## Stéphane Le Calvé

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6304995/publications.pdf

Version: 2024-02-01

92 papers 2,286 citations

27 h-index

201575

265120 42 g-index

93 all docs 93 docs citations

93 times ranked 2374 citing authors

#	Article	IF	CITATIONS
1	Aldehyde measurements in indoor environments in Strasbourg (France). Atmospheric Environment, 2006, 40, 1336-1345.	1.9	111
2	Transportable, fast and high sensitive near real-time analyzers: Formaldehyde detection. Sensors and Actuators B: Chemical, 2013, 181, 551-558.	4.0	104
3	Inhaled formaldehyde exposure: effect on bronchial response to mite allergen in sensitized asthma patients. Allergy: European Journal of Allergy and Clinical Immunology, 2006, 61, 1344-1350.	2.7	101
4	Kinetic Studies of OH Reactions with a Series of Ketones. Journal of Physical Chemistry A, 1998, 102, 4579-4584.	1.1	78
5	Near-UV molar absorptivities of acetone, alachlor, metolachlor, diazinon and dichlorvos in aqueous solution. Journal of Photochemistry and Photobiology A: Chemistry, 2005, 174, 76-81.	2.0	74
6	Temperature Dependence for the Rate Coefficients of the Reactions of the OH Radical with a Series of Formates. Journal of Physical Chemistry A, 1997, 101, 5489-5493.	1.1	71
7	Concentrations and determinants of gaseous aldehydes in 162 homes in Strasbourg (France). Atmospheric Environment, 2008, 42, 505-516.	1.9	66
8	Kinetic Studies of OH Reactions with a Series of Acetates. The Journal of Physical Chemistry, 1996, 100, 12364-12368.	2.9	61
9	Formaldehyde measurements in libraries: Comparison between infrared diode laser spectroscopy and a DNPH-derivatization method. Atmospheric Environment, 2006, 40, 5768-5775.	1.9	53
10	A review of optical interferometry techniques for VOC detection. Sensors and Actuators A: Physical, 2020, 302, 111782.	2.0	53
11	Uptake study of ClONO <sub>2</sub> and BrONO <sub>2</sub> by Halide containing droplets. Atmospheric Chemistry and Physics, 2004, 4, 1291-1299.	1.9	51
12	Henry's law constant measurements for formaldehyde and benzaldehyde as a function of temperature and water composition. Atmospheric Environment, 2011, 45, 2991-2998.	1.9	49
13	Portable, miniature, fast and high sensitive real-time analyzers: BTEX detection. Sensors and Actuators B: Chemical, 2013, 182, 446-452.	4.0	48
14	Adsorption of acetic acid on ice: Experiments and molecular dynamics simulations. Journal of Chemical Physics, 2005, 122, 194707.	1.2	46
15	Experimental performances study of a transportable GC-PID and two thermo-desorption based methods coupled to FID and MS detection to assess BTEX exposure at sub-ppb level in air. Talanta, 2014, 127, 33-42.	2.9	44
16	Henry's law constant measurements for phenol, o-, m-, and p-cresol as a function of temperature. Atmospheric Environment, 2004, 38, 5577-5588.	1.9	43
17	Atmospheric Fate of Dichlorvos:Â Photolysis and OH-Initiated Oxidation Studies. Environmental Science & Environmental Science	4.6	43
18	Gas Detection Using Portable Deep-UV Absorption Spectrophotometry: A Review. Sensors, 2019, 19, 5210.	2.1	43

