Vincent Boudon

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7543/publications.pdf

Version: 2024-02-01

145 papers	13,891 citations	94433 37 h-index	22166 113 g-index
151 all docs	151 docs citations	151 times ranked	8222 citing authors

#	Article	IF	Citations
1	The HITRAN 2008 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 533-572.	2.3	3,129
2	The HITRAN2016 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 3-69.	2.3	2,840
3	The HITRAN2012 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 130, 4-50.	2.3	2,810
4	The HITRAN2020 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 277, 107949.	2.3	770
5	The 2015 edition of the GEISA spectroscopic database. Journal of Molecular Spectroscopy, 2016, 327, 31-72.	1.2	311
6	The 2009 edition of the GEISA spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2395-2445.	2.3	306
7	Virtual atomic and molecular data centre. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2151-2159.	2.3	164
8	Evidence for a Polar Ethane Cloud on Titan. Science, 2006, 313, 1620-1622.	12.6	161
9	Global analysis of the high resolution infrared spectrum of methane 12CH4 in the region from 0 to 4800cmâ˜1. Chemical Physics, 2009, 356, 131-146.	1.9	156
10	Symmetry-adapted tensorial formalism to model rovibrational and rovibronic spectra of molecules pertaining to various point groups. Journal of Molecular Spectroscopy, 2004, 228, 620-634.	1.2	140
11	Methane line parameters in the HITRAN2012 database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 130, 201-219.	2.3	121
12	The virtual atomic and molecular data centre (VAMDC) consortium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 074003.	1.5	120
13	Applications of a new set of methane line parameters to the modeling of Titanâ€™s spectrum in the 1.58Î¼m window. Planetary and Space Science, 2012, 61, 85-98.	1.7	99
14	Titanâ€™s surface and atmosphere from Cassini/VIMS data with updated methane opacity. Icarus, 2013, 226, 470-486.	2.5	92
15	XTDS and SPVIEW: Graphical tools for the analysis and simulation of high-resolution molecular spectra. Journal of Molecular Spectroscopy, 2008, 251, 102-113.	1.2	87
16	MeCaSDa and ECaSDa: Methane and ethene calculated spectroscopic databases for the virtual atomic and molecular data centre. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 130, 62-68.	2.3	83
17	The vibrational levels of methane obtained from analyses of high-resolution spectra. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 98, 394-404.	2.3	81
18	Titan's 3-micron spectral region from ISO high-resolution spectroscopy. Icarus, 2006, 180, 176-185.	2.5	74

#	Article	IF	Citations
19	The 2020 edition of the GEISA spectroscopic database. Journal of Molecular Spectroscopy, 2021, 380, 111510.	1.2	74
20	High resolution spectroscopy and the first global analysis of the Tetradecad region of methane 12CH4. Physical Chemistry Chemical Physics, 2013, 15, 10071.	2.8	73
21	Performance of the AILES THz-Infrared beamline at SOLEIL for High resolution spectroscopy. AIP Conference Proceedings, 2010, , .	0.4	70
22	Comparison of line-by-line and band models of near-IR methane absorption applied to outer planet atmospheres. Icarus, 2012, 218, 1-23.	2.5	64
23	The high-resolution far-infrared spectrum of methane at the SOLEIL synchrotron. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 1117-1129.	2.3	58
24	Highly-spherical Top Data System (HTDS) software for spectrum simulation of octahedral XY6 molecules. Journal of Quantitative Spectroscopy and Radiative Transfer, 2000, 66, 1-16.	2.3	56
25	Orientation of O(3) and SU(2)âŠ—CI representations in cubic point groups (Oh,Td) for application to molecular spectroscopy. Journal of Molecular Spectroscopy, 2003, 219, 313-325.	1.2	56
