

Paolo Stoppa

List of Publications by Year in descending order

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papers

871
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471509

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69
docs citations

69
times ranked

310
citing authors

#	ARTICLE	IF	CITATIONS
1	The Spectroscopic Characterization of Halogenated Pollutants through the Interplay between Theory and Experiment: Application to R1122. <i>Molecules</i> , 2022, 27, 748.	3.8	8
2	High resolution FTIR study of the $\hat{\nu}_{25}$, $\hat{\nu}_{26}$, and $\hat{\nu}_{29}$ fundamental bands of CH ₂ D ⁷⁹ Cl. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2021, 270, 107719.	2.3	3
3	High-resolution infrared spectrum of CHD ₂ ⁷⁹ Br: ro-vibrational analysis of the $\hat{\nu}_{25}$ and $\hat{\nu}_{29}$ fundamentals. <i>Molecular Physics</i> , 2020, 118, e1654627.	1.7	0
4	High-resolution FTIR spectroscopy of CHD ₂ ⁷⁹ Br: ro-vibrational analysis of the ν_4 fundamental and determination of the ground state constants. <i>Molecular Physics</i> , 2020, 118, e1581293.	1.7	1
5	High-resolution infrared and ab initio investigation of CHD ₂ ⁷⁹ Br: Ro-vibrational analysis of the $\hat{\nu}_{26}$ fundamental and the $2\hat{\nu}_{26} \sim \hat{\nu}_{26}$ hot band. <i>Molecular Physics</i> , 2020, 118, e1766141.	1.7	0
6	High-resolution millimeter-wave spectroscopy of CH ₂ DCl: Paving the way for future astronomical observations of chloromethane isotopologues. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020, 248, 106982.	2.3	5
7	Spectroscopy of a low global warming power refrigerant. Infrared and millimeter-wave spectra of trifluoroethene (HFO-1123) in the ground and some vibrational excited states. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020, 248, 106980.	2.3	5
8	Sextic centrifugal distortion constants: interplay of density functional and basis set for accurate yet feasible computations. <i>Molecular Physics</i> , 2020, 118, e1734678.	1.7	12
9	Molecular synthons for accurate structural determinations: the equilibrium geometry of 1-chloro-1-fluoroethene. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 3615-3625.	2.8	15
10	FTIR spectrum of vinyl fluoride near 3.6 $\hat{\nu}_{4m}$: rovibrational analysis of the $\hat{\nu}_{24} + \hat{\nu}_{27}$ band and modelling Coriolis resonances in a seven-level polyad. <i>Molecular Physics</i> , 2018, 116, 3487-3494.	1.7	0
11	Line-by-line spectroscopic parameters of HFC-32 ro-vibrational transitions within the atmospheric window around 8.2 $\hat{\nu}_{4m}$. <i>Journal of Molecular Spectroscopy</i> , 2018, 348, 57-63.	1.2	4
12	Accurate Vibrational-Rotational Parameters and Infrared Intensities of 1-Bromo-1-fluoroethene: A Joint Experimental Analysis and Ab Initio Study. <i>Journal of Physical Chemistry A</i> , 2017, 121, 3305-3317.	2.5	18
13	Collision induced broadening of $\hat{\nu}_{21}$ band and ground state spectral lines of sulfur dioxide perturbed by N ₂ and O ₂ . <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 198, 155-163.	2.3	3
14	Computing sextic centrifugal distortion constants by DFT: A benchmark analysis on halogenated compounds. <i>Journal of Molecular Spectroscopy</i> , 2017, 335, 117-125.	1.2	24
15	CO ₂ -, He- and H ₂ -broadening coefficients of SO ₂ for $\hat{\nu}_{21}$ band and ground state transitions for astrophysical applications. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 203, 367-376.	2.3	18
16	High-resolution infrared spectroscopy of CH ₂ D ⁷⁹ Br: ro-vibrational analysis of the $\hat{\nu}_{24}$ and $\hat{\nu}_{28}$ fundamental bands. <i>Molecular Physics</i> , 2017, 115, 1555-1561.	1.7	3
17	Study of the Vibrational Spectra and Absorption Cross Sections of 1-Chloro-1-fluoroethene by a Joint Experimental and Ab Initio Approach. <i>Journal of Physical Chemistry A</i> , 2016, 120, 8369-8386.	2.5	17
18	FTIR spectra of CH ₂ F ₂ in the 1000 $\hat{\nu}_{23}$, $\hat{\nu}_{25}$, $\hat{\nu}_{27}$, $\hat{\nu}_{29}$ and $2\hat{\nu}_{24}$ polyad. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016, 175, 8-16.	2.3	14

