An-Wen Liu

List of Publications by Year
in descending order

50 papers	1,112 citations	516710 16 h-index	414414 32 g-index
51 all docs	51 docs citations	51 times ranked	636 citing authors

#	Article	IF	Citations
1	The 2015 edition of the GEISA spectroscopic database. Journal of Molecular Spectroscopy, 2016, 327, 31-72.	1.2	311
2	Toward a Determination of the Proton-Electron Mass Ratio from the Lamb-Dip Measurement of HD. Physical Review Letters, 2018, 120, 153001.	7.8	67
3	Electric-quadrupole transition of H<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>determined to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo>â^'</mml:mo><mml:mn>9</mml:mn></mml:mrow></mml:math>	2.5	58
4	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:mi>b</mml:mi><mml:mspace width="0.28em" /><mml:mspace width="0.28em" /><mml:mi>i</mml:mi><mml:mi>n</mml:mi><mml:mi>i</mml:mi><mml:mi>t</mml:mi><mml:mi>i</mml:mi><mml:mi>o</mml:mi></mml:mrow></mml:math> of the spectral shapes of CO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>isolated lin	2.5	56
5	Absorption spectrum of deuterated water vapor enriched by 18O between 6000 and 9200cmâ^'1. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 653-669.	2.3	43
6	THEv= 3 â†•0S(0)-S(3) ELECTRIC QUADRUPOLE TRANSITIONS OF H₂NEAR 0.8 Î¼m. Astrophysical Journal, 2012, 749, 76.	4.5	38
7	Cavity ring-down spectroscopy of the electric quadrupole transitions of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si25.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">H</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> in the 784â€“852 nm region. Journal of Molecular Spectroscopy, 2014, 300, 60-64.	1.2	32
8	Cavity ring-down spectroscopy of Doppler-broadened absorption line with sub-MHz absolute frequency accuracy. Optics Express, 2012, 20, 9956.	3.4	28
9	Communication: Molecular near-infrared transitions determined with sub-kHz accuracy. Journal of Chemical Physics, 2017, 147, 091103.	3.0	28
10	Comb-locked cavity ring-down saturation spectroscopy. Review of Scientific Instruments, 2017, 88, 043108.	1.3	27
11	Ultrasensitive near-infrared cavity ring-down spectrometer for precise line profile measurement. Review of Scientific Instruments, 2010, 81, 043105.	1.3	26
12	H2 -He collisions: Ab initio theory meets cavity-enhanced spectra. Physical Review A, 2020, 101, .	2.5	24
13	Fourier-transform spectroscopy of 14N15N16O in the 3800â€“9000cmâ^'1 region and global modeling of its absorption spectrum. Journal of Molecular Spectroscopy, 2008, 248, 41-60.	1.2	20
14	Global fittings of 14N15N16O and 15N14N16O vibrationalâ€“rotational line positions using the effective Hamiltonian approach. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 1089-1105.	2.3	20
15	CW-Cavity Ring Down Spectroscopy of deuterated water in the 1.58Î¼m atmospheric transparency window. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 138, 97-106.	2.3	19
16	High-resolution spectroscopy of the triple-substituted isotopologue of water molecule D_{f 2}^{f 18}O: the first triad. Molecular Physics, 2008, 106, 1793-1801.	1.7	17
17	Opticalâ€“Optical Double-Resonance Absorption Spectroscopy of Molecules with Kilohertz Accuracy. Journal of Physical Chemistry Letters, 2020, 11, 7843-7848.	4.6	17
18	A well-isolated vibrational state of CO₂verified by near-infrared saturated spectroscopy with kHz accuracy. Physical Chemistry Chemical Physics, 2020, 22, 2841-2848.	2.8	16

