

Hans-Werner Jacobi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8248900/publications.pdf>

Version: 2024-02-01

46
papers

3,622
citations

185998

28
h-index

233125

45
g-index

66
all docs

66
docs citations

66
times ranked

3242
citing authors

#	ARTICLE	IF	CITATIONS
1	Halogens and their role in polar boundary-layer ozone depletion. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 4375-4418.	1.9	593
2	Snow physics as relevant to snow photochemistry. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 171-208.	1.9	259
3	CAPRAM2.3: A Chemical Aqueous Phase Radical Mechanism for Tropospheric Chemistry. <i>Journal of Atmospheric Chemistry</i> , 2000, 36, 231-284.	1.4	253
4	A review of air-ice chemical and physical interactions (AICI): liquids, quasi-liquids, and solids in snow. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 1587-1633.	1.9	235
5	Frost flowers on sea ice as a source of sea salt and their influence on tropospheric halogen chemistry. <i>Geophysical Research Letters</i> , 2004, 31, .	1.5	202
6	Measurements of NO _x emissions from the Antarctic snowpack. <i>Geophysical Research Letters</i> , 2001, 28, 1499-1502.	1.5	167
7	Comprehensive isotopic composition of atmospheric nitrate in the Atlantic Ocean boundary layer from 65°S to 79°N. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	156
8	Overview of the MOSAiC expedition: Atmosphere. <i>Elementa</i> , 2022, 10, .	1.1	121
9	Measurements of hydrogen peroxide and formaldehyde exchange between the atmosphere and surface snow at Summit, Greenland. <i>Atmospheric Environment</i> , 2002, 36, 2619-2628.	1.9	114
10	Impacts of snowpack emissions on deduced levels of OH and peroxy radicals at Summit, Greenland. <i>Atmospheric Environment</i> , 2002, 36, 2523-2534.	1.9	110
11	A mechanism for the photochemical transformation of nitrate in snow. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2007, 185, 371-382.	2.0	101
12	Overview of the MOSAiC expedition: Snow and sea ice. <i>Elementa</i> , 2022, 10, .	1.1	91
13	Isotopic view on nitrate loss in Antarctic surface snow. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	79
14	Reactive trace gases measured in the interstitial air of surface snow at Summit, Greenland. <i>Atmospheric Environment</i> , 2004, 38, 1687-1697.	1.9	76
15	Investigation of the photochemical decomposition of nitrate, hydrogen peroxide, and formaldehyde in artificial snow. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006, 179, 330-338.	2.0	76
16	Impact of temperature-driven cycling of hydrogen peroxide (H ₂ O ₂) between air and snow on the planetary boundary layer. <i>Journal of Geophysical Research</i> , 2001, 106, 15395-15404.	3.3	73
17	Effects of mixing state on optical and radiative properties of black carbon in the European Arctic. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 14037-14057.	1.9	65
18	Black carbon in snow in the upper Himalayan Khumbu Valley, Nepal: observations and modeling of the impact on snow albedo, melting, and radiative forcing. <i>Cryosphere</i> , 2015, 9, 1685-1699.	1.5	57