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19	High-resolution FTIR spectroscopy of HCFC-31 in the 950 $\hat{~}$ 1160 cm ⁻¹ region: rovibrational analysis and resonances in the $\hat{1}/2_{4}$, $\hat{1}/2_{9}$ and $\hat{1}/2_{5} + \hat{1}/2_{6}$ bands of CH_2Cl_2 . <i>Molecular Physics</i> , 2015, 113, 3683-3690.		6
20	The energetic of $(\text{CH}_2\text{F}_2)_2$ investigated by TDL IR spectroscopy and DFT computations: From collision induced relaxation of ro-vibrational transitions to non-covalent interactions. <i>Journal of Chemical Physics</i> , 2015, 142, 134310.	3.0	14
21	Adsorption of F_2CCFCl on TiO_2 nano-powder: Structures, energetics and vibrational properties from DRIFT spectroscopy and periodic quantum chemical calculations. <i>Applied Surface Science</i> , 2015, 353, 986-994.	6.1	28
22	Insights into the interaction between CH_2F_2 and titanium dioxide: DRIFT spectroscopy and DFT analysis of the adsorption energetics. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 136, 1614-1620.	3.9	6
23	Self-, N ₂ -, O ₂ -broadening coefficients and line parameters of HFC-32 for $\hat{1}/2_{7}$ band and ground state transitions from infrared and microwave spectroscopy. <i>Molecular Physics</i> , 2014, 112, 2384-2396.	1.7	15
24	High-resolution infrared spectroscopy of CH_2BrF near 8 $\hat{~}$ 4 $\hat{~}$ m: rovibrational analysis of the $\hat{1}/2_{3}$ and $\hat{1}/2_{8}$ fundamentals and resonances with the dark states $\hat{1}/2_{5}$ and $\hat{1}/2_{6} + \hat{1}/2_{9}$. <i>Molecular Physics</i> , 2014, 112, 1799-1807.	1.7	4
25	The ro-vibrational analysis of the $\hat{1}/2_{4}$ fundamental band of CF_3Br from jet-cooled diode laser and FTIR spectra in the 8.3- $\hat{1}/4$ m region. <i>Molecular Physics</i> , 2014, 112, 1899-1909.	1.7	9
26	N ₂ , O ₂ - and He-collision-induced broadening of sulfur dioxide ro-vibrational lines in the 9.2 $\hat{~}$ 4m atmospheric window. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 118, 373-379.	3.9	20
27	High-resolution rovibrational analysis of CH_2BrF in the range 920 $\hat{~}$ 980cm ⁻¹ . <i>Chemical Physics Letters</i> , 2013, 579, 16-22.	2.6	2
28	Anharmonic theoretical simulations of infrared spectra of halogenated organic compounds. <i>Journal of Chemical Physics</i> , 2013, 139, 074310.	3.0	72
29	High resolution FTIR spectroscopy of chlorofluoromethane near 13 $\hat{~}$ 4 $\hat{~}$ um: rovibrational analysis and resonances of $\hat{1}/2_{5}$ and $\hat{1}/2_{6}$ bands in CF_3 and CF_2 . <i>Molecular Physics</i> , 2013, 111, 525-534.	1.7	5
30	A complete listing of sulfur dioxide self-broadening coefficients for atmospheric applications by coupling infrared and microwave spectroscopy to semiclassical calculations. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2013, 130, 233-248.	2.3	17
31	An integrated experimental and quantum-chemical investigation on the vibrational spectra of chlorofluoromethane. <i>Journal of Chemical Physics</i> , 2013, 139, 164302.	3.0	36
32	Anharmonic force field and vibrational dynamics of CH_2F_2 up to 5000 cm ⁻¹ studied by Fourier transform infrared spectroscopy and state-of-the-art <i>ab initio</i> calculations. <i>Journal of Chemical Physics</i> , 2012, 136, 214302.	3.0	37
33	Experimental and theoretical studies of the vibrational spectra of CHD_2Br . <i>Molecular Physics</i> , 2012, 110, 2091-2102.	1.7	3
34	High resolution infrared synchrotron study of $\text{CH}_2\text{D}_2\text{Br}$: ground state constants and analysis of the $\hat{1}/2_{5}$, $\hat{1}/2_{6}$ and $\hat{1}/2_{9}$ fundamentals. <i>Molecular Physics</i> , 2012, 110, 2063-2069.	1.7	5
35	Quantum-chemical <i>ab initio</i> investigation of the vibrational spectrum of halon 1113 and its anharmonic force field: A joint experimental and computational approach. <i>Chemical Physics</i> , 2012, 397, 55-64.	1.9	22
36	Modelling the anharmonic and Coriolis resonances within the six level polyad involving the $\hat{1}/2_{4}$ fundamental in the ro-vibrational spectrum of vinyl fluoride. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2012, 113, 1240-1249.	2.3	16