#	Article	IF	CITATIONS
19	Kinetic Studies of OH Reactions with a Series of Methyl Esters. Journal of Physical Chemistry A, 1997, 101, 9137-9141.	1.1	42
20	Development of a novel portable miniaturized GC for near real-time low level detection of BTEX. Sensors and Actuators B: Chemical, 2016, 224, 159-169.	4.0	38
21	Experimental and Theoretical Adsorption Study of Ethanol on Ice Surfaces. Journal of Physical Chemistry B, 2004, 108, 17425-17432.	1.2	37
22	Temperature dependence of Henry's law constants of metolachlor and diazinon. Chemosphere, 2004, 57, 319-327.	4.2	37
23	An analytical method coupling accelerated solvent extraction and HPLC-fluorescence for the quantification of particle-bound PAHs in indoor air sampled with a 3-stages cascade impactor. Talanta, 2015, 131, 386-394.	2.9	36
24	Micro photoionization detectors. Sensors and Actuators B: Chemical, 2019, 287, 86-94.	4.0	36
25	Adsorption studies of acetone and 2,3-butanedione on ice surfaces between 193 and 223 K. Physical Chemistry Chemical Physics, 2004, 6, 1277-1284.	1.3	35
26	Miniaturization of fluorescence sensing in optofluidic devices. Microfluidics and Nanofluidics, 2020, 24, 1.	1.0	31
27	Adsorption of Benzaldehyde at the Surface of Ice, Studied by Experimental Method and Computer Simulation. Langmuir, 2010, 26, 9596-9606.	1.6	29
28	Uptake Measurements of Ethanol on Ice Surfaces and on Supercooled Aqueous Solutions Doped with Nitric Acid between 213 and 243 K. Journal of Physical Chemistry A, 2007, 111, 925-931.	1.1	28
29	Kinetic Studies of OH and O3 Reactions with Allyl and Isopropenyl Acetate. Journal of Atmospheric Chemistry, 2000, 37, 161-172.	1.4	26
30	Photolysis of Chloral under Atmospheric Conditions. Environmental Science & En	4.6	26
31	Uptake Measurements of Acetaldehyde on Solid Ice Surfaces and on Solid/Liquid Supercooled Mixtures Doped with HNO <sub>3</sub> in the Temperature Range 203â^'253 K. Journal of Physical Chemistry A, 2009, 113, 5091-5098.	1.1	26
32	In-cloud multiphase behaviour of acetone in the troposphere: Gas uptake, Henry's law equilibrium and aqueous phase photooxidation. Chemosphere, 2010, 81, 312-320.	4.2	25
33	Vapor Pressure Measurements of Hydroxyacetaldehyde and Hydroxyacetone in the Temperature Range (273 to 356) K. Journal of Chemical & Engineering Data, 2010, 55, 852-855.	1.0	24
34	Studies on atmospheric degradation of diazinon in the EUPHORE simulation chamber. Chemosphere, 2011, 85, 724-730.	4.2	24
35	Adsorptive removal of gaseous formaldehyde at realistic concentrations. Journal of Environmental Chemical Engineering, 2020, 8, 103986.	3.3	24
36	Development of microfluidic analytical method for on-line gaseous Formaldehyde detection. Sensors and Actuators B: Chemical, 2017, 243, 963-970.	4.0	22

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37	Experimental Uptake Study of Ethanol by Water Droplets and Its Theoretical Modeling of Cluster Formation at the Interface. Journal of Physical Chemistry B, 2002, 106, 7237-7245.	1.2	21
38	Identifying the impact of Beirut Airport's activities on local air quality - Part I: Emissions inventory of NO2 and VOCs. Atmospheric Environment, 2018, 187, 435-444.	1.9	21
39	Portable novel micro-device for BTEX real-time monitoring: Assessment during a field campaign in a low consumption energy junior high school classroom. Atmospheric Environment, 2016, 126, 211-217.	1.9	20
40	On-line gaseous formaldehyde detection by a microfluidic analytical method based on simultaneous uptake and derivatization in a temperature controlled annular flow. Talanta, 2017, 172, 102-108.	2.9	20
41	Sub-ppb Level Detection of BTEX Gaseous Mixtures with a Compact Prototype GC Equipped with a Preconcentration Unit. Micromachines, 2019, 10, 187.	1.4	20
42	Henry's law constants measurements of alachlor and dichlorvos between 283 and 298K. Atmospheric Environment, 2003, 37, 2347-2353.	1.9	19
43	Henry's law constants measurements of the nonylphenol isomer 4(3′,5′-dimethyl-3′-heptyl)-phenol, tertiary octylphenol and γ-hexachlorocyclohexane between 278 and 298 K. Atmospheric Environment, 2004, 38, 4859-4868.	1.9	19
44	A dynamic system for single and repeated exposure of airway epithelial cells to gaseous pollutants. Toxicology in Vitro, 2013, 27, 632-640.	1.1	19
45	Particle-bound PAHs quantification using a 3-stages cascade impactor in French indoor environments. Environmental Pollution, 2014, 195, 64-72.	3.7	19
46	Volatile organic compounds (VOCs) removal capacity of ZSM-5 zeolite adsorbents for near real-time BTEX detection. Journal of Environmental Chemical Engineering, 2020, 8, 103724.	3.3	19
47	Atmospheric Loss Processes of Dimethyl and Diethyl Carbonate. Journal of Atmospheric Chemistry, 2002, 43, 151-174.	1.4	18
48	Adsorption Study of Acetone on Acid-Doped Ice Surfaces between 203 and 233 K. Journal of Physical Chemistry B, 2005, 109, 14112-14117.	1.2	18
49	Human Exposure Chamber for Known Formaldehyde Levels: Generation and Validation. Indoor and Built Environment, 2005, 14, 173-182.	1.5	17
50	Development of a Toluene Detector Based on Deep UV Absorption Spectrophotometry Using Glass and Aluminum Capillary Tube Gas Cells with a LED Source. Micromachines, 2019, 10, 193.	1.4	16
51	Recent developments and trends in miniaturized gas preconcentrators for portable gas chromatography systems: A review. Sensors and Actuators B: Chemical, 2021, 346, 130449.	4.0	16
52	Micro Milled Microfluidic Photoionization Detector for Volatile Organic Compounds. Micromachines, 2019, 10, 228.	1.4	15
53	The influence of reaction conditions on the photooxidation of diisopropyl ether. Journal of Photochemistry and Photobiology A: Chemistry, 2005, 176, 86-97.	2.0	14
54	An assessment of indoor air quality in the maintenance room at Beirut-Rafic Hariri International Airport. Atmospheric Pollution Research, 2019, 10, 701-711.	1.8	14

