

Robert Wegener

List of Publications by Year in descending order

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43
papers

1,989
citations

304743

22
h-index

276875

41
g-index

79
all docs

79
docs citations

79
times ranked

2400
citing authors

#	ARTICLE	IF	CITATIONS
1	Isoprene oxidation by nitrate radical: alkyl nitrate and secondary organic aerosol yields. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 6685-6703.	4.9	208
2	Missing Gas-Phase Source of HONO Inferred from Zeppelin Measurements in the Troposphere. <i>Science</i> , 2014, 344, 292-296.	12.6	154
3	Photochemical production of aerosols from real plant emissions. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 4387-4406.	4.9	133
4	Experimental evidence for efficient hydroxyl radical regeneration in isoprene oxidation. <i>Nature Geoscience</i> , 2013, 6, 1023-1026.	12.9	132
5	Chemical analysis of volatiles emitted by <i>Pinus sylvestris</i> after induction by insect oviposition. <i>Journal of Chemical Ecology</i> , 2003, 29, 1235-1252.	1.8	125
6	Effects of NO ₂ and SO ₂ on the secondary organic aerosol formation from photooxidation of α -pinene and limonene. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 1611-1628.	4.9	110
7	Simulation chamber investigation of the reactions of ozone with short-chained alkenes. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	83
8	Intercomparison of oxygenated volatile organic compound measurements at the SAPHIR atmosphere simulation chamber. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	78
9	Intercomparison of measurements of NO ₂ concentrations in the atmosphere simulation chamber SAPHIR during the NO ₃ Comp campaign. <i>Atmospheric Measurement Techniques</i> , 2010, 3, 21-37.	3.1	77
10	Comparison of OH reactivity measurements in the atmospheric simulation chamber SAPHIR. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 4023-4053.	3.1	74
11	Secondary organic aerosol formation from hydroxyl radical oxidation and ozonolysis of monoterpenes. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 991-1012.	4.9	67
12	Analysis of volatiles induced by oviposition of elm leaf beetle <i>Xanthogaleruca luteola</i> on <i>Ulmus minor</i> . <i>Journal of Chemical Ecology</i> , 2001, 27, 499-515.	1.8	62
13	Stable carbon isotope composition of secondary organic aerosol from α -pinene oxidation. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	51
14	Importance of isomerization reactions for OH radical regeneration from the photo-oxidation of isoprene investigated in the atmospheric simulation chamber SAPHIR. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 3333-3355.	4.9	44
15	HO _x budgets during HO _x Comp: A case study of HO _x chemistry under NO _x -limited conditions. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	38
16	OH regeneration from methacrolein oxidation investigated in the atmosphere simulation chamber SAPHIR. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 7895-7908.	4.9	38
17	Evidence for an unidentified non-photochemical ground-level source of formaldehyde in the Po Valley with potential implications for ozone production. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 1289-1298.	4.9	36
18	Twenty years of ambient observations of nitrogen oxides and specified hydrocarbons in air masses dominated by traffic emissions in Germany. <i>Faraday Discussions</i> , 2016, 189, 407-437.	3.2	32

#	ARTICLE	IF	CITATIONS
19	Intercomparison of peroxy radical measurements obtained at atmospheric conditions by laser-induced fluorescence and electron spin resonance spectroscopy. <i>Atmospheric Measurement Techniques</i> , 2009, 2, 55-64.	3.1	30
20	Comparisons of observed and modeled OH and HO ₂ concentrations during the ambient measurement period of the HO _x Comp field campaign. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 2567-2585.	4.9	30
21	ACTRIS non-methane hydrocarbon intercomparison experiment in Europe to support WMO GAW and EMEP observation networks. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 2715-2736.	3.1	28
22	Investigation of the α -pinene photooxidation by OH in the atmosphere simulation chamber SAPHIR. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 6631-6650.	4.9	27
23	Investigation of the formaldehyde differential absorption cross section at high and low spectral resolution in the simulation chamber SAPHIR. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 3579-3586.	4.9	25
24	Isotope effect in the formation of H ₂ from H ₂ CO studied at the atmospheric simulation chamber SAPHIR. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5343-5357.	4.9	25
25	Simulation chamber studies on the NO ₃ chemistry of atmospheric aldehydes. <i>Geophysical Research Letters</i> , 2006, 33, n/a-n/a.	4.0	24
26	Intercomparison of Hantzsch and fiber-laser-induced-fluorescence formaldehyde measurements. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 1571-1580.	3.1	24
27	Investigation of the oxidation of methyl vinyl ketone (MVK) by OH radicals in the atmospheric simulation chamber SAPHIR. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 8001-8016.	4.9	22
28	Evaluation of OH and HO ₂ concentrations and their budgets during photooxidation of 2-methyl-3-butene-2-ol (MBO) in the atmospheric simulation chamber SAPHIR. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 11409-11422.	4.9	20
29	Influence of urban air on proton exchange membrane fuel cell vehicles " Long term effects of air contaminants in an authentic driving cycle. <i>Journal of Power Sources</i> , 2018, 400, 556-565.	7.8	20
30	Identification and synthesis of homoterpenoids emitted from elm leaves after elicitation by beetle eggs. <i>Tetrahedron</i> , 2002, 58, 315-319.	1.9	19
31	OH-initiated degradation of several hydrocarbons in the atmosphere simulation chamber SAPHIR. <i>Journal of Atmospheric Chemistry</i> , 2007, 57, 203-214.	3.2	18
32	Gas-to-particle partitioning of major biogenic oxidation products: a study on freshly formed and aged biogenic SOA. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 12969-12989.	4.9	18
33	Comparison of three aerosol chemical characterization techniques utilizing PTR-ToF-MS: a study on freshly formed and aged biogenic SOA. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 1481-1500.	3.1	17
34	Investigation of the β -pinene photooxidation by OH in the atmospheric simulation chamber SAPHIR. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 11635-11649.	4.9	17
35	A new plant chamber facility, PLUS, coupled to the atmosphere simulation chamber SAPHIR. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 1247-1259.	3.1	15
36	Temperature dependence of the kinetic isotope effect in β -pinene ozonolysis. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	11

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37	Response to Comment on "Missing gas-phase source of HONO inferred from Zeppelin measurements in the troposphere". Science, 2015, 348, 1326-1326.	12.6	10
38	Dehydrogenation of ocimene by active carbon: artefact formation during headspace sampling from leaves of Phaseolus lunatus. Arkivoc, 2007, 2007, 164-172.	0.5	7
39	Photooxidation of pinonaldehyde at ambient conditions investigated in the atmospheric simulation chamber SAPHIR. Atmospheric Chemistry and Physics, 2020, 20, 13701-13719.	4.9	6
40	Unravelling a black box: an open-source methodology for the field calibration of small air quality sensors. Atmospheric Measurement Techniques, 2021, 14, 7221-7241.	3.1	6
41	Atmospheric photo-oxidation of myrcene: OH reaction rate constant, gas-phase oxidation products and radical budgets. Atmospheric Chemistry and Physics, 2021, 21, 16067-16091.	4.9	4
42	Investigation of the limonene photooxidation by OH at different NO concentrations in the atmospheric simulation chamber SAPHIR (Simulation of Atmospheric PHotochemistry In a large) Tj ETQq0 0 0 rgBT4 Overlockal 0 Tf 50 5	4.9	4
43	Air quality observations onboard commercial and targeted Zeppelin flights in Germany "a platform for high-resolution trace-gas and aerosol measurements within the planetary boundary layer. Atmospheric Measurement Techniques, 2022, 15, 3827-3842.	3.1	1