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37	Microwave, High-Resolution Infrared, and Quantum Chemical Investigations of CHBrF_2 : Ground and $v_4 = 1$ States. <i>Journal of Physical Chemistry A</i> , 2011, 115, 453-459.	2.5	25
38	Toward a Complete Understanding of the Vinyl Fluoride Spectrum in the Atmospheric Region. <i>ChemPhysChem</i> , 2011, 12, 356-363.	2.1	20
39	Anharmonic resonances in the CH chromophore overtone spectra of CHBrF_2 . <i>Molecular Physics</i> , 2011, 109, 2163-2172.	1.7	12
40	High-resolution FTIR spectrum of $\text{CH}_2\text{D}^{79}\text{Br}$: the ground, $v_5 = 1$ and $v_9 = 1$ state constants. <i>Molecular Physics</i> , 2010, 108, 733-738.	1.7	6
41	Spectroscopic measurements of SO_2 line parameters in the $9.2\text{--}9.25\text{ }\mu\text{m}$ atmospheric region and theoretical determination of self-broadening coefficients. <i>Journal of Chemical Physics</i> , 2010, 132, 044315.	3.0	26
42	Spectroscopic study of CHBrF_2 up to 9500 cm^{-1} : Vibrational analysis, integrated band intensities, and <i>ab initio</i> calculations. <i>Journal of Chemical Physics</i> , 2010, 133, 044310.	3.0	19
43	Determination of the vinyl fluoride line intensities by TDL spectroscopy: the object oriented approach of Visual Line Shape Fitting Program to line profile analysis. <i>Molecular Physics</i> , 2010, 108, 677-685.	1.7	17
44	Infrared Spectrum and Anharmonic Force Field of CH_2DBr . <i>Journal of Physical Chemistry A</i> , 2009, 113, 6083-6090.	2.5	9
45	Infrared Spectra, Integrated Band Intensities, and Anharmonic Force Field of $\text{H}_2\text{C}=\text{CHF}$. <i>Journal of Physical Chemistry A</i> , 2009, 113, 1497-1504.	2.5	26
46	High resolution FTIR spectroscopy of $\text{CH}_2^{79}\text{BrF}$: Analysis of the ν_8 fundamental band. <i>Journal of Molecular Spectroscopy</i> , 2008, 251, 123-128.	1.2	4
47	Jet-cooled diode laser spectrum and FTIR integrated band intensities of CF_3 : rovibrational analysis of $2\nu_5$ and $\nu_2 + \nu_3$ bands near $9\text{ }\mu\text{m}$ and cross-section measurements in the $450\text{--}2500\text{ cm}^{-1}$ region. <i>Molecular Physics</i> , 2008, 106, 1171-1179.	1.7	16
48	High-Resolution FTIR, Microwave, and <i>Ab Initio</i> Investigations of $\text{CH}_2^{79}\text{BrF}$: \hat{A} Ground, $v_5 = 1$, and $v_6 = 1, 2$ State Constants. <i>Journal of Physical Chemistry A</i> , 2007, 111, 7090-7097.	2.5	20
49	Vibrational spectra and normal coordinates analysis of <i>cis</i> - FHCCHI . <i>Journal of Molecular Structure</i> , 2007, 827, 165-175.	3.6	1
50	ATIRS package: A program suite for the rovibrational analysis of infrared spectra of asymmetric top molecules. <i>Journal of Molecular Spectroscopy</i> , 2007, 243, 148-154.	1.2	33
51	Spectroscopic constants of the ground and lower vibrational states of $\text{CH}_2^{81}\text{BrF}$: A combined high resolution infrared and microwave study. <i>Journal of Molecular Spectroscopy</i> , 2007, 246, 126-132.	1.2	6
52	High-Resolution Infrared Study of Vinyl Fluoride in the $750\text{--}1050\text{ cm}^{-1}$ Region: Rovibrational Analysis and Resonances Involving the ν_8 , ν_{10} , and ν_{11} Fundamentals. <i>Journal of Physical Chemistry A</i> , 2006, 110, 13412-13418.	2.5	12
53	Diode laser spectra and rovibrational analysis of the ν_4 fundamental of. <i>Molecular Physics</i> , 2006, 104, 3187-3192.	1.7	5
54	Vinyl halides adsorbed on TiO_2 surface: FTIR spectroscopy studies and <i>ab initio</i> calculations. <i>Journal of Molecular Structure</i> , 2005, 741, 213-219.	3.6	14