26	New assignments in the 2Î¼m transparency window of the 12CH4 Octad band system. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 116, 101-109.	2.3	55
27	A Decade with VAMDC: Results and Ambitions. Atoms, 2020, 8, 76.	1.6	53
28	Development of the Dipole Moment and Polarizability Operators of Octahedral Molecules. Journal of Molecular Spectroscopy, 1999, 197, 222-231.	1.2	52
29	Rotationally resolved infrared spectroscopy of adamantane. Journal of Chemical Physics, 2012, 136, 024310.	3.0	50
30	High-resolution spectroscopy and preliminary global analysis of Câ€“H stretching vibrations of C2H4 in the 3000 and 6000cmâ^'1 regions. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2265-2278.	2.3	48
31	Analysis of the rovibrational spectrum of 13CH4 in the Octad range. Journal of Molecular Spectroscopy, 2013, 291, 33-47.	1.2	48
32	Titan's surface albedo variations over a Titan season from near-infrared CFHT/FTS spectra. Planetary and Space Science, 2006, 54, 1225-1246.	1.7	47
33	Instrumental methods for professional and amateur collaborations in planetary astronomy. Experimental Astronomy, 2014, 38, 91-191.	3.7	47
34	Field-free one-dimensional alignment of ethylene molecule. Physical Review A, 2006, 73, .	2.5	44
35	Line positions and intensities in the band of ethylene near : An experimental and theoretical study. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 952-962.	2.3	44
36	Global Analysis of the Infrared Spectrum of ¹³CH₄: Lines in the Region 0 to 3200 cm^{â€“1}. Chimia, 2008, 62, 273-276.	0.6	38

#	Article	IF	Citations
37	Self- and air-broadened line shapes in the 2Î½3 P and R branches of 12CH4. Journal of Molecular Spectroscopy, 2015, 315, 114-136.	1.2	37
38	Global analysis of the high temperature infrared emission spectrum of 12CH4 in the dyad (Î½2/Î½4) region. Journal of Chemical Physics, 2016, 144, 024312.	3.0	35
39	Total internal partition sums for the HITRAN2020 database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 271, 107713.	2.3	35
40	High-Resolution Jet-Cooled Spectroscopy of SF6: The Î½2+ Î½6Combination Band of32SF6and the Î½3Band of the Rare Isotopomers. Journal of Molecular Spectroscopy, 1998, 192, 359-367.	1.2	32
41	High-Resolution Spectroscopy and Analysis of the Î½4 Bending Region of SF6 near 615 cmâ¯1. Journal of Molecular Spectroscopy, 2001, 205, 304-311.	1.2	28
42	Self-broadening coefficients and improved line intensities for the Î½7 band of ethylene near <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0019.gif" overflow="scroll"><mml:mn>10.5</mml:mn><mml:mspace width="0.25em" /><mml:mi mathvariant="normal">Î¼</mml:mi><mml:mi mathvariant="normal">m</mml:mi></mml:math>, and impact on ethylene retrievals from Jungfraujoch solar spectra. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 148, 177-185.	2.3	28
43	The partition sum of methane at high temperature. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 2697-2706.	2.3	27
44	Spectroscopy of X2Y4 (D2h) molecules: tensorial formalism adapted to the O(3)âŠƒD2h chain, Hamiltonian and transition moment operators. Journal of Molecular Spectroscopy, 2003, 217, 239-248.	1.2	25
45	High-resolution Raman spectroscopy of the Î½1 region and Ramanâ€“Raman double resonance spectroscopy of the 2Î½1â¯Î½1 band of 32SF6 and 34SF6. Determination of the equilibrium bond length of sulfur hexafluoride. Journal of Molecular Spectroscopy, 2004, 228, 392-400.	1.2	25
46	Spectral line parameters including line shapes in the 2Î½3 Q branch of 12CH4. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 177, 152-169.	2.3	25
47	High-resolution spectroscopy and global analysis of CF 4 rovibrational bands to model its atmospheric absorption. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 201, 75-93.	2.3	25
