chemistry - an Asian Journal</i> , 2014, 9, 1032-1038.	3.3	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.	1.2	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.	1.2	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.	2.6	14
93	The structures of CO-CH <sub>3</sub> CCH and N <sub>2</sub> -CH <sub>3</sub> CCH: Spectroscopic measurements and modeling. <i>Journal of Chemical Physics</i> , 1994, 100, 3415-3421.	3.0	14
94	Rotational spectrum and spectroscopic constants of <sup>36</sup> Ar-H <sup>35</sup> Cl and <sup>40</sup> Ar-HCl. <i>Chemical Physics Letters</i> , 1998, 291, 190-196.	2.6	14
95	The observation and characterization by rotational spectroscopy of the weakly bound trimer Ar <sub>2</sub> HBr. <i>Journal of Chemical Physics</i> , 2002, 117, 8248-8255.	3.0	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.	2.8	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.	3.0	14
98	High-J rotational spectrum of toluene in  m  = 3 torsional states. <i>Journal of Molecular Spectroscopy</i> , 2017, 339, 31-39.	1.2	14
99	Identification of Trace 2-Chloropropene with a New Chirped Pulse Microwave Spectrometer. <i>Acta Physica Polonica A</i> , 2017, 131, 311-317.	0.5	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.	13.7	13
101	Vibrational satellites in the J = 3 → 2 rotational transitions of D <sub>2</sub> 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.	3.6	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.	13.7	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.	1.2	12
105	The rotational spectrum of chlorine nitrate (ClONO <sub>2</sub> ): The 1/2 ← 1/2 dyad. <i>Journal of Molecular Spectroscopy</i> , 2007, 243, 1-9.	1.2	12
106	Structure and properties of the (HCl) <sub>2</sub> H <sub>2</sub> O cluster observed by chirped-pulse Fourier transform microwave spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 13912.	2.8	12
107	The Millimeter-Wave Rotational Spectrum of Chloroacetonitrile. <i>Journal of Molecular Spectroscopy</i> , 1993, 158, 318-327.	1.2	11
108	The Millimeter-Wave Rotational Spectrum of 2-Chloroacrylonitrile. <i>Journal of Molecular Spectroscopy</i> , 1994, 166, 32-40.	1.2	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.	1.2	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.	1.2	11
111	The Rotational Spectrum of CBrClF <sub>2</sub> (Halon BCF): II. The Lowest Excited Vibrational States and Nuclear Quadrupole Coupling Tensors. <i>Journal of Molecular Spectroscopy</i> , 1997, 185, 71-78.	1.2	11
112	Nuclear Quadrupole Coupling in 1,1,1-Trichloroethane: Inertial and Principal Tensors for <sup>35</sup> Cl and <sup>37</sup> Cl. <i>Journal of Molecular Spectroscopy</i> , 1998, 189, 228-234.	1.2	11
113	Millimetre wave rotational spectrum of glycolic acid. <i>Journal of Molecular Spectroscopy</i> , 2016, 321, 13-22.	1.2	11
114	Detection of CH <sub>3</sub> C <sub>3</sub> N in Titan's Atmosphere. <i>Astrophysical Journal Letters</i> , 2020, 903, L22.	8.3	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.	1.2	11
116	Refractive index measurements in liquids within the frequency region 50 to 600 GHz; complex permittivity of C <sub>6</sub> H <sub>5</sub> Cl, CH <sub>3</sub> Cl and CH <sub>2</sub> Cl <sub>2</sub> . <i>Journal of Physics E: Scientific Instruments</i> , 1984, 17, 240-245.	0.7	10
117	Rotational spectrum of <sup>14</sup> N <sub>2</sub> · <sup>35</sup> Cl and <sup>14</sup> N <sub>2</sub> · <sup>37</sup> Cl: electric field gradients at the nitrogen nuclei. <i>Chemical Physics Letters</i> , 1997, 276, 202-209.	2.6	10
