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List of Publications by Year
in descending order

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24 papers	1,157 citations	623734 14 h-index	677142 22 g-index
24 all docs	24 docs citations	24 times ranked	589 citing authors

#	Article	IF	Citations
1	Infrared laser-absorption sensing for combustion gases. Progress in Energy and Combustion Science, 2017, 60, 132-176.	31.2	471
2	Spectroscopy and Optical Diagnostics for Gases. , 2016, , .		196
3	MHz laser absorption spectroscopy via diplexed RF modulation for pressure, temperature, and species in rotating detonation rocket flows. Applied Physics B: Lasers and Optics, 2020, 126, 1.	2.2	59
4	Tomographic laser absorption imaging of combustion species and temperature in the mid-wave infrared. Optics Express, 2018, 26, 20944.	3.4	56
5	Mid-infrared laser absorption tomography for quantitative 2D thermochemistry measurements in premixed jet flames. Applied Physics B: Lasers and Optics, 2018, 124, 1.	2.2	51
6	Single-ended mid-infrared laser-absorption sensor for time-resolved measurements of water concentration and temperature within the annulus of a rotating detonation engine. Proceedings of the Combustion Institute, 2019, 37, 1435-1443.	3.9	44
7	Infrared laser absorption sensors for multiple performance parameters in a detonation combustor. Proceedings of the Combustion Institute, 2015, 35, 3739-3747.	3.9	43
8	Wavelength modulation spectroscopy near 5Â$$upmu$$m for carbon monoxide sensing in a high-pressure kerosene-fueled liquid rocket combustor. Applied Physics B: Lasers and Optics, 2018, 124, 1.	2.2	30
9	Line mixing and broadening in the ν(1â†'3) first overtone bandhead of carbon monoxide at high temperatures and high pressures. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 239, 106636.	2.3	30
10	Volumetric laser absorption imaging of temperature, CO and CO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.svg"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math> in laminar flames using 3D masked Tikhonov regularization. Combustion and Flame, 2021, 224, 239-247.	5.2	25
11	Line mixing and broadening of carbon dioxide by argon in the ν3 bandhead near 4.2ÂÂμm at high temperatures and high pressures. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 253, 107135.	2.3	22
12	Methane-oxygen rotating detonation exhaust thermodynamics with variable mixing, equivalence ratio, and mass flux. Aerospace Science and Technology, 2021, 113, 106683.	4.8	22
13	Solarâ€"Thermal Production of Graphitic Carbon and Hydrogen via Methane Decomposition. Energy & Fuels, 2022, 36, 3920-3928.	5.1	17
14	Cross-band infrared laser absorption of carbon monoxide for thermometry and species sensing in high-pressure rocket flows. Applied Physics B: Lasers and Optics, 2019, 125, 1.	2.2	16
15	In-situ thermochemical analysis of hybrid rocket fuel oxidation via laser absorption tomography of $$ext {CO}$$, $$ext {CO}_{2}$$, and $$ext {H}_{2}ext {O}$$. Experiments in Fluids, 2020, 61, 1.	2.4	15
16	Exploiting line-mixing effects for laser absorption spectroscopy at extreme combustion pressures. Proceedings of the Combustion Institute, 2021, 38, 1685-1693.	3.9	11
17	Robust cepstral analysis at variable wavelength scan depth for narrowband tunable laser absorption spectroscopy. Measurement Science and Technology, 2021, 32, 045502.	2.6	11
18	Interband cascade laser absorption of hydrogen chloride for high-temperature thermochemical analysis of fire-resistant polymer reactivity. Applied Optics, 2020, 59, 2141.	1.8	10

#	Article	IF	Citations
19	Competitive oxidation of methane and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si23.svg"><mml:msub><mml:mtext>C</mml:mtext><mml:mn>2</mml:mn></mml:msub></mml:math> hydrocarbons discerned by isotopic labeling and laser absorption spectroscopy of CO isotopologues in shock-heated mixtures. Combustion and Flame, 2021, 224, 54-65.	5.2	7
20	Injector Effects on Hybrid Polymethylmethacrylate Combustion Assessed by Thermochemical Tomography. Journal of Propulsion and Power, 2021, 37, 928-943.	2.2	7
21	Localized characteristic velocity (c*) for rocket combustion analysis based on gas temperature and composition via laser absorption spectroscopy. Measurement Science and Technology, 2021, 32, 125203.	2.6	5
22	Hypergolic Continuous Detonation with Space-Storable Propellants and Additively Manufactured Injector Design. Journal of Spacecraft and Rockets, 2022, 59, 1332-1341.	1.9	5
23	Concentrated solar-thermal methane pyrolysis in a porous substrate: Yield analysis via infrared laser absorption. Proceedings of the Combustion Institute, 2023, 39, 5581-5589.	3.9	3
24	Swirl injection in hybrid polymethylmethacrylate combustion assessed by thermochemical imaging. , 2021, , .		1