48	Analysis of the â€œUnusualâ€•Vibrational Components of Triply Degenerate Vibrational Mode Î½6 of Mo(CO)6 Based on the Classical Interpretation of the Effective Rotationâ€“Vibration Hamiltonian. Journal of Molecular Spectroscopy, 2000, 201, 95-108.	1.2	24
49	Simultaneous Analysis of the Î½2 Raman and Î½2 + Î½6 Infrared Spectra of the SF6 Molecule. Journal of Molecular Spectroscopy, 2000, 201, 164-171.	1.2	24
50	VAMDCâ€”The Virtual Atomic and Molecular Data Centreâ€”A New Way to Disseminate Atomic and Molecular Dataâ€”VAMDC Level 1 Release. AIP Conference Proceedings, 2011, , .	0.4	24
51	Spectroscopic tools for remote sensing of greenhouse gases CH 4 , CF 4 and SF 6. Environmental Chemistry Letters, 2003, 1, 86-91.	16.2	23
52	Quantifying methane vibrational and rotational temperature with Raman scattering. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 236, 106562.	2.3	23
53	High-resolution spectroscopy and analysis of the Î½₃/2Î½₄dyad of CF₄. Molecular Physics, 2011, 109, 2273-2290.	1.7	22
54	Spectroscopy of XY5Z (C4v) Molecules: Development of the Hamiltonian and the Transition Moment Operators Using a Tensorial Formalism. Journal of Molecular Spectroscopy, 2000, 200, 131-137.	1.2	21

#	Article	IF	Citations
55	Spectroscopy of XY2Z2 (C2v) Molecules: A Tensorial Formalism Adapted to the O(3)âŠƒTdâŠƒC2v Chain. Application to the Ground State of SO2F2. Journal of Molecular Spectroscopy, 2002, 216, 297-307.	1.2	21
56	Line broadening coefficient calculations for methane perturbed by nitrogen. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 1328-1343.	2.3	21
57	Line positions and intensities for the Î½3 band of 5 isotopologues of germane for planetary applications. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 205, 174-183.	2.3	20
58	First High-Resolution Raman Spectrum and Analysis of the Î½5 Bending Fundamental of SF6. Journal of Molecular Spectroscopy, 2002, 213, 139-144.	1.2	19
59	Strong thermal nonequilibrium in hypersonic CO and CH4 probed by CRDS. Journal of Chemical Physics, 2015, 142, 214305.	3.0	19
60	High-resolution infrared spectroscopy and analysis of the Î½2/Î½4 bending dyad of ruthenium tetroxide. Journal of Molecular Spectroscopy, 2017, 336, 29-35.	1.2	19
61	The ground state rotational spectrum of SO2F2. Journal of Molecular Spectroscopy, 2003, 222, 172-179.	1.2	18
62	top data system (TDS) software for spectrum simulation of asymmetric molecules. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 95, 521-538.	2.3	18
63	The 2-Î¼m spectroscopy of Huygens probe landing site on Titan with Very Large Telescope/Nasmyth Adaptive Optics System Near-Infrared Imager and Spectrograph. Journal of Geophysical Research, 2007, 112, .	3.3	18
64	Theoretical investigation of the potential energy surface of the van der Waals complex CH4â€“N2. Journal of Chemical Physics, 2009, 131, 134304.	3.0	18
65	Mapping spectroscopic uncertainties into prospective methane retrieval errors from Sentinel-5 and its precursor. Atmospheric Measurement Techniques, 2015, 8, 3617-3629.	3.1	18
66	The high overtone and combination levels of SF 6 revisited at Doppler-limited resolution: A global effective rovibrational model for highly excited vibrational states. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 190, 38-47.	2.3	18
67	Spectroscopy of XY5Z (C4v) Molecules: A Tensorial Formalism Adapted to the O(3) âŠƒ Oh âŠƒ C4v Chain. Journal of Molecular Spectroscopy, 2000, 200, 123-130.	1.2	17
68	Rotational-vibrational relative equilibria and the structure of quantum energy spectrum of the tetrahedral molecule P4. European Physical Journal D, 2001, 17, 13-35.	1.3	17
