Marcel Nn Snels

List of Publications by Year
in descending order

88 papers	1,495 citations	304743 22 h-index	414414 32 g-index
98 all docs	98 docs citations	98 times ranked	1339 citing authors

#	Article	IF	Citations
1	Quasi-coincident observations of polar stratospheric clouds by ground-based lidar and CALIOP at Concordia (Dome C, Antarctica) from 2014 to 2018. Atmospheric Chemistry and Physics, 2021, 21, 2165-2178.	4.9	7
2	Comparison of Coincident Optical Particle Counter and Lidar Measurements of Polar Stratospheric Clouds Above McMurdo (77.85Â°S, 166.67Â°E) From 1994 to 1999. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033572.	3.3	3
3	Lidar observations of cirrus clouds in Palau (7Â°33â€²â€‰N, 134Â°48â€²â€‰E). Atmospheric Chemistry and Physics, 2021, 21, 7947-7961.	4.9	4
4	Polar Stratospheric Clouds: Satellite Observations, Processes, and Role in Ozone Depletion. Reviews of Geophysics, 2021, 59, e2020RG000702.	23.0	49
5	A simulation chamber for absorption spectroscopy in planetary atmospheres. Atmospheric Measurement Techniques, 2021, 14, 7187-7197.	3.1	2
6	Comparison of Antarctic polar stratospheric cloud observations by ground-based and space-borne lidar and relevance for chemistryâ€"climate models. Atmospheric Chemistry and Physics, 2019, 19, 955-972.	4.9	14
7	Temperature dependence of collisional induced absorption (CIA) bands of CO2 with implications for Venusâ€™ atmosphere. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 204, 242-249.	2.3	4
8	Terrestrial <scp>OH</scp> nightglow measurements during the <scp>Rosetta</scp> flyby. Geophysical Research Letters, 2015, 42, 5670-5677.	4.0	7
9	Lagrangian analysis of microphysical and chemical processes in the Antarctic stratosphere: a case study. Atmospheric Chemistry and Physics, 2015, 15, 6651-6665.	4.9	3
10	Carbon dioxide opacity of the Venus×³ atmosphere. Planetary and Space Science, 2014, 103, 347-354.	1.7	17
11	Carbon dioxide absorption at high densities in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0002.gif" overflow="scroll"><mml:mn>1.18</mml:mn><mml:mspace width="0.25em" /><mml:mi mathvariant="normal">Î¼</mml:mi><mml:mi mathvariant="normal">m</mml:mi></mml:math> nightside transparency window of Venus. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 133, 464-471.	2.3	13
12	Observation of polar stratospheric clouds over McMurdo (77.85Â°S, 166.67Â°E) (2006â€"2010). Journal of Geophysical Research D: Atmospheres, 2014, 119, 5528-5541.	3.3	11
13	Near-infrared Rayleigh scattering of SF6. Molecular Physics, 2013, 111, 2314-2319.	1.7	4
14	The characteristics of the O2 Herzberg II and Chamberlain bands observed with VIRTIS/Venus Express. Icarus, 2013, 223, 609-614.	2.5	31
15	Experimental CO2 absorption coefficients at high pressure and high temperature. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 117, 21-28.	2.3	27
16	Molecular dynamics simulations for CO2 spectra. IV. Collisional line-mixing in infrared and Raman bands. Journal of Chemical Physics, 2013, 138, 244310.	3.0	11
17	Estimate of the Arctic Convective Boundary Layer Height from Lidar Observations: A Case Study. Advances in Meteorology, 2012, 2012, 1-9.	1.6	23
18	Evaluation of stratospheric ozone, temperature, and aerosol profiles from the LOANA lidar in Antarctica. Polar Science, 2012, 6, 209-225.	1.2	15

