

Christopher L Strand

List of Publications by Year in descending order

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Version: 2024-02-01

23
papers

640
citations

840776

11
h-index

677142

22
g-index

24
all docs

24
docs citations

24
times ranked

512
citing authors

#	ARTICLE	IF	CITATIONS
1	Collisional broadening and pressure shift of the potassium resonance doublets by nitrogen, helium, and hydrogen at high temperatures. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2022, 283, 108149.	2.3	3
2	Time-resolved, single-ended laser absorption thermometry and H ₂ O, CO ₂ , and CO speciation in a H ₂ /C ₂ H ₄ -fueled rotating detonation engine. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 1719-1727.	3.9	13
3	Thermometry and speciation for high-temperature and -pressure methane pyrolysis using shock tubes and dual-comb spectroscopy. <i>Measurement Science and Technology</i> , 2021, 32, 125502.	2.6	8
4	Shock tube measurements of high-temperature argon broadening and shift parameters for the potassium D1 and D2 resonance transitions. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2021, 275, 107895.	2.3	4
5	Line mixing in the nitric oxide R-branch near 5.2 μ m. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2021, 276, 107935.	2.3	5
6	Analysis of laser absorption gas sensors employing scanned-wavelength modulation spectroscopy with 1f-phase detection. <i>Applied Physics B: Lasers and Optics</i> , 2020, 126, 1.	2.2	18
7	Temperature-dependent absorption cross section measurements for propene, 1-butene, cis-/trans-2-butene, isobutene and 1,3-butadiene in the spectral region 8.4–11.7 μ m. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020, 255, 107240.	2.3	10
8	Two-color frequency-multiplexed IMS technique for gas thermometry at elevated pressures. <i>Applied Physics B: Lasers and Optics</i> , 2020, 126, 1.	2.2	9
9	Dual-comb spectroscopy for high-temperature reaction kinetics. <i>Measurement Science and Technology</i> , 2020, 31, 055501.	2.6	43
10	Two-temperature Collisional-radiative Modeling of Partially Ionized O ₂ -Ar Mixtures over 8000–10,000 K Behind Reflected Shock Waves. <i>Journal of Physical Chemistry A</i> , 2020, 124, 3687-3697.	2.5	6
11	Single-ended mid-infrared laser-absorption sensor for time-resolved measurements of water concentration and temperature within the annulus of a rotating detonation engine. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 1435-1443.	3.9	44
12	Single-Ended Sensor for Thermometry and Speciation in Shock Tubes Using Native Surfaces. <i>IEEE Sensors Journal</i> , 2019, 19, 4954-4961.	4.7	4
13	R-branch line intensities and temperature-dependent line broadening and shift coefficients of the nitric oxide fundamental rovibrational band. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019, 239, 106612.	2.3	21
14	High-pressure, high-temperature optical cell for mid-infrared spectroscopy. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019, 231, 69-78.	2.3	11
15	A two-wavelength ethylene-absorption temperature diagnostic. <i>Measurement Science and Technology</i> , 2019, 30, 035206.	2.6	3
16	TDLAS Measurements of the Underexpanded Exhaust Plume from a Solid Propellant Gas Generator. , 2019, , .		2
17	SpectraPlot.com: Integrated spectroscopic modeling of atomic and molecular gases. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 200, 249-257.	2.3	101
18	Mid-infrared laser absorption spectroscopy of NO ₂ at elevated temperatures. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 187, 364-374.	2.3	19

#	ARTICLE	IF	CITATIONS
19	Line intensities and temperature-dependent line broadening coefficients of Q-branch transitions in the ν_2 band of ammonia near $10.4\bar{1}\frac{1}{4}\mu\text{m}$. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016, 175, 90-99.	2.3	33
20	Quantification of Supersonic Impulse Flow Conditions via High-Bandwidth Wavelength Modulation Absorption Spectroscopy. <i>AIAA Journal</i> , 2015, 53, 2978-2987.	2.6	24
21	Hypersonic Scramjet Testing via Diode Laser Absorption in a Reflected Shock Tunnel. <i>Journal of Propulsion and Power</i> , 2014, 30, 1586-1594.	2.2	14
22	Fitting of calibration-free scanned-wavelength-modulation spectroscopy spectra for determination of gas properties and absorption lineshapes. <i>Applied Optics</i> , 2014, 53, 356.	1.8	189
23	Supersonic Mass-Flux Measurements via Tunable Diode Laser Absorption and Nonuniform Flow Modeling. <i>AIAA Journal</i> , 2011, 49, 2783-2791.	2.6	56