

# Ronny Engelmann

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9204712/publications.pdf>

Version: 2024-02-01

113  
papers

4,281  
citations

109321

35  
h-index

128289

60  
g-index

163  
all docs

163  
docs citations

163  
times ranked

3312  
citing authors

#	ARTICLE	IF	CITATIONS
1	Doppler lidar studies of heat island effects on vertical mixing of aerosols during SAMUMâ€“2. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 63, 448.	1.6	11
2	First triple-wavelength lidar observations of depolarization and extinction-to-backscatter ratios of Saharan dust. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 355-369.	4.9	24
3	Overview of the MOSAIC expedition: Atmosphere. <i>Elementa</i> , 2022, 10, .	3.2	121
4	Australian wildfire smoke in the stratosphere: the decay phase in 2020/2021 and impact on ozone depletion. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 7417-7442.	4.9	17
5	Impact of aerosol layering, complex aerosol mixing, and cloud coverage on high-resolution MAIAC aerosol optical depth measurements: Fusion of lidar, AERONET, satellite, and ground-based measurements. <i>Atmospheric Environment</i> , 2021, 247, 118163.	4.1	21
6	Californian Wildfire Smoke Over Europe: A First Example of the Aerosol Observing Capabilities of Aeolus Compared to Groundâ€“Based Lidar. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL092194.	4.0	34
7	Influence of low-level blocking and turbulence on the microphysics of a mixed-phase cloud in an inner-Alpine valley. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 5151-5172.	4.9	11
8	Microphysical investigation of the seeder and feeder region of an Alpine mixed-phase cloud. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 6681-6706.	4.9	22
9	Tropospheric and stratospheric wildfire smoke profiling with lidar: mass, surface area, CCN, and INP retrieval. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 9779-9807.	4.9	45
10	Experimental assessment of a micro-pulse lidar system in comparison with reference lidar measurements for aerosol optical properties retrieval. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 5225-5239.	3.1	10
11	Contrasting ice formation in Arctic clouds: surface-coupled vs. surface-decoupled clouds. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 10357-10374.	4.9	22
12	Wildfire smoke, Arctic haze, and aerosol effects on mixed-phase and cirrus clouds over the North Pole region during MOSAIC: an introduction. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 13397-13423.	4.9	36
13	Advection of Biomass Burning Aerosols towards the Southern Hemispheric Mid-Latitude Station of Punta Arenas as Observed with Multiwavelength Polarization Raman Lidar. <i>Remote Sensing</i> , 2021, 13, 138.	4.0	14
14	The unexpected smoke layer in the High Arctic winter stratosphere during MOSAIC 2019â€“2020. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 15783-15808.	4.9	34
15	CALIPSO Aerosol-Typing Scheme Misclassified Stratospheric Fire Smoke: Case Study From the 2019 Siberian Wildfire Season. <i>Frontiers in Environmental Science</i> , 2021, 9, .	3.3	18
16	Hemispheric contrasts in ice formation in stratiform mixed-phase clouds: disentangling the role of aerosol and dynamics with ground-based remote sensing. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 17969-17994.	4.9	18
17	Smoke of extreme Australian bushfires observed in the stratosphere over Punta Arenas, Chile, in January 2020: optical thickness, lidar ratios, and depolarization ratios at 355 and 532â€“nm. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 8003-8015.	4.9	65
18	Profiling Aerosol Optical Properties at the Central Asian Site of Dushanbe, Tajikistan: Pure Dust Cases. <i>EPJ Web of Conferences</i> , 2020, 237, 02027.	0.3	0

#	ARTICLE	IF	CITATIONS
19	Automatic Lidar Calibration and Processing Program for Multiwavelength Raman Polarization Lidar. EPJ Web of Conferences, 2020, 237, 08007.	0.3	3
20	First Results from the German Cal/Val Activities for Aeolus. EPJ Web of Conferences, 2020, 237, 01008.	0.3	10
21	Continuos Monitoring of Liquid Water Clouds and Aerosols with Dual-FOV Lidar Polarization Technique. EPJ Web of Conferences, 2020, 237, 07005.	0.3	0
22	Long-term profiling of aerosol light extinction, particle mass, cloud condensation nuclei, and ice-nucleating particle concentration over Dushanbe, Tajikistan, in Central Asia. Atmospheric Chemistry and Physics, 2020, 20, 4695-4711.	4.9	27
23	Spatiotemporal variability of solar radiation introduced by clouds over Arctic sea ice. Atmospheric Measurement Techniques, 2020, 13, 1757-1775.	3.1	7
24	The dual-field-of-view polarization lidar technique: a new concept in monitoring aerosol effects in liquid-water clouds – theoretical framework. Atmospheric Chemistry and Physics, 2020, 20, 15247-15263.	4.9	19
25	The dual-field-of-view polarization lidar technique: a new concept in monitoring aerosol effects in liquid-water clouds – case studies. Atmospheric Chemistry and Physics, 2020, 20, 15265-15284.	4.9	25
26	Optical and geometrical aerosol particle properties over the United Arab Emirates. Atmospheric Chemistry and Physics, 2020, 20, 8909-8922.	4.9	29
27	Optical properties of Central Asian aerosol relevant for spaceborne lidar applications and aerosol typing at 355 and 532 nm. Atmospheric Chemistry and Physics, 2020, 20, 9265-9280.	4.9	33
28	Application of the shipborne remote sensing supersite OCEANET for profiling of Arctic aerosols and clouds during the Polarstern cruise PS106. Atmospheric Measurement Techniques, 2020, 13, 5335-5358.	3.1	28
29	Validation of Aeolus wind products above the Atlantic Ocean. Atmospheric Measurement Techniques, 2020, 13, 6007-6024.	3.1	33
30	Wildfire Smoke in the Stratosphere Over Europe – First Measurements of Depolarization and Lidar Ratios at 355, 532, and 1064 nm. EPJ Web of Conferences, 2020, 237, 02036.	0.3	0
31	Aerosol layer heights above Tajikistan during the CADEX campaign. E3S Web of Conferences, 2019, 99, 02009.	0.5	2
32	Impact of vertical air motions on ice formation rate in mixed-phase cloud layers. Npj Climate and Atmospheric Science, 2019, 2, .	6.8	7
33	EARLINET evaluation of the CATS Level 2 aerosol backscatter coefficient product. Atmospheric Chemistry and Physics, 2019, 19, 11743-11764.	4.9	16
34	peakTree: a framework for structure-preserving radar Doppler spectra analysis. Atmospheric Measurement Techniques, 2019, 12, 4813-4828.	3.1	14
35	CADEX and beyond: Installation of a new PollyXT site in Dushanbe. E3S Web of Conferences, 2019, 99, 02010.	0.5	0
36	Lidar/radar approach to quantify the dust impact on ice nucleation in mid and high level clouds. E3S Web of Conferences, 2019, 99, 04003.	0.5	1

