Shanshan Yu

List of Publications by Year
in descending order

72	4,835	218381	102304
papers	citations	26 h-index	66 g-index

73	73	73	4845
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The HITRAN2016 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 3-69.	1.1	2,840
2	The 2015 edition of the GEISA spectroscopic database. Journal of Molecular Spectroscopy, 2016, 327, 31-72.	0.4	311
3	HERSCHELOBSERVATIONS OF EXTRAORDINARY SOURCES: ANALYSIS OF THE HIFI 1.2 THz WIDE SPECTRAL SURVEY TOWARD ORION KL. I. METHODS. Astrophysical Journal, 2014, 787, 112.	1.6	106
4	Broadband rotational spectroscopy of acrylonitrile: Vibrational energies from perturbations. Journal of Molecular Spectroscopy, 2012, 280, 134-144.	0.4	91
5	OCO-3 early mission operations and initial (vEarly) XCO2 and SIF retrievals. Remote Sensing of Environment, 2020, 251, 112032.	4.6	89
6	HERSCHELOBSERVATIONS OF EXTRAORDINARY SOURCES: ANALYSIS OF THE FULLHERSCHEL/HIFI MOLECULAR LINE SURVEY OF SAGITTARIUS B2(N). Astrophysical Journal, 2014, 789, 8.	1.6	82
7	Demonstration of a room temperature 2.48â€“2.75 THz coherent spectroscopy source. Review of Scientific Instruments, 2011, 82, 093105.	0.6	75
8	Multispectrum analysis of the oxygen A-band. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 186, 118-138.	1.1	67
9	Line parameters including temperature dependences of self- and air-broadened line shapes of 12C16O2: 1.6-Î¼m region. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 177, 117-144.	1.1	52
10	Submillimeter-wave and far-infrared spectroscopy of high-J transitions of the ground and Î½2=1 states of ammonia. Journal of Chemical Physics, 2010, 133, 174317.	1.2	49
11	Gaseous HgH2, CdH2, and ZnH2. Chemistry - A European Journal, 2005, 11, 4709-4712.	1.7	47
12	High-resolution tropospheric carbon monoxide profiles retrieved from CrIS and TROPOMI. Atmospheric Measurement Techniques, 2016, 9, 2567-2579.	1.2	46
13	Terahertz spectroscopy for space applications: 2.5â€“2.7THz spectra of HD, H2O and NH3. Journal of Molecular Structure, 2011, 1006, 2-12.	1.8	43
14	Line parameters including temperature dependences of air- and self-broadened line shapes of 12C16O2: 2.06-Î¼m region. Journal of Molecular Spectroscopy, 2016, 326, 21-47.	0.4	42
15	Direct retrieval of isoprene from satellite-based infrared measurements. Nature Communications, 2019, 10, 3811.	5.8	42
16	High resolution spectral analysis of oxygen. I. Isotopically invariant Dunham fit for the $X^3 {m Sigma }_g^ -$X3Î£gâ^', a1Î”g, $b^1 {m Sigma }_g^ +$b1Î£g+ states. Journal of Chemical Physics, 2012, 137, 024304.	1.2	41
17	The ground state torsion rotation spectrum of CH2DOH. Journal of Molecular Spectroscopy, 2012, 280, 119-133.	0.4	38
18	Self- and air-broadened line shapes in the 2Î½3 P and R branches of 12CH4. Journal of Molecular Spectroscopy, 2015, 315, 114-136.	0.4	37