118	The experimental electric dipole moments of the Ar <sub>n</sub> HX van der Waals clusters. <i>Chemical Physics Letters</i> , 2001, 333, 381-386.	2.6	10
119	Far-Infrared Spectrum of S(CN) <sub>2</sub> Measured with Synchrotron Radiation: Global Analysis of the Available High-Resolution Spectroscopic Data. <i>Journal of Physical Chemistry A</i> , 2013, 117, 13815-13824.	2.5	10
120	Rotation and Rotation-Vibration Spectroscopy of the <sup>0</sup> + <sup>0</sup> Inversion Doublet in Deuterated Cyanamide. <i>Journal of Physical Chemistry A</i> , 2013, 117, 9889-9898.	2.5	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.	1.2	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.	4.5	10
123	Water Triggers Hydrogen-Bond Network Reshaping in the Glycoaldehyde Dimer. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8401-8405.	13.8	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.	1.2	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.	2.6	9
126	Comprehensive analysis of the rotational spectrum of 2,2-dichloropropane. <i>Journal of Molecular Spectroscopy</i> , 2015, 308-309, 20-27.	1.2	9



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127	The Millimeter-Wave Rotational Spectrum of Trichloroacetonitrile: A Study of h <sub>3</sub> Splitting in a Near-Spherical Molecule. <i>Journal of Molecular Spectroscopy</i> , 1993, 159, 96-102.	1.2	8
128	The millimeter-wave spectrum of chlorine nitrate (ClONO <sub>2</sub> ): The $\hat{1}/2_6$ vibrational state. <i>Journal of Molecular Spectroscopy</i> , 2007, 244, 113-116.	1.2	8
129	Measurement of CH <sub>3</sub> D on Titan at Submillimeter Wavelengths. <i>Astronomical Journal</i> , 2019, 157, 219.	4.7	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.	2.8	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.	2.8	8
132	High-Resolution Infrared and Millimeter-Wave Study of D <sub>3</sub> SiF: The Ground and v <sub>3</sub> =1 States of the <sup>29</sup> Si and <sup>30</sup> Si Species, and the v <sub>3</sub> =v <sub>6</sub> =1 and v <sub>3</sub> =2 States of D <sub>3</sub> <sup>28</sup> SiF. <i>Journal of Molecular Spectroscopy</i> , 2001, 208, 101-109.	1.2	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.	3.6	7
134	Strong Coriolis coupling between and states of studied by millimeter-wave spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2008, 251, 235-240.	1.2	7
135	The pure rotational spectrum of Difluoroiodomethane, CHF <sub>2</sub> I. <i>Journal of Molecular Spectroscopy</i> , 2010, 261, 82-86.	1.2	7
136	Rotational spectra of hydrazoic acid. <i>Journal of Molecular Spectroscopy</i> , 2017, 337, 27-31.	1.2	7
137	Observation of <sup>36</sup> ArH <sup>37</sup> Cl, <sup>38</sup> ArH <sup>35</sup> Cl and <sup>38</sup> ArH <sup>37</sup> Cl in natural abundance using CP-FTMW spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2018, 344, 34-38.	1.2	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.	1.2	7
139	Improved centrifugal and hyperfine analysis of ND <sub>2</sub> H and NH <sub>2</sub> D and its application to the spectral line survey of L1544. <i>Journal of Molecular Spectroscopy</i> , 2021, 377, 111431.	1.2	7
140	Millimetre-wave laboratory study of glycinamide and a search for it with ALMA towards Sagittarius B2(N). <i>Astronomy and Astrophysics</i> , 2022, 657, A99.	5.1	7
141	Refractive index measurements in CH <sub>3</sub> I in the frequency region 50–310 GHz. <i>Molecular Physics</i> , 1986, 58, 647-650.	1.7	6