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19	The AMMA MULID network for aerosol characterization in West Africa. International Journal of Remote Sensing, 2011, 32, 5485-5504.	2.9	12
20	A comparison of light backscattering and particle size distribution measurements in tropical cirrus clouds. Atmospheric Measurement Techniques, 2011, 4, 557-570.	3.1	15
21	Measurements and modelling of high pressure pure CO2 spectra from 750 to 8500cmâˆ'1. Iâ€"central and wing regions of the allowed vibrational bands. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 925-936.	2.3	51
22	Radiosonde stratospheric temperatures at Dumont d'Urville (Antarctica): trends and link with polar stratospheric clouds. Atmospheric Chemistry and Physics, 2010, 10, 3813-3825.	4.9	14
23	Variability of aerosol vertical distribution in the Sahel. Atmospheric Chemistry and Physics, 2010, 10, 12005-12023.	4.9	35
24	Detection and identification of TNT, 2,4-DNT and 2,6-DNT by near-infrared cavity ringdown spectroscopy. Chemical Physics Letters, 2010, 489, 134-140.	2.6	25
25	Calibration method for depolarization lidar measurements. International Journal of Remote Sensing, 2009, 30, 5725-5736.	2.9	19
26	Torsional splittings in the diode laser slit-jet spectra of the Î½6 fundamental of 1-chloro-1,1-difluoroethane (HCFC-142b). Journal of Molecular Spectroscopy, 2009, 254, 108-118.	1.2	9
27	Development and airborne operation of a compact water isotope ratio infrared spectrometerâ€. Isotopes in Environmental and Health Studies, 2009, 45, 303-320.	1.0	28
28	Morphology of the tropopause layer and lower stratosphere above a tropical cyclone: a case study on cyclone Davina (1999). Atmospheric Chemistry and Physics, 2008, 8, 3411-3426.	4.9	38
29	Balloonborne lidar for cloud physics studies. Applied Optics, 2006, 45, 5701.	2.1	15
30	Spectroscopic evidence for NAT, STS, and ice in MIPAS infrared limb emission measurements of polar stratospheric clouds. Atmospheric Chemistry and Physics, 2006, 6, 1201-1219.	4.9	82
31	The NH and ND stretching fundamentals of 14NH2D. Journal of Molecular Spectroscopy, 2006, 237, 143-148.	1.2	22
32	Mode selective tunneling dynamics observed by high resolution spectroscopy of the bending fundamentals of N14H2D and N14D2H. Journal of Chemical Physics, 2006, 125, 194319.	3.0	30
33	Fermi interaction between the Î½1 and the Î½2+4Î½s bands of Arâ‹¯DN2+. Journal of Chemical Physics, 2006, 124, 224315.	3.0	4
34	Classification and scales of Antarctic polar stratospheric clouds using wavelet decomposition. Journal of Atmospheric and Solar-Terrestrial Physics, 2005, 67, 293-300.	1.6	15
35	Determination of polar stratospheric cloud particle refractive indices by use of in situ optical measurements and T-matrix calculations. Applied Optics, 2005, 44, 3302.	2.1	17
36	Analysis of FTIR spectra of CH279Br35Cl; the Î½3and Î½9fundamentals. Molecular Physics, 2004, 102, 1469-1473.	1.7	0