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19	The rotational spectrum of acrylonitrile up to 1.67THz. Journal of Molecular Spectroscopy, 2009, 258, 26-34.	0.4	36
20	Submillimeter measurements of the Criegee intermediate CH2OO, in the gas phase. Journal of Molecular Spectroscopy, 2014, 297, 16-20.	0.4	33
21	Measurement and analysis of new terahertz and far-infrared spectra of high temperature water. Journal of Molecular Spectroscopy, 2012, 279, 16-25.	0.4	32
22	High accuracy absorption coefficients for the Orbiting Carbon Observatory-2 (OCO-2) mission: Validation of updated carbon dioxide cross-sections using atmospheric spectra. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 213-223.	1.1	32
23	High resolution spectral analysis of oxygen. IV. Energy levels, partition sums, band constants, RKR potentials, Franck-Condon factors involving the $X^{3}Sigma ^{-}_{g}$X3Î£gâ^', a1Î”g and $b^{1}Sigma ^{+}_{g}$b1Î£g+ states. Journal of Chemical Physics, 2014, 141, 174302.	1.2	30
24	NEW GROUND-STATE MEASUREMENTS OF ETHYL CYANIDE. Astrophysical Journal, Supplement Series, 2009, 184, 133-137.	3.0	29
25	Infrared Emission Spectra and Equilibrium Structures of Gaseous HgH2 and HgD2. Journal of Physical Chemistry A, 2005, 109, 10280-10286.	1.1	27
26	Terahertz spectroscopy of oxygen, O2, in its 3Î£â^'g and 1Î” electronic states. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 1167-1173.	1.1	27
27	Spectral line parameters including line shapes in the 2Î½3 Q branch of 12CH4. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 177, 152-169.	1.1	25
28	TERAHERTZ SPECTROSCOPY AND GLOBAL ANALYSIS OF H ₃ O ⁺. Astrophysical Journal, Supplement Series, 2009, 180, 119-124.	3.0	24
29	WIDESPREAD ROTATIONALLY HOT HYDRONIUM ION IN THE GALACTIC INTERSTELLAR MEDIUM. Astrophysical Journal, 2014, 785, 135.	1.6	22
30	TERAHERTZ SPECTROSCOPY OF THE BENDING VIBRATIONS OF ACETYLENE¹²C₂H₂. Astrophysical Journal, 2009, 705, 786-790.	1.6	20
31	Empirical rovibrational energy levels of ammonia up to 7500â€¯cm<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.svg"><mml:msup><mml:mrow /><mml:mrow><mml:mo>â^'</mml:mo><mml:mn>1</mml:mn></mml:mrow></mml:msup></mml:math>. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 251, 107027.	1.1	20
32	Microwave spectroscopy of methanol between 248 and 277 THz. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 2549.	0.9	19
33	O2 A-band line parameters to support atmospheric remote sensing. Part II: The rare isotopologues. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2527-2541.	1.1	19
34	The <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0010.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mi>a</mml:mi></mml:mrow><mml:mi mathvariant="normal">1</mml:mi></mml:msup><mml:msub><mml:mrow><mml:mi mathvariant="normal">Î”</mml:mi></mml:mrow><mml:mrow><mml:mi>g</mml:mi></mml:mrow></mml:msub><mml:mo>â^'</mml:mo><mml:mi mathvariant="normal">3</mml:mi></mml:msup><mml:msubsup><mml:mrow><mml:mi>Î£</mml:mi></mml:mrow><mml:mrow><mml:mi>g</mml:mi></mml:mrow><mml:mrow><mml:mi	1.1	17
35	Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1257-1265. Far-infrared 14NH3 line positions and intensities measured with a FT-IR and AILES beamline, Synchrotron SOLEIL. Journal of Molecular Spectroscopy, 2016, 327, 1-20.	0.4	16
36	Validation of ozone intensities at 10â€Âµm with THz spectrometry. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 282-292.	1.1	16

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37	High resolution spectral analysis of oxygen. II. Rotational spectra of a1Î”gâ€‰ O2 isotopologues. Journal of Chemical Physics, 2012, 137, 024305.	1.2	15
38	Characterization and Use of a 1.3â€“1.5 THz Multiplier Chain for Molecular Spectroscopy. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 314-321.	2.0	15
39	Opticalâ€“optical double resonance spectroscopy of the transition of CaOH. Journal of Molecular Spectroscopy, 2006, 240, 238-243.	0.4	14
40	High resolution spectral analysis of oxygen. III. Laboratory investigation of the airglow bands. Journal of Chemical Physics, 2013, 139, 144301.	1.2	14
41	Modeling the spectrum of the 2Î½2 and Î½4 states of ammonia to experimental accuracy. Journal of Chemical Physics, 2016, 145, 124301.	1.2	14
42	Submillimeter-wave spectroscopy of DCO+ in the excited vibrational states: Does the Stark effect cause anomalies in the (0220) state?. Journal of Chemical Physics, 2007, 127, 074301.	1.2	13
43	Laser spectroscopy of the and transitions of SrOD. Journal of Molecular Spectroscopy, 2006, 240, 26-31.	0.4	11
44	Infrared emission spectroscopy of the A4Î¦â€“X4Î”i and B4Îiâ€“X4Î”i transitions of CoS. Journal of Molecular Spectroscopy, 2006, 236, 255-259.	0.4	11
45	Submillimeter-wave spectroscopy of HCO+ in the excited vibrational states. Journal of Molecular Spectroscopy, 2008, 248, 26-40.	0.4	11
46	The vibration-rotation emission spectra of gaseous CdH2 and CdD2. Journal of Chemical Physics, 2005, 122, 194301.	1.2	10
47	The vibration-rotation emission spectrum of hot BeF2. Journal of Chemical Physics, 2005, 123, 134303.	1.2	10
48	Fourier transform infrared emission spectroscopy of new systems of NiS. Journal of Molecular Spectroscopy, 2009, 258, 20-25.	0.4	10
49	High resolution spectroscopy of and. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 2077-2081.	1.1	10
50	Infrared and near infrared emission spectra of SbH and SbD. Journal of Molecular Spectroscopy, 2005, 229, 257-265.	0.4	9
51	Fourier transform emission spectroscopy of the C3Î”â€“X3Î¦, D3Î”â€“X3Î¦, G3Î¦â€“X3Î¦ and G3Î¦â€“C3Î” systems of CoCl. Journal of Molecular Spectroscopy, 2007, 243, 69-77.	0.4	9
52	Terahertz spectroscopy of water in its second triad. Journal of Molecular Spectroscopy, 2013, 288, 7-10.	0.4	9
53	Vicarious Calibration of Orbiting Carbon Observatory-2. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 5135-5145.	2.7	9
54	Hyperfine structure of the transitions of 16O17O, 17O18O and 17O2 by CRDS at 80K. Chemical Physics Letters, 2011, 502, 37-41.	1.2	8

