Coralie Schoemaecker

List of Publications by Year
in descending order

61 papers	1,595 citations	236612 25 h-index	329751 37 g-index
64 all docs	64 docs citations	64 times ranked	1857 citing authors

#	Article	IF	Citations
1	Unexpectedly high indoor hydroxyl radical concentrations associated with nitrous acid. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13294-13299.	3.3	168
2	Comparison of OH reactivity measurements in the atmospheric simulation chamber SAPHIR. Atmospheric Measurement Techniques, 2017, 10, 4023-4053.	1.2	74
3	Rate constant of the reaction between CH3O2 and OH radicals. Chemical Physics Letters, 2014, 593, 7-13.	1.2	68
4	Quantification of OH and HO ₂ radicals during the low-temperature oxidation of hydrocarbons by Fluorescence Assay by Gas Expansion technique. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20014-20017.	3.3	65
5	Photocatalytic Decomposition of H₂O₂ on Different TiO₂ Surfaces Along with the Concurrent Generation of HO₂ Radicals Monitored Using Cavity Ring Down Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 10090-10097.	1.5	62
6	The <scp>MERMAID</scp> study: indoor and outdoor average pollutant concentrations in 10 lowâ€energy school buildings in France. Indoor Air, 2016, 26, 702-713.	2.0	53
7	The Reaction between CH₃O₂ and OH Radicals: Product Yields and Atmospheric Implications. Environmental Science & Technology, 2017, 51, 2170-2177.	4.6	51
8	Direct observation of OH radicals after 565nm multi-photon excitation of NO2 in the presence of H2O. Chemical Physics Letters, 2011, 513, 12-16.	1.2	48
9	Simultaneous, time-resolved measurements of OH and HO2 radicals by coupling of high repetition rate LIF and cw-CRDS techniques to a laser photolysis reactor and its application toÂtheÂphotolysis of H2O2. Applied Physics B: Lasers and Optics, 2011, 103, 725-733.	1.1	48
10	Quantification of Hydrogen Peroxide during the Low-Temperature Oxidation of Alkanes. Journal of the American Chemical Society, 2012, 134, 11944-11947.	6.6	46
11	Assessment of the impact of oxidation processes on indoor air pollution using the new time-resolved INCA-Indoor model. Atmospheric Environment, 2015, 122, 521-530.	1.9	43
12	Experimental and modeling study of the oxidation of n-butane in a jet stirred reactor using cw-CRDS measurements. Physical Chemistry Chemical Physics, 2013, 15, 19686.	1.3	42
13	Rate Constant of the Reaction between CH₃O₂ Radicals and OH Radicals Revisited. Journal of Physical Chemistry A, 2016, 120, 8923-8932.	1.1	41
14	The reaction of hydroxyl and methylperoxy radicals is not a major source of atmospheric methanol. Nature Communications, 2018, 9, 4343.	5.8	32
15	ROOOH: a missing piece of the puzzle for OH measurements in low-NO environments?. Atmospheric Chemistry and Physics, 2019, 19, 349-362.	1.9	32
16	Photolysis of CH3CHO at 248 nm: Evidence of triple fragmentation from primary quantum yield of CH3 and HCO radicals and H atoms. Journal of Chemical Physics, 2014, 140, 214308.	1.2	30
17	Intercomparison of the comparative reactivity method (CRM) and pumpâ€“probe technique for measuring total OH reactivity in an urban environment. Atmospheric Measurement Techniques, 2015, 8, 4243-4264.	1.2	30
18	The reaction of fluorine atoms with methanol: yield of CH₃O/CH₂OH and rate constant of the reactions CH₃O + CH₃O and CH₃O + HO₂. Physical Chemistry Chemical Physics, 2018, 20, 10660-10670.	1.3	29