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37	Analysis of FTIR spectra of CH279Br35Cl; the Î½4 and Î½5 fundamentals and their hot-bands Î½4+Î½6âˆ’Î½6 and Î½5+Î½6âˆ’Î½6. Journal of Molecular Spectroscopy, 2004, 224, 13-17.	1.2	1
38	Climatology of polar stratospheric clouds based on lidar observations from 1993 to 2001 over McMurdo Station, Antarctica. Journal of Geophysical Research, 2004, 109, .	3.3	56
39	Diode laser slit-jet spectra and analysis of the Î½14 fundamental of 1-chloro-1,1-difluoroethane (HCFC-142b). Journal of Molecular Spectroscopy, 2003, 217, 72-78.	1.2	6
40	Diode laser jet spectra and analysis of the Î½14 fundamental of 1,1,1,2-tetrafluoroethane (HFC-134a). Journal of Molecular Spectroscopy, 2003, 221, 156-162.	1.2	5
41	High resolution FTIR spectra and analysis of the Î½4 + Î½8 combination band and of the 2Î½4 + Î½8 âˆ’ Î½4 hot band of CH2 35Cl2. Molecular Physics, 2003, 101, 799-803.	1.7	1
42	The NH and ND stretching fundamentals of14ND2H. Journal of Chemical Physics, 2003, 119, 7893-7902.	3.0	42
43	High resolution analysis of the complex symmetric CF3 stretching chromophore absorption in CF3I. Journal of Chemical Physics, 2002, 116, 974-983.	3.0	15
44	High resolution FTIR spectra and analysis of the Î½11fundamental and of the Î½2+ Î½11, Î½5+ Î½12and Î½7+ Î½16combination bands of12C6D6. Molecular Physics, 2002, 100, 981-1001.	1.7	10
45	Analysis of the Î½3â€‰+â€‰Î½7 combination band of CF2Cl2 from spectra obtained by high resolution diode laser and FTIR supersonic jet techniquesElectronic supplementary information (ESI) available: line assignments for diode laser spectra for transitions Î½3 and Î½7 of CF235Cl2 (Table S1) and CF235Cl37Cl (Table S2). See http://www.rsc.org/suppdata/cp/b1/b110919g/. Physical Chemistry Chemical Physics, 2002, 4, 1531-1536.	2.8	14
46	High-Resolution FTIR Spectra of CD235Cl2: Analysis of the Î½3/Î½7/Î½9 Triad. Journal of Molecular Spectroscopy, 2002, 216, 191-196.	1.2	1
47	Diode laser slit-jet spectra and analysis of the fundamental of 1-chloro-1,1-difluoroethane (HCFC-142b). European Physical Journal D, 2002, 21, 137-142.	1.3	5
48	Diodeâ€“Laser Jet Spectra and Analysis of the Î½1 and Î½4 Fundamentals of CCl3F. Journal of Molecular Spectroscopy, 2001, 205, 102-109.	1.2	13
49	Diode Laser Jet Spectra and Analysis of the Î½3 and Î½8 Fundamentals of CHF2Cl. Journal of Molecular Spectroscopy, 2001, 209, 1-10.	1.2	22
50	High resolution FTIR spectra and analysis of the Î½11 fundamental band of. Chemical Physics Letters, 2001, 350, 57-62.	2.6	2
51	<title>Study of atmospheric trace gases by sub-Doppler diode laser spectroscopy</title>. , 2000, 4070, 94.		0
52	<title>First results obtained with a lidar fluorescence sensor system</title>. , 2000, , .		3
53	Thev1andv3bands of ND3. Molecular Physics, 2000, 98, 837-854.	1.7	37
54	Pressure broadening in the second overtone of NO, measured with a near infrared DFB diode laser. Optics Communications, 1999, 159, 80-83.	2.1	10

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55	Excited vibrational states of benzene: High resolution FTIR spectra and analysis of some out-of-plane vibrational fundamentals of C6H5D. Chemical Physics, 1997, 225, 107-130.	1.9	22
56	High Resolution Spectra and Rotational Analysis of the 2Î½8, Î½2+ Î½8, and 2Î½2Bands in Methylene Chloride. Journal of Molecular Spectroscopy, 1997, 182, 124-131.	1.2	3
57	High Resolution IR Study of the Coriolis Coupling between Î½3and Î½9in CH235Cl37Cl. Journal of Molecular Spectroscopy, 1997, 183, 224-227.	1.2	5
58	Comment on â€œHigh-Resolution FTIR Spectrum and Rotational Structure of the Î½8Band of Methylene Chlorideâ€•[J. Mol. Spectrosc.175,363â€“369 (1996)]. Journal of Molecular Spectroscopy, 1996, 177, 320.	1.2	4
59	High Resolution IR Study of the Coriolis Coupling between Î½3and Î½9in Methylene Chloride. Journal of Molecular Spectroscopy, 1995, 174, 581-586.	1.2	5
60	High-Resolution Spectra and Analysis of the Î½8 Band of Methylene Chloride. Journal of Molecular Spectroscopy, 1995, 173, 113-119.	1.2	8
61	Laser ablation of BiSrCaCuO superconducting thin film: analysis of intermediate species in real time. Applied Surface Science, 1995, 86, 45-49.	6.1	5
62	Rotational analysis of the Î½1band of trichlorofluoromethane from high resolution Fourier transform and diode laser spectra of supersonic jets and isotopically enriched samples. Journal of Chemical Physics, 1995, 103, 8846-8853.	3.0	26
63	Laser studies of polystyrene precursors performed through resonant two photon ionization processes in a supersonic molecular beam. Applied Surface Science, 1993, 69, 340-344.	6.1	6
64	Laser deposition of thin films of high Tc superconductors. Applied Surface Science, 1993, 69, 365-369.	6.1	9
65	Spectroscopy of 4-fluorostyrene clusters. Journal of Molecular Structure, 1993, 293, 197-200.	3.6	22
66	Resonant twophoton ionization processes of van der Waals adducts: Spectroscopy and reactivity of styrenes clustered with various molecules. Journal of Chemical Sciences, 1993, 105, 773-782.	1.5	1
67	The intermolecular vibrations of Arâ€“styrene and Arâ€“4â€fluorostyrene complexes. Journal of Chemical Physics, 1993, 99, 8398-8406.	3.0	58
68	Production and reactivity of ionic clusters. Applied Surface Science, 1992, 54, 171-174.	6.1	2
69	High resolution Fourierâ€transform infrared spectroscopy of CHCl2F in supersonic jets: Analysis of Î½3, Î½7, and Î½8. Journal of Chemical Physics, 1991, 95, 6355-6361.	3.0	24
70	High-resolution Fourier-transform infrared spectroscopy of thev3(F2) fundamental of RuO4. Molecular Physics, 1991, 72, 145-158.	1.7	11
71	Luminescence and ESCA analysis of laser-ablated materials. Applied Surface Science, 1990, 46, 321-325.	6.1	10
72	High-resolution infrared spectrum and analysis of thev11, A2u(B2) fundamental band of12C6H6and13C12C5H6. Molecular Physics, 1990, 71, 759-768.	1.7	53

