Vincent Boudon

List of Publications by Year
in descending order

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 HITRAN2020 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 277, 107949.	2.3	770
2	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
3	Nitrogen-Broadening Parameters for Atmospheric Spectra Modelling of the Î½3 Band of SF6. Molecules, 2022, 27, 646.	3.8	3
4	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
5	High-resolution infrared synchrotron 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: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
6	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
7	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="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
8	Terahertz Rotational Spectroscopy of Greenhouse Gases Using Long Interaction Path-Lengths. Applied Sciences (Switzerland), 2021, 11, 1229.	2.5	16
9	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:mi>. Journal of Quantitative Spectroscopy and Radiative Tran	2.3	3
10	The 2020 edition of the GEISA spectroscopic database. Journal of Molecular Spectroscopy, 2021, 380, 111510.	1.2	74
11	Total internal partition sums for the HITRAN2020 database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 271, 107713.	2.3	35
12	A Decade with VAMDC: Results and Ambitions. Atoms, 2020, 8, 76.	1.6	53
13	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
14	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
15	Isotopic relations for tetrahedral and octahedral molecules. Journal of Molecular Structure, 2020, 1206, 127729.	3.6	3
16	Calculated spectroscopic databases for the VAMDC portal: New molecules and improvements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 251, 107096.	2.3	16
17	Quantifying methane vibrational and rotational temperature with Raman scattering. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 236, 106562.	2.3	23
18	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

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19	Conformational landscape of the SF6 dimer as revealed by various free jet conditions. AIP Conference Proceedings, 2019, , .	0.4	0
20	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
21	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
22	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
23	Stimulated Raman spectroscopy of 13CF4. Journal of Molecular Spectroscopy, 2018, 348, 47-56.	1.2	1
24	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></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
25	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
26	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
27	The VAMDC Portal as a Major Enabler of Atomic and Molecular Data Citation. Galaxies, 2018, 6, 105.	3.0	13
28	Introduction to the special issue on molecular spectroscopy, atmospheric composition and climate change. Journal of Molecular Spectroscopy, 2018, 348, 1.	1.2	0
29	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
30	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
31	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
32	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
33	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
34	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
35	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
36	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

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37	The HITRAN2016 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 3-69.	2.3	2,840
38	Line position analysis of the (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 71 bending tr. Journal of Molecular Spectroscopy, 2017, 339, 23-30.	1.2	1
39	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
40	The virtual atomic and molecular data centre (VAMDC) consortium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 074003.	1.5	120
41	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
42	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
43	Global frequency and intensity analysis of the Î½10/Î½7/Î¼4/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
44	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
45	The 2015 edition of the GEISA spectroscopic database. Journal of Molecular Spectroscopy, 2016, 327, 31-72.	1.2	311
46	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
47	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
48	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
49	Mapping spectroscopic uncertainties into prospective methane retrieval errors from Sentinel-5 and its precursor. Atmospheric Measurement Techniques, 2015, 8, 3617-3629.	3.1	18
50	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
51	Strong thermal nonequilibrium in hypersonic CO and CH4 probed by CRDS. Journal of Chemical Physics, 2015, 142, 214305.	3.0	19
52	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></mml:mrow></mml:msub></mml:mrow></mml:math> 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></mml:mrow></mml:msub></mml:mrow></mml:math> IR ba. Journal of Molecular Spectroscopy, 2015, 315, 37-40.	1.2	4
53	Infrared spectroscopy of ruthenium tetroxide and high-resolution analysis of the Î½3 band. Journal of Molecular Spectroscopy, 2015, 315, 46-54.	1.2	5
54	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	11

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55	Instrumental methods for professional and amateur collaborations in planetary astronomy. Experimental Astronomy, 2014, 38, 91-191.	3.7	47
56	Resolving the forbidden band of SF₆. Physical Chemistry Chemical Physics, 2014, 16, 1415-1423.	2.8	15
57	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
58	Rotationally resolved IR spectroscopy of hexamethylenetetramine (HMT) C₆N₄H₁₂. Astronomy and Astrophysics, 2014, 561, A109.	5.1	15
59	Titanâ€™s surface and atmosphere from Cassini/VIMS data with updated methane opacity. Icarus, 2013, 226, 470-486.	2.5	92
60	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
61	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
62	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
63	Methane line parameters in the HITRAN2012 database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 130, 201-219.	2.3	121
64	The HITRAN2012 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 130, 4-50.	2.3	2,810
65	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
66	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
67	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
68	Analysis of the rovibrational spectrum of 13CH4 in the Octad range. Journal of Molecular Spectroscopy, 2013, 291, 33-47.	1.2	48
69	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
70	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
71	Rotationally resolved infrared spectroscopy of adamantane. Journal of Chemical Physics, 2012, 136, 024310.	3.0	50
72	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