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55	Kinetic studies of OH reactions with propylal, butylal and 1,3-dioxolane. Physical Chemistry Chemical Physics, 2002, 4, 5622-5626.	1.3	12
56	Uptake Measurements of Dibasic Esters by Water Droplets and Determination of Their Henry's Law Constants. Journal of Physical Chemistry A, 2003, 107, 11433-11439.	1.1	12
57	Fast sorption measurements of volatile organic compounds on building materials: Part 1 – Methodology developed for field applications. Building and Environment, 2016, 99, 200-209.	3.0	12
58	BTEX near real-time monitoring in two primary schools in La Rochelle, France. Air Quality, Atmosphere and Health, 2018, 11, 1091-1107.	1.5	12
59	Easy-to-manufacture micro gas preconcentrator integrated in a portable GC for enhanced trace detection of BTEX. Sensors and Actuators B: Chemical, 2020, 324, 128690.	4.0	12
60	Le formaldéhyde inhalé et la réponse bronchique. Revue Des Maladies Respiratoires, 2006, 23, 3S25-3S34.	1.7	11
61	Molar absorptivities of 2,4-D, cymoxanil, fenpropidin, isoproturon and pyrimethanil in aqueous solution in the near-UV. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 63, 103-110.	2.0	11
62	Adsorption of Hydroxyacetone on Pure Ice Surfaces. ChemPhysChem, 2010, 11, 3921-3927.	1.0	11
63	Fluorescence Microscopy Analysis of Particulate Matter from Biomass Burning: Polyaromatic Hydrocarbons as Main Contributors. Aerosol Science and Technology, 2015, 49, 1160-1169.	1.5	11
64	Characterization of a modular microfluidic photoionization detector. Sensors and Actuators B: Chemical, 2020, 324, 128667.	4.0	11
65	Fast sorption measurements of VOCs on building materials: Part 2 – Comparison between FLEC and CLIMPAQ methods. Building and Environment, 2016, 99, 239-251.	3.0	10
66	Low-volume PEEK gas cell for BTEX detection using portable deep-UV absorption spectrophotometry. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 243, 118727.	2.0	10
67	Photoinduced Proton Transfer Promoted by Peripheral Subunits for Some Hantzsch Esters. Journal of Physical Chemistry A, 2015, 119, 39-49.	1.1	9
68	Near Real-Time Monitoring of Formaldehyde in a Low-Energy School Building. Atmosphere, 2019, 10, 763.	1.0	9
69	VOC tracers from aircraft activities at Beirut Rafic Hariri International Airport. Atmospheric Pollution Research, 2019, 10, 537-551.	1.8	9
70	Continuous aldehydes monitoring in primary schools in France: Evaluation of emission sources and ventilation practices over 5 weeks. Atmospheric Pollution Research, 2021, 12, 340-351.	1.8	9
71	Near-UV molar absorptivities of alachlor, mecroprop-p, pendimethalin, propanil and trifluralin in methanol. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 193, 237-244.	2.0	8
72	An IoT-based scheme for real time indoor personal exposure assessment. , 2016, , .		8