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73	High-resolution spectra and analysis of the hot bands of the v2vibration of CF3Cl (v2+ vn- vn,n= 3, 5,) Tj ETQq1 1 0.784314 rgBT /Overl	1.7	8
74	High resolution infrared spectrum and analysis of the v2 band of CF3I. Molecular Physics, 1989, 68, 327-332.	1.7	6
75	High-resolution infrared spectrum and analysis of the Î½2 band of CF3Br. Journal of Molecular Spectroscopy, 1989, 138, 413-422.	1.2	3
76	High-resolution infrared spectrum and analysis of the 2Î½3 band of CF3Cl. Journal of Molecular Spectroscopy, 1989, 135, 131-143.	1.2	2
77	High resolution infrared spectrum and analysis of the 2v 3, 3v 3-v 3 and v 1-v 3 bands of CF3 Br. Molecular Physics, 1989, 68, 333-340.	1.7	3
78	High-resolution infrared spectrum and analysis of the Î½2 band of CF3Cl. Journal of Molecular Spectroscopy, 1988, 130, 337-343.	1.2	11
79	High-resolution spectroscopy of CF2Cl2 in a molecular jet. Applied Physics B, Photophysics and Laser Chemistry, 1988, 45, 27-31.	1.5	14
80	Shape and width of IR absorption lines of ammonia expanded in a supersonic jet. Applied Physics B, Photophysics and Laser Chemistry, 1988, 47, 277-282.	1.5	12
81	High Resolution Spectroscopy of CF3Br by Diode Laser in the Frequency Range 1070â€"1090 cmâ^'1. Laser Chemistry, 1988, 8, 61-78.	0.5	7
82	Induction effects on IR-predissociation spectra of (SF6)2, (SiF4)2 and (SiH4)2. Chemical Physics Letters, 1987, 140, 543-547.	2.6	36
83	IR dissociation of ammonia clusters. Chemical Physics, 1987, 115, 79-91.	1.9	49
84	Van der waals modes and rotational fine structure in C2H4 dimers. Chemical Physics Letters, 1986, 124, 1-7.	2.6	41
85	IR dissociation of dimers of high symmetry molecules: SF6, SiF4 and SiH4. Chemical Physics, 1986, 109, 67-83.	1.9	25
86	Orientational hole burning for dimers in the limit of large rotational quantum numbers. Chemical Physics, 1985, 94, 1-6.	1.9	7
87	Multiple-photon excitation spectra of SiH4 measured in the 10 Î¼m range by a continuously tunable CO2 laser. Chemical Physics Letters, 1985, 122, 480-488.	2.6	23
88	Infrared predissociation of SiF4 and CF3Br clusters in a molecular-beam experiment. Chemical Physics Letters, 1984, 106, 377-381.	2.6	21