#	ARTICLE	IF	CITATIONS
19	Observation of a fast ozone loss in the marginal ice zone of the Arctic Ocean. Journal of Geophysical Research, 2006, 111, .	3.3	56
20	Laboratory studies of atmospheric aqueous-phase free-radical chemistry: kinetic and spectroscopic studies of reactions of NO ₃ and SO ₄ · radicals with aromatic compounds. Faraday Discussions, 1995, 100, 129.	1.6	47
21	Seasonality of reactive nitrogen oxides (NO _y) at Neumayer Station, Antarctica. Journal of Geophysical Research, 2002, 107, ACH 2-1-ACH 2-11.	3.3	45
22	Peroxyacetyl nitrate (PAN) concentrations in the Antarctic troposphere measured during the photochemical experiment at Neumayer (PEAN'99). Atmospheric Environment, 2000, 34, 5235-5247.	1.9	42
23	Circumpolar measurements of speciated mercury, ozone and carbon monoxide in the boundary layer of the Arctic Ocean. Atmospheric Chemistry and Physics, 2010, 10, 5031-5045.	1.9	42
24	Observation of widespread depletion of ozone in the springtime boundary layer of the central Arctic linked to mesoscale synoptic conditions. Journal of Geophysical Research, 2010, 115, .	3.3	40
25	Development of a Mechanism for Nitrate Photochemistry in Snow. Journal of Physical Chemistry A, 2010, 114, 1790-1796.	1.1	39
26	Antarctic winter mercury and ozone depletion events over sea ice. Atmospheric Environment, 2016, 129, 125-132.	1.9	39
27	A laser flash photolysis kinetic study of reactions of the Cl ₂ · radical anion with oxygenated hydrocarbons in aqueous solution. International Journal of Chemical Kinetics, 1999, 31, 169-181.	1.0	37
28	Measurements and modeling of the vertical profile of specific surface area of an alpine snowpack. Advances in Water Resources, 2013, 55, 111-120.	1.7	37
29	Modelling of radiation quantities and photolysis frequencies in the aqueous phase in the troposphere. Atmospheric Environment, 1997, 31, 3137-3150.	1.9	35
30	Levels and pattern of volatile organic nitrates and halocarbons in the air at Neumayer Station (70°S), Antarctic. Chemosphere, 2002, 48, 981-992.	4.2	28
31	Simulation of the specific surface area of snow using a one-dimensional physical snowpack model: implementation and evaluation for subarctic snow in Alaska. Cryosphere, 2010, 4, 35-51.	1.5	28
32	Investigation of the role of the snowpack on atmospheric formaldehyde chemistry at Summit, Greenland. Journal of Geophysical Research, 2002, 107, ACH 9-1.	3.3	27
33	Quantification of different flow components in a high-altitude glacierized catchment (Dudh Koshi, Tj ETQq1 1 0.784314 rgBT ₂₅ /Overlock	1.9	25
34	An isotopic view on the connection between photolytic emissions of NO _x from the Arctic snowpack and its oxidation by reactive halogens. Journal of Geophysical Research, 2012, 117, .	3.3	23
35	Surface species formed during UV photolysis of ozone adsorbed on water ice films at 80 K. A combined RA-FTIR and DFT study. Physical Chemistry Chemical Physics, 2003, 5, 496-505.	1.3	21
36	Peroxyacetyl nitrate (PAN) distribution over the South Atlantic Ocean. Physical Chemistry Chemical Physics, 1999, 1, 5517-5521.	1.3	20

#	ARTICLE	IF	CITATIONS
37	Role of Nitrite in the Photochemical Formation of Radicals in the Snow. Environmental Science & Technology, 2014, 48, 165-172.	4.6	20
38	A laser flash photolysis study of the decay of Cl [•] atoms and Cl ₂ ^{•-} radical anions in aqueous solution at 298 K. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1997, 101, 1909-1913.	0.9	18
39	Deposition of ionic species and black carbon to the Arctic snowpack: combining snow pit observations with modeling. Atmospheric Chemistry and Physics, 2019, 19, 10361-10377.	1.9	17
40	Photochemical decomposition of hydrogen peroxide (H ₂ O ₂) and formaldehyde (HCHO) in artificial snow. Annals of Glaciology, 2004, 39, 29-33.	2.8	15
41	Evaluation of Gridded and In Situ Precipitation Datasets on Modeled Glacio-Hydrologic Response of a Small Glacierized Himalayan Catchment. Journal of Hydrometeorology, 2019, 20, 1103-1121.	0.7	7
42	Snow: a reliable indicator for global warming in the future?. Environmental Research Letters, 2012, 7, 011004.	2.2	6
43	Deposition of light-absorbing particles in glacier snow of the Sunderdhunga Valley, the southern forefront of the central Himalayas. Atmospheric Chemistry and Physics, 2021, 21, 2931-2943.	1.9	6
44	Spring snow albedo feedback over northern Eurasia: Comparing in situ measurements with reanalysis products. Cryosphere, 2018, 12, 1887-1898.	1.5	5
45	The Development of a Miniature Optical Sensor for Balloon-Borne Measurements of Ozone Profiles. Journal of Atmospheric and Oceanic Technology, 2008, 25, 57-70.	0.5	2
46	Snow albedo and its sensitivity to changes in deposited light-absorbing particles estimated from ambient temperature and snow depth observations at a high-altitude site in the Himalaya. Elementa, 2022, 10, .	1.1	0