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19	Reactive indoor air chemistry and healthâ€"A workshop summary. International Journal of Hygiene and Environmental Health, 2017, 220, 1222-1229.	2.1	28
20	Absorption Spectrum and Absolute Absorption Cross Sections of CH₃O₂ Radicals and CH₃I Molecules in the Wavelength Range 7473â€"7497 cm^{â€"1}. Journal of Physical Chemistry A, 2013, 117, 12802-12811.	1.1	27
21	Kinetics of the reaction of OH radicals with CH3OH and CD3OD studied by laser photolysis coupled to high repetition rate laser induced fluorescence. Reaction Kinetics and Catalysis Letters, 2009, 96, 291-297.	0.6	26
22	Measurement of Absolute Absorption Cross Sections for Nitrous Acid (HONO) in the Near-Infrared Region by the Continuous Wave Cavity Ring-Down Spectroscopy (cw-CRDS) Technique Coupled to Laser Photolysis. Journal of Physical Chemistry A, 2011, 115, 10720-10728.	1.1	26
23	Detection of some stable species during the oxidation of methane by coupling a jet-stirred reactor (JSR) to cw-CRDS. Chemical Physics Letters, 2012, 534, 1-7.	1.2	26
24	Experimental determination of the rate constant of the reaction between C 2 H 5 O 2 and OH radicals. Chemical Physics Letters, 2015, 619, 196-200.	1.2	26
25	Experimental and theoretical investigation of the reaction of RO₂ radicals with OH radicals: Dependence of the HO₂ yield on the size of the alkyl group. International Journal of Chemical Kinetics, 2018, 50, 670-680.	1.0	26
26	Atmospheric and kinetic studies of OH and HO2 by the FAGE technique. Journal of Environmental Sciences, 2012, 24, 78-86.	3.2	24
27	Impact of the spectral and spatial properties of natural light on indoor gas-phase chemistry: Experimental and modeling study. Indoor Air, 2018, 28, 426-440.	2.0	24
28	Direct Measurement of the Equilibrium Constants of the Reaction of Formaldehyde and Acetaldehyde with HO₂ Radicals. International Journal of Chemical Kinetics, 2014, 46, 245-259.	1.0	22
29	Impact of material emissions and sorption of volatile organic compounds on indoor air quality in a low energy building: Field measurements and modeling. Indoor Air, 2018, 28, 924-935.	2.0	21
30	Measurements and modelling of HCN and CN species profiles in laminar CH 4 /O 2 /N 2 low pressure flames using LIF/CRDS techniques. Proceedings of the Combustion Institute, 2015, 35, 745-752.	2.4	20
31	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
32	Identification of the major HO_xradical pathways in an indoor air environment. Indoor Air, 2017, 27, 434-442.	2.0	20
33	Rate constants of the reaction of C2â€"C4 peroxy radicals with OH radicals. Chemical Physics Letters, 2017, 684, 245-249.	1.2	20
34	Direct detection of HO2 radicals in the vicinity of TiO2 photocatalytic surfaces using cw-CRDS. Applied Catalysis B: Environmental, 2010, 99, 413-419.	10.8	18
35	Assessment of indoor HONO formation mechanisms based on in situ measurements and modeling. Indoor Air, 2017, 27, 443-451.	2.0	17
36	Investigation on the near-field evolution of industrial plumes from metalworking activities. Science of the Total Environment, 2019, 668, 443-456.	3.9	16

