

# Virginie Zeninari

## List of Publications by Year in descending order

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52  
papers

1,073  
citations

304743

22  
h-index

454955

30  
g-index

52  
all docs

52  
docs citations

52  
times ranked

827  
citing authors

#	ARTICLE	IF	CITATIONS
1	How Does Gas-Phase CO <sub>2</sub> Evolve in the Headspace of Champagne Glasses?. Journal of Agricultural and Food Chemistry, 2021, 69, 2262-2270.	5.2	6
2	A first step towards the mapping of gas-phase CO <sub>2</sub> in the headspace of champagne glasses. Infrared Physics and Technology, 2020, 109, 103437.	2.9	1
3	Widely-Tunable Quantum Cascade-Based Sources for the Development of Optical Gas Sensors. Sensors, 2020, 20, 6650.	3.8	5
4	Development and validation of a diode laser sensor for gas-phase CO <sub>2</sub> monitoring above champagne and sparkling wines. Sensors and Actuators B: Chemical, 2018, 257, 745-752.	7.8	19
5	Intracavity Gas Detection with an extended-cavity Quantum Cascade Laser emitting @ 7.6 $\mu$ m. , 2018, , .		0
6	Test and Development of an OPO-Based Spectrometer for SAFESIDE - An INTERREG V Project for Gases Detection. , 2018, , .		0
7	Monitoring gas-phase CO <sub>2</sub> in the headspace of champagne glasses through combined diode laser spectrometry and micro-gas chromatography analysis. Food Chemistry, 2018, 264, 255-262.	8.2	22
8	Applications of IR Laser Spectrometry to the Monitoring of Gaseous CO <sub>2</sub> in the Headspace of Champagne Glasses. , 2018, , .		0
9	Multi-gas sensing with quantum cascade laser array in the mid-infrared region. Applied Physics B: Lasers and Optics, 2017, 123, 1.	2.2	28
10	External cavity coherent quantum cascade laser array. Infrared Physics and Technology, 2016, 76, 415-420.	2.9	4
11	Miniaturized differential Helmholtz resonators for photoacoustic trace gas detection. Sensors and Actuators B: Chemical, 2016, 236, 1104-1110.	7.8	35
12	Photoacoustic Detection of Methane in Large Concentrations with a Helmholtz Sensor: Simulation and Experimentation. International Journal of Thermophysics, 2016, 37, 1.	2.1	14
13	Optimization and complete characterization of a photoacoustic gas detector. Applied Physics B: Lasers and Optics, 2015, 118, 319-326.	2.2	8
14	Challenges in the Design and Fabrication of a Lab-on-a-Chip Photoacoustic Gas Sensor. Sensors, 2014, 14, 957-974.	3.8	24
15	Quantitative simulation of photoacoustic signals using finite element modelling software. Applied Physics B: Lasers and Optics, 2013, 111, 383-389.	2.2	30
16	Carbon Dioxide and Ethanol Release from Champagne Glasses, Under Standard Tasting Conditions. Advances in Food and Nutrition Research, 2012, 67, 289-340.	3.0	1
17	Wavelet Denoising for Infrared Laser Spectroscopy and Gas Detection. Applied Spectroscopy, 2012, 66, 700-710.	2.2	15
18	Unraveling the evolving nature of gaseous and dissolved carbon dioxide in champagne wines: A state-of-the-art review, from the bottle to the tasting glass. Analytica Chimica Acta, 2012, 732, 1-15.	5.4	23