69	New investigation of the Î½3 Câ€“H stretching region of 12CH4 through the analysis of high temperature infrared emission spectra. Journal of Chemical Physics, 2018, 148, 134306.	3.0	17
70	Study of the Fundamental Bands of 70GeD4 by High-Resolution Raman and Infrared Spectroscopy: First Experimental Determination of the Equilibrium Bond Length of Germane. Journal of Molecular Spectroscopy, 2002, 216, 408-418.	1.2	16
71	C4v Top Data System (C4v TDS) software for infrared spectrum simulation of XY5Z symmetric molecules. Journal of Quantitative Spectroscopy and Radiative Transfer, 2002, 74, 621-636.	2.3	16
72	Terahertz Rotational Spectroscopy of Greenhouse Gases Using Long Interaction Path-Lengths. Applied Sciences (Switzerland), 2021, 11, 1229.	2.5	16

#	Article	IF	Citations
73	Calculated spectroscopic databases for the VAMDC portal: New molecules and improvements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 251, 107096.	2.3	16
74	High-resolution FTIR spectrum and analysis of the Î½2+Î½4 combination band of 32SF6. Journal of Molecular Spectroscopy, 2003, 222, 291-295.	1.2	15
75	Rotational Raman spectroscopy of ethylene using a femtosecond time-resolved pump-probe technique. Journal of Chemical Physics, 2005, 123, 154309.	3.0	15
76	Highâ€resolution stimulated Raman spectroscopy and analysis of the Î½₁, 2Î½₁â€“Î½₁, Î½₂, 2Î½₂, and 3Î½₂â€“Î½₂ bands of CF₄. Journal of Raman Spectroscopy, 2013, 44, 731-738.	2.5	15
77	Resolving the forbidden band of SF₆. Physical Chemistry Chemical Physics, 2014, 16, 1415-1423.	2.8	15
78	Rotationally resolved IR spectroscopy of hexamethylenetetramine (HMT) C₆N₄H₁₂. Astronomy and Astrophysics, 2014, 561, A109.	5.1	15
79	Tensorial development of the rovibronic Hamiltonian and transition moment operators for octahedral molecules. Journal of Molecular Structure, 2001, 599, 125-137.	3.6	14
80	The SO2F2 quasi-spherical top: Correspondence between tensorial and Watson's formalisms. Journal of Molecular Structure, 2006, 780-781, 124-133.	3.6	14
81	High-resolution stimulated Raman spectroscopy and analysis of theÎ½2,Î½5and 2Î½6bands of34SF6. Molecular Physics, 2006, 104, 2653-2661.	1.7	13
82	Near-infrared radiative transfer modelling with different CH4 spectroscopic databases to retrieve atmospheric methane total amount. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2676-2682.	2.3	13
83	Self and N2 collisional broadening of far-infrared methane lines measured at the SOLEIL synchrotron. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1874-1886.	2.3	13
84	The VAMDC Portal as a Major Enabler of Atomic and Molecular Data Citation. Galaxies, 2018, 6, 105.	3.0	13
85	Spectroscopy of XY3Z (C3v) molecules: A tensorial formalism adapted to the O(3)âŠƒCâˆžvâŠƒC3v group chain. Journal of Molecular Spectroscopy, 2005, 234, 113-121.	1.2	12
86	High-resolution spectroscopy of difference and combination bands of SF₆ to elucidate the Î½₃ + Î½₁ â^' Î½₁ and Î½₃ + Î½₂ â^' Î½₂ hot band structures in the Î½₃ region. Molecular Physics, 2014, 112, 2504-2514.	1.7	12
87	Spectral lines of methane measured up to 2.6 THz at sub-MHz accuracy with a CW-THz photomixing spectrometer: Line positions of rotational transitions induced by centrifugal distortion. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 349-354.	2.3	12
88	top data system (TDS) software for infrared spectrum simulation of asymmetric molecules: some improvements to the TDS packages. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 93, 429-446.	2.3	11
89	Development of the Hamiltonian and transition moment operators of symmetric top molecules using the O(3)âŠƒCâˆžvâŠƒC3v group chain. Journal of Molecular Spectroscopy, 2005, 234, 176-181.	1.2	11