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37	Water Vapor Does Not Catalyze the Reaction between Methanol and OH Radicals. Angewandte Chemie - International Edition, 2019, 58, 5013-5017.	7.2	16
38	On the direct formation of HO2 radicals after 248Ânm irradiation of benzene C6H6 in the presence of O2. Applied Physics B: Lasers and Optics, 2008, 92, 379-385.	1.1	15
39	OH RADICAL REACTIVITY MEASUREMENTS BY FAGE. Environmental Engineering and Management Journal, 2011, 10, 107-114.	0.2	15
40	(2+1)REMPI on molecular nitrogen through the 1Î£g+ (II)-state. Chemical Physics Letters, 2007, 435, 242-246.	1.2	13
41	Absorption spectrum and absorption cross sections of the 2Î½ 1 band of HO 2 between 20 and 760â€¯Torr air in the range 6636 and 6639Âcm â^'1. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 211, 107-114.	1.1	13
42	The past, present, and future of indoor air chemistry. Indoor Air, 2020, 30, 373-376.	2.0	13
43	Fast sorption measurements of volatile organic compounds on building materials: Part 1 â€" Methodology developed for field applications. Building and Environment, 2016, 99, 200-209.	3.0	12
44	Measurement of line strengths in the Ãƒ 2 Aâ€™ â†<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mover accent="true"><mml:mi mathvariant="normal">X</mml:mi><mml:mo>Ëœ</mml:mo></mml:mover></mml:math>2 Aâ€•transition of HO 2 and DO 2. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 201, 161-170.	1.1	12
45	Variability of hydroxyl radical (OH)Âreactivity in the Landes maritime pine forest: results from the LANDEX campaignÂ2017. Atmospheric Chemistry and Physics, 2020, 20, 1277-1300.	1.9	11
46	HO 2 Formation from the Photoexcitation of Benzene/O 2 Mixtures at 248 nm: An Energy Dependence Study. ChemPhysChem, 2010, 11, 3867-3873.	1.0	10
47	Absolute absorption cross sections for two selected lines of formaldehyde around 6625cmâ^'1. Journal of Molecular Spectroscopy, 2012, 281, 18-23.	0.4	10
48	Fast sorption measurements of VOCs on building materials: Part 2 â€" Comparison between FLEC and CLIMPAQ methods. Building and Environment, 2016, 99, 239-251.	3.0	10
49	Quantitative IBBCEAS measurements of I2 in the presence of aerosols. Applied Physics B: Lasers and Optics, 2014, 114, 421-432.	1.1	9
50	Note: A laser-flash photolysis and laser-induced fluorescence detection technique for measuring total HO2 reactivity in ambient air. Review of Scientific Instruments, 2013, 84, 076106.	0.6	8
51	Absolute Absorption Cross-Section of the Ãƒâ†XËœ Electronic Transition of the Ethyl Peroxy Radical and Rate Constant of Its Cross Reaction with HO2. Photonics, 2021, 8, 296.	0.9	8
52	Atmospheric reactivity of biogenic volatile organic compounds in a maritime pine forest during the LANDEX episode 1 field campaign. Science of the Total Environment, 2021, 756, 144129.	3.9	7
53	A modeling study of the impact of photolysis on indoor air quality. Indoor Air, 2022, 32, .	2.0	7
54	Rate Constant and Branching Ratio for the Reactions of the Ethyl Peroxy Radical with Itself and with the Ethoxy Radical. ACS Earth and Space Chemistry, 2022, 6, 181-188.	1.2	6

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55	Formation of HO₂ Radicals from the 248 nm Two-Photon Excitation of Different Aromatic Hydrocarbons in the Presence of O₂. Journal of Physical Chemistry A, 2012, 116, 6231-6239.	1.1	5
56	Yield of HO₂ Radicals in the OH-Initiated Oxidation of SO₂. Zeitschrift Fur Physikalische Chemie, 2011, 225, 1105-1115.	1.4	4
57	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
58	Fast sorption measurements of volatile organic compounds on building materials: Part 1 â€“ Methodology developed for field applications. Data in Brief, 2016, 6, 953-958.	0.5	3
59	Water Vapor Does Not Catalyze the Reaction between Methanol and OH Radicals. Angewandte Chemie, 2019, 131, 5067-5071.	1.6	3
60	Water does not catalyze the reaction of OH radicals with ethanol. Physical Chemistry Chemical Physics, 2020, 22, 7165-7168.	1.3	2
61	HOx and ROx Radicals in Atmospheric Chemistry. NATO Science for Peace and Security Series C: Environmental Security, 2013, , 77-92.	0.1	2