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73	High-Resolution Spectroscopy and Structure of Osmium Tetroxide. A Benchmark Study on ¹⁹²OsO₄. Inorganic Chemistry, 2012, 51, 10356-10365.	4.0	11
74	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
75	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
76	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
77	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
78	The 2009 edition of the GEISA spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2395-2445.	2.3	306
79	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
80	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
81	22nd Colloquium on High Resolution Molecular Spectroscopy: Special Issue dedicated to Gianfranco Di Lonardo. Molecular Physics, 2011, 109, 2069-2070.	1.7	3
82	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
83	High-resolution spectroscopy and analysis of the Î½₃/2Î½₄dyad of CF₄. Molecular Physics, 2011, 109, 2273-2290.	1.7	22
84	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
85	Line broadening coefficient calculations for methane perturbed by nitrogen. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 1328-1343.	2.3	21
86	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
87	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
88	Virtual atomic and molecular data centre. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2151-2159.	2.3	164
89	Performance of the AILES THz-Infrared beamline at SOLEIL for High resolution spectroscopy. AIP Conference Proceedings, 2010, , .	0.4	70
90	Methane in Titan's atmosphere: from fundamental spectroscopy to planetology. Europhysics News, 2009, 40, 17-20.	0.3	10

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91	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
92	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
93	Breakdown of the reduction of the rovibrational Hamiltonian: The case of S18O2F2. Journal of Molecular Spectroscopy, 2009, 256, 232-237.	1.2	6
94	The HITRAN 2008 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 533-572.	2.3	3,129
95	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
96	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
97	Experimental IR study andab initiomodelling of ethylene adsorption in a MFI-type host zeolite. Molecular Physics, 2009, 107, 2081-2093.	1.7	6
98	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
99	The partition sum of methane at high temperature. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 2697-2706.	2.3	27
100	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
101	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
102	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
103	Twentieth Colloquium on High Resolution Molecular Spectroscopy. Molecular Physics, 2008, 106, 1125-1126.	1.7	1
104	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
105	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
106	High-resolution stimulated Raman spectroscopy and analysis of theÎ½2,Î½5and 2Î½6bands of34SF6. Molecular Physics, 2006, 104, 2653-2661.	1.7	13
107	Stark effect in X2Y4 molecules: Application to ethylene. Journal of Molecular Structure, 2006, 780-781, 70-79.	3.6	5
108	The SO2F2 quasi-spherical top: Correspondence between tensorial and Watson's formalisms. Journal of Molecular Structure, 2006, 780-781, 124-133.	3.6	14

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109	Titan's 3-micron spectral region from ISO high-resolution spectroscopy. Icarus, 2006, 180, 176-185.	2.5	74
110	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
111	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
112	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
113	Evidence for a Polar Ethane Cloud on Titan. Science, 2006, 313, 1620-1622.	12.6	161
114	Field-free one-dimensional alignment of ethylene molecule. Physical Review A, 2006, 73, .	2.5	44
115	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
116	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
117	The hot bands of silane between 2120 and 2270cmâ¯1. Journal of Molecular Spectroscopy, 2005, 230, 117-124.	1.2	3
118	Development of the Hamiltonian and transition moment operators of symmetric top molecules using the O(3)âŠƒCâžvâŠƒC3v group chain. Journal of Molecular Spectroscopy, 2005, 234, 176-181.	1.2	11
119	Spectroscopy of XY3Z (C3v) molecules: A tensorial formalism adapted to the O(3)âŠƒCâžvâŠƒC3v group chain. Journal of Molecular Spectroscopy, 2005, 234, 113-121.	1.2	12
120	Rotational Raman spectroscopy of ethylene using a femtosecond time-resolved pump-probe technique. Journal of Chemical Physics, 2005, 123, 154309.	3.0	15
121	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
122	High-resolution Raman spectroscopy of the Î½1 region and Ramanâ€“Raman double resonance spectroscopy of the 2Î½1âˆ’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
123	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
124	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
125	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
126	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

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127	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
128	The ground state rotational spectrum of SO2F2. Journal of Molecular Spectroscopy, 2003, 222, 172-179.	1.2	18
129	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
130	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
131	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
132	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
133	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
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#	Article	IF	Citations
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