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<b>7</b> 3	Development and Optimization of an Airborne Formaldehyde Microfluidic Analytical Device Based on Passive Uptake through a Microporous Tube. Micromachines, 2019, 10, 807.	1.4	8
74	Simultaneous Monitoring of Particle-Bound PAHs Inside a Low-Energy School Building and Outdoors over Two Weeks in France. Atmosphere, 2021, 12, 108.	1.0	8
<b>7</b> 5	Optofluidic fluorescence cell for the detection of low concentration toxic gases. Sensors and Actuators B: Chemical, 2018, 255, 3441-3446.	4.0	6
76	Design of a Novel Axial Gas Pulses Micromixer and Simulations of its Mixing Abilities via Computational Fluid Dynamics. Micromachines, 2019, 10, 205.	1.4	6
77	Optofluidic Formaldehyde Sensing: Towards On-Chip Integration. Micromachines, 2020, 11, 673.	1.4	6
78	On-Line Gaseous Formaldehyde Detection Based on a Closed-Microfluidic-Circuit Analysis. Chemosensors, 2020, 8, 57.	1.8	6
79	UV absorption spectrum and Henry's law constant of EPTC. Atmospheric Environment, 2008, 42, 7940-7946.	1.9	5
80	An Assessment of Indoor Air Quality in the Arrivals Hall of Beirut–Rafic Hariri International Airport: Monitoring of VOCs and NO2. Atmosphere, 2021, 12, 400.	1.0	5
81	Prototyping a Microfluidic Sensor for Real-Time Detection of Airborne Formaldehyde. International Journal of Chemical Engineering and Applications (IJCEA), 2020, 11, 23-28.	0.3	5
82	Tropospheric multiphase chemistry of 2,5- and 2,6-dimethylphenols: determination of the mass accommodation coefficients and the Henry $\hat{a} \in \mathbb{R}^{N}$ s law constants. Physical Chemistry Chemical Physics, 2006, 8, 1714.	1.3	4
83	Data on comparison between FLEC and CLIMPAQ methods used for fast sorption measurements of VOCs on building materials. Data in Brief, 2016, 7, 518-523.	0.5	4
84	A Sensitive and Portable Deep-UV Absorbance Detector with a Microliter Gas Cell Compatible with Micro GC. Chemosensors, 2021, 9, 63.	1.8	4
85	Specific accumulation of CYP94A1 transcripts after exposure to gaseous benzaldehyde: Induction of lauric acid i‰-hydroxylase activity in Vicia sativa exposed to atmospheric pollutants. Environmental Research, 2011, 111, 37-44.	3.7	3
86	Fast sorption measurements of volatile organic compounds on building materials: Part 1 – Methodology developed for field applications. Data in Brief, 2016, 6, 953-958.	0.5	3
87	Adsorbent screening for airborne BTEX analysis and removal. Journal of Environmental Chemical Engineering, 2020, 8, 103563.	3.3	3
88	Experimental Validation of a Novel Generator of Gas Mixtures Based on Axial Gas Pulses Coupled to a Micromixer. Micromachines, 2021, 12, 715.	1.4	2
89	Development of a Portable and Modular Gas Generator: Application to Formaldehyde Analysis. Chemosensors, 2022, 10, 131.	1.8	2
90	Le formaldéhyde inhalé et la réponse bronchique. Revue Francaise D'allergologie Et D'immunologie Clinique, 2007, 47, 80-83.	0.1	0

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91	Numerical simulation of the sorption phenomena during the transport of VOCs inside a capillary GC column. Chemical Engineering Science, 2021, 234, 116445.	1.9	O
92	In-situ measurements of sorption parameters with a Field and Laboratory Emission Cell (FLEC): a comparison to the test emission chamber method. WIT Transactions on Ecology and the Environment, 2015, , .	0.0	0