#	ARTICLE	IF	CITATIONS
19	Self-induced pressure shift and temperature dependence measurements of CO <sub>2</sub> at 2.05 $\mu$ m with a tunable diode laser spectrometer. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2012, 85, 74-78.	3.9	15
20	Continuous-wave quantum cascade lasers absorption spectrometers for trace gas detection in the atmosphere. <i>Laser Physics</i> , 2011, 21, 805-812.	1.2	19
21	Development of a versatile atmospheric N <sub>2</sub> O sensor based on quantum cascade laser technology at 4.5 $\mu$ m. <i>Applied Physics B: Lasers and Optics</i> , 2011, 103, 717-723.	2.2	18
22	Tunable diode laser measurement of pressure-induced shift coefficients of CO <sub>2</sub> around 2.05 $\mu$ m for Lidar application. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2011, 112, 1411-1419.	2.3	21
23	Photoacoustic spectroscopy for trace gas detection with cryogenic and room-temperature continuous-wave quantum cascade lasers. <i>Open Physics</i> , 2010, 8, .	1.7	7
24	Near infrared diode laser spectroscopy of C <sub>2</sub> H <sub>2</sub> , H <sub>2</sub> O, CO <sub>2</sub> and their isotopologues and the application to TDLAS, a tunable diode laser spectrometer for the martian PHOBOS-GRUNT space mission. <i>Applied Physics B: Lasers and Optics</i> , 2010, 99, 339-351.	2.2	78
25	Self-broadening coefficients and positions of acetylene around 1.533 $\mu$ m studied by high-resolution diode laser absorption spectrometry. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2010, 111, 2332-2340.	2.3	25
26	Inter-comparison of 2 $\mu$ m Heterodyne Differential Absorption Lidar, Laser Diode Spectrometer, LICOR NDIR analyzer and flask measurements of near-ground atmospheric CO <sub>2</sub> mixing ratio. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 71, 1914-1921.	3.9	9
27	Diode laser spectroscopy of two acetylene isotopologues (12C <sub>2</sub> H <sub>2</sub> , 13C <sub>2</sub> H <sub>2</sub> ) in the 1.533 $\mu$ m region for the PHOBOS-Grunt space mission. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 74, 1204-1208.	3.9	13
28	Alternative method for gas detection using pulsed quantum-cascade-laser spectrometers. <i>Optics Letters</i> , 2009, 34, 181.	3.3	16
29	Laser diode absorption spectroscopy for accurate CO <sub>2</sub> line parameters at 2 $\mu$ m: consequences for space-based DIAL measurements and potential biases. <i>Applied Optics</i> , 2009, 48, 5475.	2.1	27
30	A Case Study of CO <sub>2</sub> , CO and Particles Content Evolution in the Suburban Atmospheric Boundary Layer Using a 2 $\mu$ m Doppler DIAL, a 1 $\mu$ m Backscatter Lidar and an Array of In-situ Sensors. <i>Boundary-Layer Meteorology</i> , 2008, 128, 381-401.	2.3	6
31	Laser diode spectroscopy of H <sub>2</sub> O at 2.63 $\mu$ m for atmospheric applications. <i>Applied Physics B: Lasers and Optics</i> , 2008, 90, 573-580.	2.2	26
32	A complete study of CO <sub>2</sub> line parameters around 4845 cm <sup>-1</sup> for Lidar applications. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2008, 109, 426-434.	2.3	31
33	Quantum cascade laser spectroscopy of N <sub>2</sub> O in the 7.9 $\mu$ m region for the in situ monitoring of the atmosphere. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2008, 109, 1845-1855.	2.3	14
34	Laser diode spectroscopy of the H <sub>2</sub> O isotopologues in the 2.64 $\mu$ m region for the in situ monitoring of the Martian atmosphere. <i>Infrared Physics and Technology</i> , 2008, 51, 229-235.	2.9	11
35	Development of a spectrometer using a continuous wave distributed feedback quantum cascade laser operating at room temperature for the simultaneous analysis of N <sub>2</sub> O and CH <sub>4</sub> in the Earth's atmosphere. <i>Applied Optics</i> , 2008, 47, 1206.	2.1	17
36	Photoacoustic detection of nitric oxide with a Helmholtz resonant quantum cascade laser sensor. <i>Infrared Physics and Technology</i> , 2007, 51, 95-101.	2.9	28

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37	Development of a compact CO <sub>2</sub> sensor open to the atmosphere and based on near-infrared laser technology at 2.68 $\mu$ m. Applied Physics B: Lasers and Optics, 2007, 86, 743-748.	2.2	39
38	Water-vapor isotope ratio measurements in air with a quantum-cascade laser spectrometer. Optics Letters, 2006, 31, 143.	3.3	17
39	The absorption line profiles of H <sub>2</sub> O near 1.39 $\mu$ m in binary mixtures with N <sub>2</sub> , O <sub>2</sub> , and H <sub>2</sub> at low pressures. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2006, 100, 682-688.	0.6	3
40	Line strengths and self-broadening coefficients of carbon dioxide isotopologues (13CO <sub>2</sub> and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Quantitative Spectroscopy and Radiative Transfer, 2006, 98, 264-276.	2.3	20
41	A complete study of the line intensities of four bands of CO <sub>2</sub> around 1.6 and 2.0 $\mu$ m: A comparison between Fourier transform and diode laser measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 101, 325-338.	2.3	61
42	A spectroscopic study of water vapor isotopologues H <sub>2</sub> 16O, H <sub>2</sub> 18O and HDO using a continuous wave DFB quantum cascade laser in the 6.7 $\mu$ m region for atmospheric applications. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 102, 129-138.	2.3	17
43	New improvements in methane detection using a Helmholtz resonant photoacoustic laser sensor: A comparison between near-IR diode lasers and mid-IR quantum cascade lasers. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 63, 1021-1028.	3.9	31
44	Diode laser spectroscopy of H <sub>2</sub> O and CO <sub>2</sub> in the 1.877 $\mu$ m region for the in situ monitoring of the Martian atmosphere. Applied Physics B: Lasers and Optics, 2006, 82, 133-140.	2.2	28
45	Laboratory spectroscopic calibration of infrared tunable laser spectrometers for the in situ sensing of the Earth and Martian atmospheres. Applied Physics B: Lasers and Optics, 2006, 85, 265-272.	2.2	32
46	Development of a Compact Instrument using Fiber Laser based Difference-Frequency Generation Source for Chemical Gas Detection. , 2006, , .		0
47	Pressure-broadening coefficients and line strengths of H <sub>2</sub> O near 1.39 $\mu$ m: application to the in situ sensing of the middle atmosphere with balloonborne diode lasers. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 94, 387-403.	2.3	33
48	Pressure broadening and shift coefficients of H <sub>2</sub> O due to perturbation by N <sub>2</sub> , O <sub>2</sub> , H <sub>2</sub> and He in the 1.39 $\mu$ m region: experiment and calculations. Molecular Physics, 2004, 102, 1697-1706.	1.7	42
49	Diode laser spectroscopy of CO <sub>2</sub> in the region for the in situ sensing of the middle atmosphere. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 83, 619-628.	2.3	48
50	In situ sensing of atmospheric CO <sub>2</sub> with laser diodes near 2.05 $\mu$ m: a spectroscopic study. Infrared Physics and Technology, 2004, 45, 229-237.	2.9	20
51	Diode laser spectroscopy of H <sub>2</sub> O in the 7165 $\text{cm}^{-1}$ range for atmospheric applications. Journal of Quantitative Spectroscopy and Radiative Transfer, 2002, 75, 493-505.	2.3	36
52	Title is missing!. Journal of Atmospheric Chemistry, 2002, 43, 175-194.	3.2	30