Silke GroÃ

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5969129/publications.pdf

Version: 2024-02-01

59 papers	3,405 citations	218677 26 h-index	175258 52 g-index
69 all docs	69 docs citations	69 times ranked	2540 citing authors

#	Article	IF	Citations
1	Vertically resolved separation of dust and smoke over Cape Verde using multiwavelength Raman and polarization lidars during Saharan Mineral Dust Experiment 2008. Journal of Geophysical Research, 2009, 114, .	3.3	292
2	Airborne observations of the Eyjafjalla volcano ash cloud over Europe during air space closure in April and May 2010. Atmospheric Chemistry and Physics, 2011, 11, 2245-2279.	4.9	273
3	Characterization of Saharan dust, marine aerosols and mixtures of biomass-burning aerosols and dust by means of multi-wavelength depolarization and Raman lidar measurements during SAMUM 2. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 706.	1.6	225
4	Aerosol classification by airborne high spectral resolution lidar observations. Atmospheric Chemistry and Physics, 2013, 13, 2487-2505.	4.9	209
5	The 16 April 2010 major volcanic ash plume over central Europe: EARLINET lidar and AERONET photometer observations at Leipzig and Munich, Germany. Geophysical Research Letters, 2010, 37, .	4.0	202
6	The Saharan Aerosol Long-Range Transport and Aerosolâ€“Cloud-Interaction Experiment: Overview and Selected Highlights. Bulletin of the American Meteorological Society, 2017, 98, 1427-1451.	3.3	173
7	Volcanic ash from Iceland over Munich: mass concentration retrieved from ground-based remote sensing measurements. Atmospheric Chemistry and Physics, 2011, 11, 2209-2223.	4.9	170
8	Ash and fine-mode particle mass profiles from EARLINET-AERONET observations over central Europe after the eruptions of the EyjafjallajÃ¶kull volcano in 2010. Journal of Geophysical Research, 2011, 116, .	3.3	165
9	Optical properties of long-range transported Saharan dust over Barbados as measured by dual-wavelength depolarization Raman lidar measurements. Atmospheric Chemistry and Physics, 2015, 15, 11067-11080.	4.9	123
10	Modelling lidar-relevant optical properties of complex mineral dust aerosols. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 725.	1.6	117
11	ML-CIRRUS: The Airborne Experiment on Natural Cirrus and Contrail Cirrus with the High-Altitude Long-Range Research Aircraft HALO. Bulletin of the American Meteorological Society, 2017, 98, 271-288.	3.3	107
12	The North Atlantic Waveguide and Downstream Impact Experiment. Bulletin of the American Meteorological Society, 2018, 99, 1607-1637.	3.3	105
13	Four-dimensional distribution of the 2010 EyjafjallajÃ¶kull volcanic cloud over Europe observed by EARLINET. Atmospheric Chemistry and Physics, 2013, 13, 4429-4450.	4.9	95
14	Dual-wavelength linear depolarization ratio of volcanic aerosols: Lidar measurements of the EyjafjallajÃ¶kull plume over Maisach, Germany. Atmospheric Environment, 2012, 48, 85-96.	4.1	86
15	Triple-wavelength depolarization-ratio profiling of Saharan dust over Barbados during SALTRACE in 2013 and 2014. Atmospheric Chemistry and Physics, 2017, 17, 10767-10794.	4.9	80
16	Characterization of the EyjafjallajÃ¶kull ash-plume: Potential of lidar remote sensing. Physics and Chemistry of the Earth, 2012, 45-46, 79-86.	2.9	59
17	Optical properties of aerosol mixtures derived from sun-sky radiometry during SAMUM-2. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 635.	1.6	58
18	EARLINET instrument intercomparison campaigns: overview on strategy and results. Atmospheric Measurement Techniques, 2016, 9, 1001-1023.	3.1	58

#	Article	IF	Citations
19	Ice formation in ash-influenced clouds after the eruption of the EyjafjallajÃ¶kull volcano in April 2010. Journal of Geophysical Research, 2011, 116, .	3.3	57
20	Towards an aerosol classification scheme for future <scp>EarthCARE</scp> lidar observations and implications for research needs. Atmospheric Science Letters, 2015, 16, 77-82.	1.9	53
21	Particle settling and vertical mixing in the Saharan Air Layer as seen from an integrated model, lidar, and in situ perspective. Atmospheric Chemistry and Physics, 2017, 17, 297-311.	4.9	53
22	Retrieval of ice-nucleating particle concentrations from lidar observations and comparison with UAV in situ measurements. Atmospheric Chemistry and Physics, 2019, 19, 11315-11342.	4.9	53
23	The May/June 2008 Saharan dust event over Munich: Intensive aerosol parameters from lidar measurements. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	48
24	Retrieval of aerosol backscatter and extinction from airborne coherent Doppler wind lidar measurements. Atmospheric Measurement Techniques, 2015, 8, 2909-2926.	3.1	40
25	Evolution of DARDAR-CLOUD ice cloud retrievals: new parameters and impacts on the retrieved microphysical properties. Atmospheric Measurement Techniques, 2019, 12, 2819-2835.	3.1	31
26	Potential of airborne lidar measurements for cirrus cloud studies. Atmospheric Measurement Techniques, 2014, 7, 2745-2755.	3.1	29
27	Calibration of a 35â€‰GHz airborne cloud radar: lessons learned and intercomparisons with 94â€‰GHz cloud radars. Atmospheric Measurement Techniques, 2019, 12, 1815-1839.	3.1	29
28	Characterization of the planetary boundary layer during SAMUM-2 by means of lidar measurements. Tellus, Series B: Chemical and Physical Meteorology, 2011, 63, 695-705.	1.6	28
29	Saharan dust contribution to the Caribbean summertime boundary layer â€“ a lidar study during SALTRACE. Atmospheric Chemistry and Physics, 2016, 16, 11535-11546.	4.9	27
30	EARLINET observations of Saharan dust intrusions over the northern Mediterranean region (2014â€“2017): properties and impact on radiative forcing. Atmospheric Chemistry and Physics, 2020, 20, 15147-15166.	4.9	27
31	EUREC⁴A's <i>HALO</i>. Earth System Science Data, 2021, 13, 5545-5563.	9.9	24
32	Airborne high spectral resolution lidar observation of pollution aerosol during EUCAARI-LONGREX. Atmospheric Chemistry and Physics, 2013, 13, 2435-2444.	4.9	22
33	Measurement of the Linear Depolarization Ratio of Aged Dust at Three Wavelengths (355, 532 and 1064) Tj ETQq1 1 0.784314 rgBT	0.3	18
34	Cloud macro-physical properties in Saharan-dust-laden and dust-free North Atlantic trade wind regimes: a lidar case study. Atmospheric Chemistry and Physics, 2019, 19, 10659-10673.	4.9	18
35	Accuracy assessment of an integrated profiling technique for operationally deriving profiles of temperature, humidity, and cloud liquid water. Journal of Geophysical Research, 2007, 112, .	3.3	17
36	Lidar ratio of Saharan dust over Cape Verde Islands: Assessment and error calculation. Journal of Geophysical Research, 2011, 116, .	3.3	17