142	The millimeter-wave rotational spectrum of tertiary butyl isocyanide. <i>Journal of Molecular Spectroscopy</i> , 1992, 151, 396-404.	1.2	6
143	Fast analytical evaluation of intermolecular electrostatic interaction energies using the pseudoatom representation of the electron density. I. The $\hat{1}/\pm$ -function method. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2018, 74, 524-536.	0.1	6
144	Bond Length Alternation Observed Experimentally: The Case of 1-H-indazole. <i>Chemistry - A European Journal</i> , 2019, 25, 10172-10178.	3.3	6

#	ARTICLE	IF	CITATIONS
145	Evaluation of coriolis coupling constants for HCN...HF and their use in the estimation of $v^2$ . Chemical Physics Letters, 1986, 129, 489-492.	2.6	5
146	Rotational spectroscopy update for the newly identified atmospheric ozone depleter CF <sub>3</sub> CCl <sub>3</sub> . Journal of Molecular Spectroscopy, 2018, 352, 1-9.	1.2	5
147	A Comprehensive Spectral Rotational Analysis of the Interstellar Methyl Isocyanate CH <sub>3</sub> NCO. Astrophysical Journal, Supplement Series, 2019, 245, 31.	7.7	5
148	Rotational spectroscopy and precise molecular structure of 1,2-dichlorobenzene. Journal of Molecular Spectroscopy, 2020, 374, 111380.	1.2	5
149	Water Triggers Hydrogen-Bond Network Reshaping in the Glycoaldehyde Dimer. Angewandte Chemie, 2020, 132, 8479-8483.	2.0	5
150	The Coriolis Interaction between the $v_2 = 1$ and $v_3 = 2$ States of Nitrosyl Bromide: Anomalous Quadrupole Patterns and Interstate Transitions in the Millimeter-Wave Spectrum. Journal of Molecular Spectroscopy, 1998, 191, 316-325.	1.2	4
151	Assignment and analysis of the rotational spectrum of 3-chlorobenzonitrile. Journal of Molecular Spectroscopy, 2006, 239, 88-93.	1.2	4
152	Comprehensive rotational spectroscopy of the newly identified atmospheric ozone depleter CF <sub>3</sub> CH <sub>2</sub> Cl. Journal of Molecular Spectroscopy, 2017, 337, 37-45.	1.2	4
153	Further rotational spectroscopy of phenol: Sextic centrifugal distortion and vibrational satellites. Journal of Molecular Spectroscopy, 2022, 386, 111630.	1.2	4
154	Submillimetre-wave spectrum, <sup>14</sup> N-hyperfine structure, and dipole moment of cyclopropyl cyanide. Journal of Molecular Spectroscopy, 2008, 251, 138-144.	1.2	3
155	Structure of Butyl Carbamate and of Its Water Complex in the Gas Phase. Journal of Physical Chemistry A, 2019, 123, 7983-7990.	2.5	3
156	The Millimeter-Wave Rotational Spectrum of CCl <sub>3</sub> CN in Excited Vibrational States. Journal of Molecular Spectroscopy, 1997, 183, 168-175.	1.2	2
157	Re-exploring Molecular Complexity with ALMA (ReMoCA): interstellar detection of urea <i>(Corrigendum)</i>. Astronomy and Astrophysics, 2020, 637, C4.	5.1	2
158	Triatomic model of hydrogen-bond stretching modes in hydrogen-bonded dimers Bâˆ«HX. Journal of Molecular Structure, 1989, 198, 77-83.	3.6	1
159	Pre-reactive Complexes in Mixtures of Water Vapour with Halogens: Characterisation of H <sub>2</sub> Oâˆ«...âˆ«...ClF and H <sub>2</sub> Oâˆ«...âˆ«...F <sub>2</sub> by a Combination of Rotational Spectroscopy and Ab initio Calculations. , 2001, 7, 2295.		1
160	From Molecular to Cluster Properties: Rotational Spectroscopy of 2-Aminopyridine and of Its Biomimetic Cluster with Water. Molecules, 2021, 26, 6870.	3.8	1
161	Assignment and analysis of the rotational spectra of the $v_7=1$ , $v_{12}=1$ and $v_{13}=1$ vibrational states of CH <sub>3</sub> CCCCH. Journal of Molecular Spectroscopy, 2011, 267, 118-122.	1.2	0
162	THz Molecular Spectroscopy. , 2018, , 387-402.		0