David A Long

List of Publications by Year
in descending order

43 papers	4,504 citations	361413 20 h-index	414414 32 g-index
43 all docs	43 docs citations	43 times ranked	4051 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	The effects of advanced spectral line shapes on atmospheric carbon dioxide retrievals. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 291, 108324.	2.3	1
3	Broadband thermomechanically limited sensing with an optomechanical accelerometer. Optica, 2021, 8, 350.	9.3	46
4	Near-infrared cavity ring-down spectroscopy measurements of nitrous oxide in the (4200)â†(0000) and (5000)â†(0000) bands. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 262, 107527.	2.3	12
5	Air-broadening in near-infrared carbon dioxide line shapes: Quantifying contributions from O2, N2, and Ar. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 270, 107669.	2.3	4
6	High accuracy spectroscopic parameters of the 1.27 Âµm band of O2 measured with comb-referenced, cavity ring-down spectroscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 270, 107684.	2.3	9
7	Molecular transition frequencies of CO2 near 1.6 Âµm with kHz-level uncertainties. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 271, 107681.	2.3	15
8	Improvement of the spectroscopic parameters of the air- and self-broadened N<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si3.svg"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>O and CO lines for the HITRAN2020 database applications. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 271, 107735.	2.3	13
9	Accurate accelerometry using cavity optomechanics and electro-optic frequency combs. , 2021, , .		0
10	Absorption coefficient (ABSCO) tables for the Orbiting Carbon Observatories: Version 5.1. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 255, 107217.	2.3	24
11	Highâ€Accuracy Nearâ€Infrared Carbon Dioxide Intensity Measurements to Support Remote Sensing. Geophysical Research Letters, 2020, 47, e2019GL086344.	4.0	23
12	Twenty-Five-Fold Reduction in Measurement Uncertainty for a Molecular Line Intensity. Physical Review Letters, 2019, 123, 043001.	7.8	33
13	Using a speed-dependent Voigt line shape to retrieve O₂ from Total Carbon Column Observing Network solar spectra to improve measurements of XCO₂. Atmospheric Measurement Techniques, 2019, 12, 35-50.	3.1	20
14	Electro-optic frequency combs generated via direct digital synthesis applied to sub-Doppler spectroscopy. OSA Continuum, 2019, 2, 3576.	1.8	23
15	Simultaneous DIAL, IPDA and point sensor measurements of the greenhouse gases, CO2 and H2O. , 2019, , .		0
16	Electro-optic frequency combs generated via direct digital synthesis applied to sub-Doppler spectroscopy. OSA Continuum, 2019, 2, .	1.8	1
17	Quantitative modeling of complex molecular response in coherent cavity-enhanced dual-comb spectroscopy. Journal of Molecular Spectroscopy, 2018, 352, 26-35.	1.2	12
18	Accurate optical measurements of stable and radioactive carbon isotopologues of CO2. , 2018, , .		0

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19	Reducing Uncertainties of Molecular Line Intensities Via Cavity Ring-Down Spectroscopy Measurements and Ab Initio Calculations. , 2018, , .		0
20	Optical Measurement of Radiocarbon below Unity Fraction Modern by Linear Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2017, 8, 4550-4556.	4.6	52
21	First-Generation Linear Absorption Spectrometer for the Optical Trace-Detection of Radiocarbon. , 2017, , .		0
22	Multiheterodyne Spectroscopy Using Multi-frequency Combs. , 2017, , .		1
23	Towards the Robust Trace Detection of Radiocarbon via Linear Absorption Spectroscopy. , 2017, , .		0
24	Broadband Cavity-Enhanced Precision Molecular Spectroscopy using Electro-optic Frequency Combs. , 2017, , .		0
25	Multiplexed sub-Doppler spectroscopy with an optical frequency comb. Physical Review A, 2016, 94, .	2.5	53
26	Coherent cavity-enhanced dual-comb spectroscopy. Optics Express, 2016, 24, 10424.	3.4	84
27	Precision interferometric measurements of mirror birefringence in high-finesse optical resonators. Physical Review A, 2016, 93, .	2.5	27
28	Precision Doppler-broadened and Sub-Doppler Absorption Spectroscopy using Optical Frequency Comb Generators. , 2016, , .		0
29	Frequency-agile, rapid scanning cavity ring-down spectroscopy (FARS-CRDS) measurements of the (30012)â†(00001) near-infrared carbon dioxide band. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 161, 35-40.	2.3	39
30	Low Power Integrated Path Differential Absorption Lidar Detection of CO2, CH4 and H2O over a 5.5 km Path using a Waveform Driven EO Sideband Spectrometer. , 2015, , .		0
31	Frequency-agile, rapid scanning spectroscopy: absorption sensitivity of 2ÂÃ—Â10â^'12Âcmâ^'1ÂHzâ^'1/2 with a tunable diode laser. Applied Physics B: Lasers and Optics, 2014, 114, 489-495.	2.2	43
32	Quantum-noise-limited cavity ring-down spectroscopy. Applied Physics B: Lasers and Optics, 2014, 115, 149-153.	2.2	31
33	Observations of Dicke narrowing and speed dependence in air-broadened CO2 lineshapes near 2.06ÂÎ¼m. Journal of Chemical Physics, 2014, 141, 174301.	3.0	40
34	Frequency-Stabilized Cavity Ring-Down Spectroscopy in the Mid-Infrared. , 2014, , .		0
35	The HITRAN2012 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 130, 4-50.	2.3	2,810
36	Absolute 12C16O2 transition frequencies at the kHz-level from 1.6 to 7.8 Âµm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 130, 112-115.	2.3	32

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37	Rapid scan absorption spectroscopy using a waveform-driven electro-optic phase modulator in the 16â€“165ÂÎ¼m region. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 2696.	2.1	9
38	Frequency-stabilized cavity ring-down spectroscopy. Chemical Physics Letters, 2012, 536, 1-8.	2.6	72
39	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.	2.3	19
40	The air-broadened, near-infrared CO2 line shape in the spectrally isolated regime: Evidence of simultaneous Dicke narrowing and speed dependence. Journal of Chemical Physics, 2011, 135, 064308.	3.0	67
41	O2 A-band line parameters to support atmospheric remote sensing. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2021-2036.	2.3	69
42	Ultra-sensitive optical measurements of high-J transitions in the O2 A-band. Chemical Physics Letters, 2009, 483, 49-54.	2.6	25
43	Experimental Line Parameters of the b¹Î£_g⁺ â† X³Î£_g^â Band of Oxygen Isotopologues at 760 nm Using Frequency-Stabilized Cavity Ring-Down Spectroscopy. Journal of Physical Chemistry A, 2009, 113, 13089-13099.	2.5	25