#	Article	IF	Citations
37	Thermal IR radiative properties of mixed mineral dust and biomass aerosol during SAMUM-2. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 751.	1.6	16
38	High Depolarization Ratios of Naturally Occurring Cirrus Clouds Near Air Traffic Regions Over Europe. Geophysical Research Letters, 2018, 45, 13,166.	4.0	16
39	Is the near-spherical shape the â€œnew blackâ€•for smoke?. Atmospheric Chemistry and Physics, 2020, 20, 14005-14021.	4.9	16
40	Impacts of Water Vapor on Saharan Air Layer Radiative Heating. Geophysical Research Letters, 2019, 46, 14854-14862.	4.0	15
41	Determining stages of cirrus evolution: a cloud classification scheme. Atmospheric Measurement Techniques, 2017, 10, 1653-1664.	3.1	13
42	Accuracy of Linear Depolarisation Ratios in Clean Air Ranges Measured with POLIS-6 at 355 and 532 NM. EPJ Web of Conferences, 2016, 119, 25013.	0.3	12
43	Sun photometer retrievals of Saharan dust properties over Barbados during SALTRACE. Atmospheric Chemistry and Physics, 2019, 19, 14571-14583.	4.9	12
44	Characterization of the EyjafjallajÃ¶kull ash-plume by means of lidar measurements over the Munich EARLINET-site. , 2010, , .		11
45	Radiative effects of long-range-transported Saharan air layers as determined from airborne lidar measurements. Atmospheric Chemistry and Physics, 2020, 20, 12313-12327.	4.9	10
46	Modelling mineral dust emissions and atmospheric dispersion with MADE3 in EMAC v2.54. Geoscientific Model Development, 2020, 13, 4287-4303.	3.6	10
47	Airborne Lidar Observations of Water Vapor Variability in Tropical Shallow Convective Environment. Surveys in Geophysics, 2017, 38, 1425-1443.	4.6	9
48	Why we need radar, lidar, and solar radiance observations to constrain ice cloud microphysics. Atmospheric Measurement Techniques, 2021, 14, 5029-5047.	3.1	9
49	Changes in cirrus cloud properties and occurrence over Europe during the COVID-19-caused air traffic reduction. Atmospheric Chemistry and Physics, 2021, 21, 14573-14590.	4.9	9
50	In situ aerosol characterization at Cape Verde: Part 2: Parametrization of relative humidity- and wavelength-dependent aerosol optical properties. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 549.	1.6	7
51	Wintertime Saharan dust transport towards the Caribbean: an airborne lidar case study during EUREC⁴A. Atmospheric Chemistry and Physics, 2022, 22, 7319-7330.	4.9	5
52	Retrievals of ice microphysical properties using dual-wavelength polarimetric radar observations during stratiform precipitation events. Atmospheric Measurement Techniques, 2022, 15, 3969-3999.	3.1	4
53	Turbulence Analysis in Longâ€Rangeâ€Transported Saharan Dust Layers With Airborne Lidar. Geophysical Research Letters, 2021, 48, e2021GL094418.	4.0	3
54	Airborne Lidar Observations of Water Vapor Variability in Tropical Shallow Convective Environment. Space Sciences Series of ISSI, 2017, , 253-271.	0.0	3

#	Article	IF	Citations
55	Deployment of the C-band radar Poldirad on Barbados during EUREC⁴A. Earth System Science Data, 2021, 13, 5899-5914.	9.9	3
56	Aerosol Classification by Advanced Backscatter Lidar Techniques. Research Topics in Aerospace, 2012, , 477-486.	0.7	1
57	Aerosol Backscatter and Extinction Retrieval from Airborne Coherent Doppler Wind Lidar Measurements. EPJ Web of Conferences, 2016, 119, 23001.	0.3	0
58	Case Study on Combined Lidar-Photometer Retrieval of Volcanic ASH Properties. EPJ Web of Conferences, 2016, 119, 07004.	0.3	0
59	Classifying stages of cirrus life-cycle evolution. EPJ Web of Conferences, 2018, 176, 05021.	0.3	0