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55	High resolution FTIR study of the $\hat{1}/25$ and $\hat{1}/26$ bands of CH ₂ D 35 Cl: analysis of resonances and determination of ground and upper state constants. <i>Molecular Physics</i> , 2005, 103, 2803-2811.	1.7	13
56	Laser infrared spectroscopy of vinyl fluoride in the 1280-1400 cm ⁻¹ region. <i>Molecular Physics</i> , 2005, 103, 657-666.	1.7	6
57	Experimental and theoretical studies of the vibrational spectra of cis-1-bromo-2-fluoroethene. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2004, 60, 1967-1975.	3.9	3
58	Tunable diode laser spectra and analysis of the $\hat{1}/23$ fundamental of. <i>Journal of Molecular Spectroscopy</i> , 2003, 220, 7-12.	1.2	8
59	Rovibrational analysis of the $\hat{1}/21$ fundamental of CF ₃ Cl from diode laser spectra in a supersonic slit-jet expansion. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 3595-3599.	2.8	8
60	High-Resolution Analysis of the $\hat{1}/24$ Absorption Band of CH ₂ FBr. <i>Journal of Molecular Spectroscopy</i> , 2000, 201, 280-284.	1.2	9
61	The vibrational spectra and normal coordinates analysis of bromofluoromethane, CH ₂ BrF. <i>Journal of Molecular Structure</i> , 2000, 517-518, 197-208.	3.6	14
62	Infrared Laser Spectroscopy of the $\hat{1}/24$ and $\hat{1}/29$ Band System of CH ₂ F ₃ Cl. <i>Journal of Molecular Spectroscopy</i> , 1999, 194, 73-78.	1.2	7
63	High Resolution Infrared Spectrum of the C-F Stretching Mode of CH ₂ F ₃ Cl. <i>Journal of Molecular Spectroscopy</i> , 1997, 183, 388-397.	1.2	8
64	Measurements and Rovibrational Study of the CH ₂ FCI $\hat{1}/24$ Band by Tunable Diode Laser Spectrometer. <i>Journal of Molecular Spectroscopy</i> , 1996, 177, 106-114.	1.2	11
65	A Fourier transform infrared study of CH ₂ =CHF in the ν_4 band region near 1650 cm ⁻¹ . <i>Molecular Physics</i> , 1996, 87, 581-591.	1.7	7
66	High-Resolution FTIR Spectrum of Vinyl Fluoride: Rovibrational Analysis of the Torsion Mode at 712 cm ⁻¹ . <i>Journal of Molecular Spectroscopy</i> , 1995, 171, 504-512.	1.2	6
67	High resolution FTIR spectrum of vinyl fluoride near 9 $\hat{1}/4$ m: rovibrational analysis of the ν_7 band. <i>Molecular Physics</i> , 1995, 84, 281-290.	1.7	14
68	Diode Laser Spectroscopy of the $\hat{1}/28$ Band of Chlorofluoromethane. <i>Journal of Molecular Spectroscopy</i> , 1994, 166, 264-272.	1.2	9
69	High-Resolution Study of the $\hat{1}/23$ Band of Chlorofluoromethane by Diode Laser Spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 1993, 159, 481-493.	1.2	10