90	High-Resolution Spectroscopy and Structure of Osmium Tetroxide. A Benchmark Study on ¹⁹²OsO₄. Inorganic Chemistry, 2012, 51, 10356-10365.	4.0	11

#	Article	IF	Citations
91	Line intensity measurements and analysis in the Î½3 band of ruthenium tetroxide. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 204, 103-111.	2.3	11
92	A methane line list with sub-MHz accuracy in the 1250 to 1380 cmâ^'1 range from optical frequency comb Fourier transform spectroscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 288, 108252.	2.3	11
93	High resolution Fourier transform infrared spectroscopy and analysis of the Î½ 6 band of jet-cooled Mo(CO) 6. Journal of Molecular Structure, 2000, 517-518, 145-155.	3.6	10
94	High-resolution stimulated Raman spectroscopy and analysis of the Î½1 stretching band of GeD4. Journal of Raman Spectroscopy, 2007, 38, 559-562.	2.5	10
95	Methane in Titan's atmosphere: from fundamental spectroscopy to planetology. Europhysics News, 2009, 40, 17-20.	0.3	10
96	Global frequency and intensity analysis of the Î½10/Î½7/Î½4/Î½12 band system of 12C2H4 at 10 Î¼m using the D2 Top Data System. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 182, 158-171.	2.3	10
97	Conformational landscape of the SF6 dimer as revealed by high resolution infrared spectroscopy and complexation with rare gas atoms. Physical Chemistry Chemical Physics, 2017, 19, 17224-17232.	2.8	10
98	Line positions and intensities for the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si5.svg"><mml:msub><mml:mi>Î½</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>/<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.svg"><mml:msub><mml:mi>Î½</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math> bands of 5 isotopologues of germane near 11.5ÂÂµm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 260, 107474.	2.3	10
99	High-Resolution Spectroscopy and Analysis of the Î½3 and Î½4 Fundamentals of Monoisotopic 70GeF4. Journal of Molecular Spectroscopy, 2001, 206, 172-180.	1.2	9
100	Highâ€resolution stimulated Raman spectroscopy and analysis of the Î½₂ and Î½₃ bands of C₂H₄. Journal of Raman Spectroscopy, 2013, 44, 1033-1038.	2.5	9
101	Characterization of isolated 1-aza-adamantan-4-one (C9H13NO) from microwave, millimeter-wave and infrared spectroscopy supported by electronic structure calculations. Journal of Molecular Spectroscopy, 2017, 338, 6-14.	1.2	9
102	High-Resolution Spectroscopy and Preliminary Analysis of the Î½1/Î½8 Dyad of SF535Cl. Journal of Molecular Spectroscopy, 2001, 208, 169-179.	1.2	8
103	Highâ€resolution stimulated Raman spectroscopy and analysis of the 2Î½₁₀ overtone symmetric motion of C₂H₄. Journal of Raman Spectroscopy, 2009, 40, 1065-1071.	2.5	8
104	C3v Top Data System (C3vTDS) software for spectrum simulation of XY3Z symmetric-top molecules using the group chain. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 1305-1315.	2.3	8
105	Observation and analysis of the SF6 Î½2+Î½4â^'Î½5 band: Improved parameters for the v5= 1 state. Journal of Molecular Spectroscopy, 2016, 325, 35-41.	1.2	8
106	First high resolution analysis of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>Î½</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:r band of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mn>36</mml:mn></mml:mrow></mml:msup><mml:msub><mml:mrow><mml:mtext>SF</mml:mtext></mml:mro	1.2	8
107	Analysis and modeling of combination bands of sulfur hexafluoride 32SF6 based on global fits. Update of the SHeCaSDa database. Journal of Molecular Spectroscopy, 2020, 368, 111251.	1.2	8
108	High-resolution spectroscopy and analysis of the Î½2 + Î½3 combination band of SF6 in a supersonic jet expansionâ€. Molecular Physics, 2013, 111, 2154-2162.	1.7	7

