

Abhijit Maity

List of Publications by Year in descending order

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37
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citing authors

#	ARTICLE	IF	CITATIONS
1	Halloysite Nanotubes Capturing Isotope Selective Atmospheric CO ₂ . Scientific Reports, 2015, 5, 8711.	3.3	70
2	Cavity ring-down spectroscopy using an EC-QCL operating at 7.5 μm for direct monitoring of methane isotopes in air. Laser Physics Letters, 2017, 14, 115701.	1.4	47
3	Cavity Ring-Down Spectroscopy: Recent Technological Advancements, Techniques, and Applications. Analytical Chemistry, 2021, 93, 388-416.	6.5	47
4	High-resolution spectral analysis of ammonia near 6.2 μm using a cw EC-QCL coupled with cavity ring-down spectroscopy. Analyst, The, 2018, 143, 2109-2114.	3.5	31
5	Continuous wave external-cavity quantum cascade laser-based high-resolution cavity ring-down spectrometer for ultrasensitive trace gas detection. Optics Letters, 2016, 41, 1949.	3.3	30
6	An EC-QCL based N ₂ O sensor at 5.2 μm using cavity ring-down spectroscopy for environmental applications. Analytical Methods, 2017, 9, 2315-2320.	2.7	28
7	Mechanisms linking metabolism of Helicobacter pylori to 18O and 13C-isotopes of human breath CO ₂ . Scientific Reports, 2015, 5, 10936.	3.3	23
8	Oxygen-18 isotope of breath CO ₂ linking to erythrocytes carbonic anhydrase activity: a biomarker for pre-diabetes and type 2 diabetes. Scientific Reports, 2015, 5, 8137.	3.3	23
9	Assessing Atmospheric CO ₂ Entrapped in Clay Nanotubes using Residual Gas Analyzer. Analytical Chemistry, 2016, 88, 2205-2211.	6.5	22
10	Oxygen-18 stable isotope of exhaled breath CO ₂ as a non-invasive marker of Helicobacter pylori infection. Journal of Analytical Atomic Spectrometry, 2014, 29, 2251-2255.	3.0	21
11	Residual gas analyzer mass spectrometry for human breath analysis: a new tool for the non-invasive diagnosis of Helicobacter pylori infection. Journal of Breath Research, 2014, 8, 016005.	3.0	20
12	Targeting erythrocyte carbonic anhydrase and 18O-isotope of breath CO ₂ for sorting out type 1 and type 2 diabetes. Scientific Reports, 2016, 6, 35836.	3.3	20
13	Exhaled nitric oxide as a potential marker for detecting non-ulcer dyspepsia and peptic ulcer disease. Journal of Breath Research, 2018, 12, 026005.	3.0	17
14	Excretion kinetics of 13C-urea breath test: influences of endogenous CO ₂ production and dose recovery on the diagnostic accuracy of Helicobacter pylori infection. Analytical and Bioanalytical Chemistry, 2014, 406, 5405-5412.	3.7	16
15	An external-cavity quantum cascade laser operating near 5.2 μm combined with cavity ring-down spectroscopy for multi-component chemical sensing. Laser Physics, 2018, 28, 045701.	1.2	15
16	Natural 18O and 13C-urea in gastric juice: a new route for non-invasive detection of ulcers. Analytical and Bioanalytical Chemistry, 2017, 409, 193-200.	3.7	14
17	High-resolution spectral analysis of hybrid A/B-type band of 1,3-butadiene at 6.2 μm using an EC-QCL coupled with cavity ring-down spectroscopy. Chemical Physics, 2019, 522, 123-128.	1.9	14
18	Simultaneous monitoring of ³² S, ³³ S and ³⁴ S isotopes of H ₂ S using cavity ring-down spectroscopy with a mid-infrared external-cavity quantum cascade laser. Journal of Analytical Atomic Spectrometry, 2019, 34, 860-866.	3.0	13