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19	Fourier-transform spectroscopy of 15N14N16O in the 3500â€“9000cmâ¯1 region. Journal of Molecular Spectroscopy, 2009, 255, 24-31.	1.2	15
20	Line intensities of the 30011e â€“ 00001e band of 12C16O2by laser-locked cavity ring-down spectroscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 207, 1-7.	2.3	15
21	High sensitivity cavity ring down spectroscopy of CO2 overtone bands near 790nm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 761-768.	2.3	14
22	Frequency metrology of the acetylene lines near 789Ânm from lamb-dip measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 210, 111-115.	2.3	14
23	Absolute frequencies of water lines near 790 nm with 10â¯11 accuracy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 205, 91-95.	2.3	14
24	Cavity ring-down spectroscopy of the bands of 15N substituted N2O. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2370-2381.	2.3	13
25	Cavity ring-down spectroscopy of the fifth overtone of CO. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 187, 274-279.	2.3	13
26	LINE PARAMETERS OF THE 782 nm BAND OF CO₂. Astrophysical Journal, 2013, 775, 71.	4.5	12
27	High sensitivity cavity ring down spectroscopy of 13C16O2 overtone bands near 806nm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 2197-2204.	2.3	11
28	Cavity ring-down spectroscopy of 15N enriched N2O near 1.56â€Âµm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 232, 1-9.	2.3	11
29	Cavity ring down spectroscopy of 18O and 17O enriched carbon dioxide near 795nm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 114, 42-44.	2.3	10
30	Cavity ring-down spectroscopy of CO2 overtone bands near 830 nm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 165, 22-27.	2.3	10
31	Cavity-enhanced saturation spectroscopy of molecules with sub-kHz accuracy. Chinese Journal of Chemical Physics, 2019, 32, 107-112.	1.3	10
32	Fourier transform absorption spectrum of in 7360â€“8440cmâ¯1 spectral region. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2197-2210.	2.3	9
33	Quantitative Moisture Measurement with a Cavity Ring-down Spectrometer using Telecom Diode Lasers. Chinese Journal of Chemical Physics, 2015, 28, 6-10.	1.3	9
34	CRDS absorption spectrum of 17O enriched water vapor in the 12,277â€“12,894Âcmâ¯1 range. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 221, 233-242.	2.3	9
35	The 4Î½CH overtone of 12C2H2: Sub-MHz precision spectrum reveals perturbations. Journal of Chemical Physics, 2013, 138, 014312.	3.0	8
36	Saturated absorption spectroscopy near 1.57 Î¼m and revised rotational line list of 12C16O. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 270, 107717.	2.3	8

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37	Cavity-enhanced saturated absorption spectroscopy of the (30012) â^' (00001) band of 12C16O2. Journal of Chemical Physics, 2022, 156, 044201.	3.0	8
38	High-resolution infrared spectroscopy of in the 3500â€“9000cmâ^'1 region. Journal of Molecular Spectroscopy, 2010, 259, 20-25.	1.2	7
39	H2O line positions in the 784â€“795nm region with 10â^'9 accuracy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 118, 96-101.	2.3	7
40	Field Measurement of NO2 and RNO2 by Two-Channel Thermal Dissociation Cavity Ring Down Spectrometer. Chinese Journal of Chemical Physics, 2017, 30, 493-498.	1.3	6
41	Global modeling of the 15N216O line positions within the framework of the polyad model of effective Hamiltonian and a room temperature 15N216O line list. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 175, 1-7.	2.3	5
42	Cavity ring-down spectroscopy of 17O-enriched water vapor between 12,055 and 12,260â€¯cmâ^'1. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 239, 106651.	2.3	4
43	High-resolution Infrared Spectroscopy of 15N216O in 1650â€“3450 cmâ^'1. Chinese Journal of Chemical Physics, 2011, 24, 611-619.	1.3	3
44	Water line positions in the 782â€“840nm region. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 164, 37-44.	2.3	3
45	Comb-locked cavity-assisted double-resonance molecular spectroscopy based on diode lasers. Review of Scientific Instruments, 2021, 92, 073003.	1.3	3
46	C2H2 Overtones Near 12300 cm1 Revisited with a Very Sensitive Cavity Ring-down Spectrometer. Chinese Journal of Chemical Physics, 2009, 22, 663-667.	1.3	2
47	Broad-Range Detection of Water Vapor using Cavity Ring-down Spectrometer. Chinese Journal of Chemical Physics, 2015, 28, 440-444.	1.3	2
48	High Precision Cavity Ring Down Spectroscopy of 6Î½₃ Overtone Band of ¹⁴N₂¹⁶O near 775 nm. Chinese Journal of Chemical Physics, 2017, 30, 487-492.	1.3	2
49	Cavity ring-down spectroscopy measurements of ambient NO3 and N2O5. Chinese Journal of Chemical Physics, 2020, 33, 1-7.	1.3	2
50	SiH2Cl2: Ab initio anharmonic force field, dipole moments, and infrared vibrational transitions. Journal of Chemical Physics, 2005, 123, 174305.	3.0	1