#	Article	IF	Citations
109	Line positions in the v6=1 band of methyl iodide: Validation of the C3v TDS package based on the tensorial formalism. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 173, 13-19.	2.3	7
110	Vibration-rotation energy levels and corresponding eigenfunctions of 12CH4 up to the tetradecad. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 219, 85-104.	2.3	7
111	Breakdown of the reduction of the rovibrational Hamiltonian: The case of S18O2F2. Journal of Molecular Spectroscopy, 2009, 256, 232-237.	1.2	6
112	Experimental IR study andab initiomodelling of ethylene adsorption in a MFI-type host zeolite. Molecular Physics, 2009, 107, 2081-2093.	1.7	6
113	High-resolution spectroscopy and analysis of the stretching dyad of osmium tetroxide. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 119-127.	2.3	6
114	First analysis of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>Î½</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></r combination band of SF6 observed at Doppler-limited resolution and effective model for the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" a. Journal of Molecular Spectroscopy, 2018, 348, 37-42.	1.2	6
115	High enthalpy source dedicated to quantitative infrared emission spectroscopy of gas flows at elevated temperatures. Review of Scientific Instruments, 2019, 90, 093103.	1.3	6
116	High-resolution spectroscopy and analysis of the Î½3, Î½4 and 2Î½4 bands of SiF4 in natural isotopic abundance. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 253, 107114.	2.3	6
117	Stark effect in X2Y4 molecules: Application to ethylene. Journal of Molecular Structure, 2006, 780-781, 70-79.	3.6	5
118	The bending triad of the quasi-spherical top molecule SO2F2 in the 550cmâ¯1 region. Journal of Molecular Spectroscopy, 2006, 238, 145-157.	1.2	5
119	D2hTDS-ST software for Stark spectrum simulation of X2Y4 asymmetric-top molecules. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 41-52.	2.3	5
120	Highâ€resolution stimulated Raman spectroscopy and analysis of the Î½₁/Î½₅ (Câ€“H) stretching dyad of C₂H₄. Journal of Raman Spectroscopy, 2013, 44, 590-596.	2.5	5
121	Infrared spectroscopy of ruthenium tetroxide and high-resolution analysis of the Î½3 band. Journal of Molecular Spectroscopy, 2015, 315, 46-54.	1.2	5
122	Pure rotation spectrum of CF4 in the v3= 1 state using THz synchrotron radiation. Journal of Molecular Spectroscopy, 2018, 348, 43-46.	1.2	5
123	Highâ€resolution stimulated Raman spectroscopy and analysis of the Î½₁ band of osmium tetroxide. Journal of Raman Spectroscopy, 2013, 44, 63-69.	2.5	4
124	Synchrotron-based Fourier transform spectra of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si78.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>Î½</mml:mi></mml:mrow><mml:mrow><mml:mn>23</mml:mn> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si79.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>Î½</mml:mi></mml:mrow><mml:mrow><mml:mn>24</mml:mn> IR ba. Journal of Molecular Spectroscopy, 2015, 315, 37-40.	1.2	4
125	Combined synchrotron-based high resolution FTIR and IR-diode laser supersonic jet spectroscopy of the chiral molecule CDBrClF. Journal of Molecular Spectroscopy, 2017, 337, 105-123.	1.2	4
126	Analytical expression of tensorial rotational operators for semi-classical interpretation of molecular spectra. Relations between molecular Hamiltonian parameters in different formalisms. Journal of Molecular Spectroscopy, 2022, 385, 111602.	1.2	4

#	Article	IF	Citations
127	Diode laser spectroscopy of the Î½8 band of the SF5Cl molecule. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2004, 60, 3403-3412.	3.9	3