#	ARTICLE	IF	CITATIONS
19	A continuous-wave quantum cascade laser near 7.5 μm combined with 2-f-wavelength modulation spectroscopy for trace monitoring of ambient CH_4 concentrations. <i>Laser Physics</i> , 2018, 28, 105702.	1.2	12
20	Wavelength modulation spectroscopy coupled with an external-cavity quantum cascade laser operating between 7.5 and 8 μm . <i>Laser Physics Letters</i> , 2018, 15, 045701.	1.4	11
21	Diagnosis of small intestinal bacterial overgrowth in irritable bowel syndrome patients using high-precision stable $^{13}\text{CO}_2$ / $^{12}\text{CO}_2$ isotope ratios in exhaled breath. <i>Journal of Analytical Atomic Spectrometry</i> , 2014, 29, 1918-1924.	3.0	10
22	Isotope selective activation: a new insight into the catalytic activity of urease. <i>RSC Advances</i> , 2017, 7, 31372-31376.	3.6	9
23	Cavity ring-down spectroscopy measurements of ν_2 -type doubling of hot bands in $\hat{\nu}_2$ vibrational states of OCS near 5.2 μm . <i>Journal of Physics Communications</i> , 2018, 2, 045014.	1.2	8
24	Exploring Triple-Isotopic Signatures of Water in Human Exhaled Breath, Gastric Fluid, and Drinking Water Using Integrated Cavity Output Spectroscopy. <i>Analytical Chemistry</i> , 2020, 92, 5717-5723.	6.5	8
25	Exploring the physiological link of breath N_2/O through nitrification and denitrification processes in human gastric juice. <i>Journal of Breath Research</i> , 2019, 13, 016002.	3.0	7
26	Cavity ring-down spectroscopy: recent technological advances and applications. , 2020, , 83-120.		6
27	Gas-Phase Isotopic Fractionation Study of Singly and Doubly Deuterated Isotopologues of Water in the H_2D Exchange Reaction by Cavity Ring-Down Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2020, 124, 1104-1111.	2.5	6
28	Molecular hydrogen in human breath: a new strategy for selectively diagnosing peptic ulcer disease, non-ulcerous dyspepsia and <i>Helicobacter pylori</i> infection. <i>Journal of Breath Research</i> , 2016, 10, 036007.	3.0	4
29	Non-invasive diagnosis of type 2 diabetes in <i>Helicobacter pylori</i> infected patients using isotope-specific infrared absorption measurements. <i>Isotopes in Environmental and Health Studies</i> , 2018, 54, 435-445.	1.0	3
30	Isotopic evidences of the preferential coordination between $^{12}\text{CO}_2$ and urease enzyme. <i>Chemical Physics</i> , 2019, 520, 21-26.	1.9	3
31	Evidence of Isotope Selective Diffusion of Ambient CO_2 Gas in WO_3 Nanostructures. <i>Journal of Physical Chemistry C</i> , 2019, 123, 2573-2578.	3.1	3
32	High-resolution spectroscopic probing of ortho and para nuclear-spin isomers of heavy water in the gas phase. <i>Chemical Physics</i> , 2021, 541, 111041.	1.9	1
33	Cavity Ring-Down Spectroscopy. <i>Progress in Optical Science and Photonics</i> , 2021, , 287-305.	0.5	1
34	Quantum Cascade Laser Spectroscopy for Atmospheric Sensing and Biomedical Diagnostics. <i>Springer Proceedings in Physics</i> , 2019, , 67-82.	0.2	1
35	A perspective on the evolving role of stable isotope analysis and the emergence of cavity enhanced spectroscopy as a potent tool. <i>Journal of Analytical Atomic Spectrometry</i> , 2021, 36, 1813-1825.	3.0	0
36	Ro-vibrational analysis of ammonia at 6.2 μm using high-precision cavity ring-down spectroscopy. , 2018, ,		0

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37	Ro-vibrational spectral features and pressure broadening dynamics of dideutero-methane ($^{12}\text{CH}_2\text{D}_2$) in the $\hat{1}^1_2(29\text{B}_2)$ fundamental band. Journal of Molecular Spectroscopy, 2022, 384, 111572.	1.2	0