Hans-Werner Jacobi

List of Publications by Year
in descending order

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	Overview of the MOSAiC expedition: Atmosphere. Elementa, 2022, 10, .	1.1	121
2	Overview of the MOSAiC expedition: Snow and sea ice. Elementa, 2022, 10, .	1.1	91
3	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
4	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
5	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
6	Quantification of different flow components in a high-altitude glacierized catchment (Dudh Koshi,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.9	25
7	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
8	Spring snow albedo feedback over northern Eurasia: Comparing in situ measurements with reanalysis products. Cryosphere, 2018, 12, 1887-1898.	1.5	5
9	Effects of mixing state on optical and radiative properties of black carbon in the European Arctic. Atmospheric Chemistry and Physics, 2018, 18, 14037-14057.	1.9	65
10	Antarctic winter mercury and ozone depletion events over sea ice. Atmospheric Environment, 2016, 129, 125-132.	1.9	39
11	Black carbon in snow in the upper Himalayan Khumbu Valley, Nepal: observations and modeling of the impact on snow albedo, melting, and radiative forcing. Cryosphere, 2015, 9, 1685-1699.	1.5	57
12	Role of Nitrite in the Photochemical Formation of Radicals in the Snow. Environmental Science & Technology, 2014, 48, 165-172.	4.6	20
13	A review of airâ€“ice chemical and physical interactions (AICI): liquids, quasi-liquids, and solids in snow. Atmospheric Chemistry and Physics, 2014, 14, 1587-1633.	1.9	235
14	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
15	Snow: a reliable indicator for global warming in the future?. Environmental Research Letters, 2012, 7, 011004.	2.2	6
16	An isotopic view on the connection between photolytic emissions of NO_{<i>x</i>} from the Arctic snowpack and its oxidation by reactive halogens. Journal of Geophysical Research, 2012, 117, .	3.3	23
17	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
18	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

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19	Development of a Mechanism for Nitrate Photochemistry in Snow. Journal of Physical Chemistry A, 2010, 114, 1790-1796.	1.1	39
20	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
21	Comprehensive isotopic composition of atmospheric nitrate in the Atlantic Ocean boundary layer from 65Â°S to 79Â°N. Journal of Geophysical Research, 2009, 114, .	3.3	156
22	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
23	Snow physics as relevant to snow photochemistry. Atmospheric Chemistry and Physics, 2008, 8, 171-208.	1.9	259
24	Halogens and their role in polar boundary-layer ozone depletion. Atmospheric Chemistry and Physics, 2007, 7, 4375-4418.	1.9	593
25	A mechanism for the photochemical transformation of nitrate in snow. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 185, 371-382.	2.0	101
26	Observation of a fast ozone loss in the marginal ice zone of the Arctic Ocean. Journal of Geophysical Research, 2006, 111, .	3.3	56
27	Investigation of the photochemical decomposition of nitrate, hydrogen peroxide, and formaldehyde in artificial snow. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 179, 330-338.	2.0	76
28	Isotopic view on nitrate loss in Antarctic surface snow. Geophysical Research Letters, 2005, 32, .	1.5	79
29	Reactive trace gases measured in the interstitial air of surface snow at Summit, Greenland. Atmospheric Environment, 2004, 38, 1687-1697.	1.9	76
30	Frost flowers on sea ice as a source of sea salt and their influence on tropospheric halogen chemistry. Geophysical Research Letters, 2004, 31, .	1.5	202
31	Photochemical decomposition of hydrogen peroxide (H₂O₂) and formaldehyde (HCHO) in artificial snow. Annals of Glaciology, 2004, 39, 29-33.	2.8	15
32	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
33	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
34	Seasonality of reactive nitrogen oxides (NOy) at Neumayer Station, Antarctica. Journal of Geophysical Research, 2002, 107, ACH 2-1-ACH 2-11.	3.3	45
35	Levels and pattern of volatile organic nitrates and halocarbons in the air at Neumayer Station (70Â°S), Antarctic. Chemosphere, 2002, 48, 981-992.	4.2	28
36	Measurements of hydrogen peroxide and formaldehyde exchange between the atmosphere and surface snow at Summit, Greenland. Atmospheric Environment, 2002, 36, 2619-2628.	1.9	114

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37	Impacts of snowpack emissions on deduced levels of OH and peroxy radicals at Summit, Greenland. Atmospheric Environment, 2002, 36, 2523-2534.	1.9	110
38	Measurements of NOxemissions from the Antarctic snowpack. Geophysical Research Letters, 2001, 28, 1499-1502.	1.5	167
39	Impact of temperature-driven cycling of hydrogen peroxide (H2O2) between air and snow on the planetary boundary layer. Journal of Geophysical Research, 2001, 106, 15395-15404.	3.3	73
40	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
41	CAPRAM2.3: A Chemical Aqueous Phase Radical Mechanism for Tropospheric Chemistry. Journal of Atmospheric Chemistry, 2000, 36, 231-284.	1.4	253
42	Peroxyacetyl nitrate (PAN) distribution over the South Atlantic Ocean. Physical Chemistry Chemical Physics, 1999, 1, 5517-5521.	1.3	20
43	A laser flash photolysis kinetic study of reactions of the Cl2? radical anion with oxygenated hydrocarbons in aqueous solution. International Journal of Chemical Kinetics, 1999, 31, 169-181.	1.0	37
44	Modelling of radiation quantities and photolysis frequencies in the aqueous phase in the troposphere. Atmospheric Environment, 1997, 31, 3137-3150.	1.9	35
45	A laser flash photolysis study of the decay of Clâ€¢Atoms and Cl₂^{â^’} radical anions in aqueous solution at 298 K. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1997, 101, 1909-1913.	0.9	18
46	Laboratory studies of atmospheric aqueous-phase free-radical chemistry: kinetic and spectroscopic studies of reactions of NO3 and SO4 ? radicals with aromatic compounds. Faraday Discussions, 1995, 100, 129.	1.6	47