Grant A D Ritchie

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7977432/publications.pdf

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42 papers

959 citations

16 h-index 30 g-index

42 all docs 42 docs citations

42 times ranked 1023 citing authors

| # | Article | IF | CITATIONS |
|----|--|---------------------|-----------------------|
| 1 | 4ÂÂCavity ring-down and cavity enhanced spectroscopy using diode lasers. Annual Reports on the Progress of Chemistry Section C, 2005, 101, 100. | 4.4 | 225 |
| 2 | Laser spectroscopy for breath analysis: towards clinical implementation. Applied Physics B: Lasers and Optics, 2018, 124, 161. | 2.2 | 124 |
| 3 | Comparison of breath gases, including acetone, with blood glucose and blood ketones in children and adolescents with type 1 diabetes. Journal of Breath Research, 2014, 8, 046010. | 3.0 | 53 |
| 4 | Optical feedback cavity enhanced absorption spectroscopy with diode lasers. Analyst, The, 2009, 134, 243-249. | 3.5 | 44 |
| 5 | Following interfacial kinetics in real time using broadband evanescent wave cavity-enhanced absorption spectroscopy: a comparison of light-emitting diodes and supercontinuum sources. Analyst, The, 2010, 135, 133-139. | 3.5 | 42 |
| 6 | In-airway molecular flow sensing: A new technology for continuous, noninvasive monitoring of oxygen consumption in critical care. Science Advances, 2016, 2, e1600560. | 10.3 | 38 |
| 7 | Potential for noninvasive assessment of lung inhomogeneity using highly precise, highly time-resolved measurements of gas exchange. Journal of Applied Physiology, 2018, 124, 615-631. | 2.5 | 30 |
| 8 | Vector correlations in the 355 nm photolysis of thermal NO2. Physical Chemistry Chemical Physics, 2000, 2, 661-664. | 2.8 | 28 |
| 9 | Cross sections in the 2ν5 band of formaldehyde studied by cavity enhanced absorption spectroscopy near 1.76 µm. Physical Chemistry Chemical Physics, 2002, 4, 445-450. | 2.8 | 27 |
| 10 | Measurements of molecular fragment alignment and orientation in the UV photodissociation of NO2 and O3. Physical Chemistry Chemical Physics, 2003, 5, 5386. | 2.8 | 27 |
| 11 | Measurements of pressure broadening coefficients of selected transitions in the $2\hat{l}\frac{1}{2}$ 5band of formaldehyde. Physical Chemistry Chemical Physics, 2003, 5, 3106-3112. | 2.8 | 27 |
| 12 | Detection of HO2in an atmospheric pressure plasma jet using optical feedback cavity-enhanced absorption spectroscopy. New Journal of Physics, 2016, 18, 113027. | 2.9 | 27 |
| 13 | RF noise induced laser perturbation for improving the performance of non-resonant cavity enhanced absorption spectroscopy. Optics Express, 2014, 22, 17030. | 3.4 | 26 |
| 14 | An intercomparison of HO ₂ measurements by fluorescence assay by gas expansion and cavity ring-down spectroscopy within HIRAC (Highly Instrumented Reactor) Tj ETQqC |) 03 0 1rgBT | /O ₂6 rlock 10 |
| 15 | HO2 reaction kinetics in an atmospheric pressure plasma jet determined by cavity ring-down spectroscopy. Plasma Sources Science and Technology, 2018, 27, 095013. | 3.1 | 22 |
| 16 | Optical-feedback cavity-enhanced absorption spectroscopy in a linear cavity: model and experiments. Applied Physics B: Lasers and Optics, 2015, 120, 329-339. | 2.2 | 21 |
| 17 | Enhancing the sensitivity of mid-IR quantum cascade laser-based cavity-enhanced absorption spectroscopy using RF current perturbation. Optics Letters, 2014, 39, 6811. | 3.3 | 19 |
| 18 | The correlation between breath acetone and blood betahydroxybutyrate in individuals with type 1 diabetes. Journal of Breath Research, 2021, 15, 017101. | 3.0 | 16 |