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55	Rotational and Rotational-Vibrational Raman Spectroscopy of Air to Characterize Astronomical Spectrographs. Physical Review Letters, 2019, 123, 061101.	2.9	8
56	Infrared and near infrared emission spectra of TeH and TeD. Journal of Molecular Spectroscopy, 2005, 230, 105-116.	0.4	7
57	The Vibrationâ^'Rotation Emission Spectrum of Gaseous HZnCl. Journal of Physical Chemistry A, 2005, 109, 4092-4094.	1.1	7
58	Rotational spectroscopy of vibrationally excited N2H+ and N2D+ up to 2.7THz. Journal of Molecular Spectroscopy, 2015, 314, 19-25.	0.4	7
59	FTS measurements of O2 collision-induced absorption in the 565â€“700â€¯nm region using a high pressure gas absorption cell. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 235, 232-243.	1.1	7
60	Instrumentation for THz Spectroscopy inÂtheÂLaboratory and in Space. IEEE Journal of Microwaves, 2021, 1, 43-54.	4.9	7
61	Further spectroscopic investigations of the high energy electronic states of SrOH: The and the transitions. Journal of Molecular Spectroscopy, 2007, 245, 26-33.	0.4	6
62	Acetylene spectra near 2.6THz. Journal of Molecular Spectroscopy, 2011, 269, 254-256.	0.4	6
63	Extended measurements and an experimental accuracy effective Hamiltonian model for the 3Î½2 and Î½4+Î½2 states of ammonia. Journal of Molecular Spectroscopy, 2018, 353, 60-66.	0.4	6
64	Analysis of the rotational spectrum of the ground and first torsional excited states of monodeuterated ethane, CH 3 CH 2 D. Journal of Molecular Spectroscopy, 2015, 307, 27-32.	0.4	5
65	THz spectroscopy of <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>12</mml:mn></mml:mrow></mml:msup></mml:mrow></mml:math>CH+, 13CH+, and <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>12</mml:mn></mml:mrow></mml:msup></mml:mrow></mml:math>CD+: A	0.4	5
66	TERAHERTZ SPECTROSCOPY AND GLOBAL ANALYSIS OF THE BENDING VIBRATIONS OF ACETYLENE¹²C₂D₂. Astrophysical Journal, 2009, 698, 2114-2120.	1.6	4
67	TERAHERTZ MEASUREMENTS OF THE HOT HYDRONIUM ION WITH AN EXTENDED NEGATIVE GLOW DISCHARGE. Astrophysical Journal, 2014, 786, 133.	1.6	4
68	Terahertz spectroscopy of ground state HD18O. Journal of Molecular Spectroscopy, 2016, 328, 27-31.	0.4	4
69	Stability Assessment of OCO-2 Radiometric Calibration Using Aqua MODIS as a Reference. Remote Sensing, 2020, 12, 1269.	1.8	4
70	THz spectroscopy of D2H+. Journal of Molecular Spectroscopy, 2017, 331, 6-8.	0.4	3
71	OCO-2 Calibration Refinement Across Versions and Plans for OCO-3. , 2020, , .		1
72	Potentiology and spectroscopy in honor of Robert Le Roy: A preface to the special issue. Journal of Molecular Spectroscopy, 2016, 330, 1-3.	0.4	0