128	The hot bands of silane between 2120 and 2270cmâ¯1. Journal of Molecular Spectroscopy, 2005, 230, 117-124.	1.2	3
129	Jet-cooled FTIR spectroscopy and analysis of the Câ€“O stretch fundamental of Ni(CO)₄. Molecular Physics, 2008, 106, 1135-1141.	1.7	3
130	22nd Colloquium on High Resolution Molecular Spectroscopy: Special Issue dedicated to Gianfranco Di Lonardo. Molecular Physics, 2011, 109, 2069-2070.	1.7	3
131	Isotopic relations for tetrahedral and octahedral molecules. Journal of Molecular Structure, 2020, 1206, 127729.	3.6	3
132	Comprehensive study of the pentad bending triad region of germane: Positions, strengths, widths and shifts of lines in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si29.svg"><mml:mrow><mml:mn>2</mml:mn><mml:msub><mml:mi>Î½</mml:mi><mml:mn>2</mml:mn></mml:msub><mml <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si5.svg"><mml:mrow><mml:msub><mml:mi>Î½</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mo linebreak="goodbreak">+</mml:mo><mml:ms. Journal of Quantitative Spectroscopy and Radiative Tran	2.3	3
133	Nitrogen-Broadening Parameters for Atmospheric Spectra Modelling of the Î½3 Band of SF6. Molecules, 2022, 27, 646.	3.8	3
134	Stark spectrum simulation for X2Y4 molecules: Application to the Î½12 band of ethylene in a high-silica zeolite. Journal of Chemical Physics, 2012, 136, 134314.	3.0	2
135	Line position analysis of the Î½ 2 band of SO 2 F 2 using the C 2v Top Data System. Journal of Molecular Spectroscopy, 2016, 325, 29-34.	1.2	2
136	High-Resolution spectroscopy and analysis of the fundamental modes of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e7298" altimg="si522.svg"><mml:msup><mml:mrow /><mml:mrow><mml:mn>28</mml:mn></mml:mrow></mml:msup></mml:math>Si<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e7306" altimg="si514.svg"><mml:msub><mml:mrow><mml:mi mathvariant="normal">F</mml:mi></mml:mrow><	1.2	2
137	Twentieth Colloquium on High Resolution Molecular Spectroscopy. Molecular Physics, 2008, 106, 1125-1126.	1.7	1
138	Highâ€resolution stimulated Raman spectroscopy and analysis of line positions and assignments for the Î½ 2 and Î½ 3 bands of 13 C 2 H 4. Journal of Raman Spectroscopy, 2016, 47, 839-844.	2.5	1
139	Line position analysis of the (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Overlock 1 bending tr. Journal of Molecular Spectroscopy, 2017, 339, 23-30.	1.2	1
140	Stimulated Raman spectroscopy of 13CF4. Journal of Molecular Spectroscopy, 2018, 348, 47-56.	1.2	1
141	High-resolution far-infrared synchrotron FTIR spectroscopy and analysis of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2487" altimg="si54.svg"><mml:msub><mml:mrow><mml:mi>Î½</mml:mi></mml:mrow><mml:mrow><mml:mn>7</mml:mn></mml:mrow></mml <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2497" altimg="si55.svg"><mml:msub><mml:mrow><mml:mi>Î½</mml:mi></mml:mrow><mml:mrow><mml:mn>19</mml:mn></mml:mrow> Journal of Molecular Spectroscopy, 2022, 386, 111614.	1.2	1
142	Tensorial development of the rovibronic Hamiltonian and dipole moment operators for XY3Z molecules with a degenerate electronic state: Preliminary application to the CH3O radical. Journal of Molecular Spectroscopy, 2009, 253, 92-98.	1.2	0
143	Introduction to the special issue on molecular spectroscopy, atmospheric composition and climate change. Journal of Molecular Spectroscopy, 2018, 348, 1.	1.2	0
144	Conformational landscape of the SF6 dimer as revealed by various free jet conditions. AIP Conference Proceedings, 2019, , .	0.4	0

#	Article	IF	Citations
145	Line positions and intensities in the Î½2 fundamental band of sulfuryl fluoride using the C2 top data system. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 227, 63-71.	2.3	0