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| 19 | Intracavity Faraday modulation spectroscopy (INFAMOS): A tool for radical detection. Journal of Chemical Physics, 2017, 147, 054201. | 3.0 | 14 |
| 20 | Spectroscopy techniques and the measurement of molecular radical densities in atmospheric pressure plasmas. Plasma Sources Science and Technology, 2019, 28, 073002. | 3.1 | 13 |
| 21 | ICL-Based OF-CEAS: A Sensitive Tool for Analytical Chemistry. Analytical Chemistry, 2017, 89, 902-909. | 6.5 | 12 |
| 22 | Quantitative measurements of oxygen atom and negative ion densities in a low pressure oxygen plasma by cavity ringdown spectroscopy. Plasma Sources Science and Technology, 2020, 29, 045004. | 3.1 | 10 |
| 23 | The spatial distribution of HO2 in an atmospheric pressure plasma jet investigated by cavity ring-down spectroscopy. Plasma Sources Science and Technology, 2020, 29, 085011. | 3.1 | 10 |
| 24 | Cavity-Enhanced Near-Infrared Laser Absorption Spectrometer for the Measurement of Acetonitrile in Breath. Analytical Chemistry, 2015, 87, 6881-6889. | 6.5 | 9 |
| 25 | An FTIR emission study of the products of NO A $<$ sup $>$ 2 $<$ /sup $>$ 1 $£<$ sup $>+<$ /sup $>$ (v = 0, 1) + O $<$ sub $>$ 2 $<$ /sub $>$ collisions. Physical Chemistry Chemical Physics, 2017, 19, 11289-11298. | 2.8 | 9 |
| 26 | Coherent transient spectroscopy with continuous wave quantum cascade lasers. Physical Chemistry Chemical Physics, 2013, 15, 2684. | 2.8 | 8 |
| 27 | Measurement of breath acetone in patients referred for an oral glucose tolerance test. Journal of Breath Research, 2018, 12, 036015. | 3.0 | 7 |
| 28 | Sensitive detection of HO2 radicals produced in an atmospheric pressure plasma using Faraday rotation cavity ring-down spectroscopy. Journal of Chemical Physics, 2019, 151, 124202. | 3.0 | 7 |
| 29 | Continuous-Wave Cavity-Enhanced Polarimetry for Optical Rotation Measurement of Chiral Molecules. Analytical Chemistry, 2021, 93, 5403-5411. | 6.5 | 7 |
| 30 | Dynamics of the Reaction O(3P) + H2S → OH + SH. 1. Rotational, Î→ Doublet, and Fine Structure Distributions in the OH(v†Ââ€~ = 1) Product. Journal of Physical Chemistry A, 1999, 103, 10644-10650. | 2.5 | 5 |
| 31 | A dynamic model of the body gas stores for carbon dioxide, oxygen, and inert gases that incorporates circulatory transport delays to and from the lung. Journal of Applied Physiology, 2021, 130, 1383-1397. | 2.5 | 4 |
| 32 | Accurate real-time F _E NO expirograms using complementary optical sensors. Journal of Breath Research, 2020, 14, 047102. | 3.0 | 4 |
| 33 | Novel measure of lung function for assessing disease activity in asthma. BMJ Open Respiratory Research, 2020, 7, e000531. | 3.0 | 3 |
| 34 | The differing physiology of nitrogen and tracer gas multiple-breath washout techniques. ERJ Open Research, 2021, 7, 00858-2020. | 2.6 | 3 |
| 35 | Quantitative measurements of singlet molecular oxygen in a low pressure ICP. Plasma Sources Science and Technology, 2021, 30, 09LT02. | 3.1 | 3 |
| 36 | Determining Water Transport Kinetics in Limestone by Dual-Wavelength Cavity Ring-Down Spectroscopy. Analytical Chemistry, 2022, 94, 3126-3134. | 6. 5 | 3 |

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|----|--|-----|-----------|
| 37 | Development of in-airway laser absorption spectroscopy for respiratory based measurements of cardiac output. Scientific Reports, 2021, 11, 5252. | 3.3 | 2 |
| 38 | Pump and probe spectroscopy with continuous wave quantum cascade lasers. Journal of Chemical Physics, 2014, 140, 054311. | 3.0 | 1 |
| 39 | Optical saturation effects in intracavity Faraday modulation spectroscopy (INFAMOS). Journal of Chemical Physics, 2018, 149, 174202. | 3.0 | 1 |
| 40 | Time-resolved observations of vibrationally excited NO X $2\hat{l}$ ($v\hat{a}\in^2$) formed from collisional quenching of NO A $2\hat{l}$ £+ (v = 0) by NO X $2\hat{l}$: evidence for the participation of the NO a $4\hat{l}$ state. Physical Chemistry Chemical Physics, 2021, 23, 20478-20488. | 2.8 | 1 |
| 41 | Breath testing for intra-abdominal infection: appendicitis, a preliminary study. Journal of Breath Research, 2021, 15, 016002. | 3.0 | 1 |
| 42 | The Molecular Bronchoscope: A Tool for Measurement of Spatially Dependent CO2 Concentrations in the Lungs. Analytical Chemistry, 2016, 88, 8857-8861. | 6.5 | 0 |