#	ARTICLE	IF	CITATIONS
37	Retrieval of ice-nucleating particle concentrations from lidar observations and comparison with UAV in situ measurements. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 11315-11342.	4.9	53
38	Vertical aerosol distribution in the southern hemispheric midlatitudes as observed with lidar in Punta Arenas, Chile (53.2°S and 70.9°W), during ALPACA. <i>Atmospheric Chemistry and Physics</i> , 2019, <b>19</b> , 6217-6233.	4.9	16
39	Polarization lidar: an extended three-signal calibration approach. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 1077-1093.	3.1	10
40	Aerosol measurements with a shipborne Sun-sky-lunar photometer and collocated multiwavelength Raman polarization lidar over the Atlantic Ocean. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 5685-5698.	3.1	21
41	Ice-nucleating particle versus ice crystal number concentration in altocumulus and cirrus layers embedded in Saharan dust: a closure study. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 15087-15115.	4.9	49
42	The unprecedented 2017-2018 stratospheric smoke event: decay phase and aerosol properties observed with the EARLINET. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 15183-15198.	4.9	83
43	The Arctic Cloud Puzzle: Using A-CLOUD/PASCAL Multiplatform Observations to Unravel the Role of Clouds and Aerosol Particles in Arctic Amplification. <i>Bulletin of the American Meteorological Society</i> , 2019, 100, 841-871.	3.3	145
44	Mineral dust in Central Asia: Combining lidar and other measurements during the Central Asian dust experiment (CADEX). <i>EPJ Web of Conferences</i> , 2018, 176, 04009.	0.3	1
45	Ship-borne aerosol profiling with lidar over the Atlantic Ocean: from pure marine conditions to complex dust-smoke mixtures. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 9661-9679.	4.9	40
46	PollyNET - an emerging network of automated raman-polarization lidars for continuous aerosol profiling. <i>EPJ Web of Conferences</i> , 2018, 176, 09013.	0.3	1
47	Properties of arctic haze aerosol from lidar observations during iarea 2015 campaign on Spitsbergen. <i>EPJ Web of Conferences</i> , 2018, 176, 05024.	0.3	3
48	Wild fire aerosol optical properties measured by lidar at Haifa, Israel. <i>EPJ Web of Conferences</i> , 2018, 176, 05049.	0.3	3
49	Calibration of Raman lidar water vapor profiles by means of AERONET photometer observations and GDAS meteorological data. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 2735-2748.	3.1	21
50	Measurements of particle backscatter, extinction, and lidar ratio at 1064 nm with the rotational raman method in Polly-XT. <i>EPJ Web of Conferences</i> , 2018, 176, 01004.	0.3	1
51	Earlinet validation of CATS L2 product. <i>EPJ Web of Conferences</i> , 2018, 176, 02005.	0.3	0
52	Comparison between two lidar methods to retrieve microphysical properties of liquid-water clouds. <i>EPJ Web of Conferences</i> , 2018, 176, 01032.	0.3	4
53	Vertical profiles of aerosol mass concentration derived by unmanned airborne in situ and remote sensing instruments during dust events. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 2897-2910.	3.1	50
54	Aerosol absorption profiling from the synergy of lidar and sun-photometry: the ACTRIS-2 campaigns in Germany, Greece and Cyprus. <i>EPJ Web of Conferences</i> , 2018, 176, 08005.	0.3	5

#	ARTICLE	IF	CITATIONS
55	Extreme levels of Canadian wildfire smoke in the stratosphere over central Europe on 21â€“22 August 2017. Atmospheric Chemistry and Physics, 2018, 18, 11831-11845.	4.9	86
56	Depolarization and lidar ratios at 355, 532, and 1064â€“nm and microphysical properties of aged tropospheric and stratospheric Canadian wildfire smoke. Atmospheric Chemistry and Physics, 2018, 18, 11847-11861.	4.9	132
57	Triple-wavelength lidar observations of the linear depolarization ratio of dried marine particles. EPJ Web of Conferences, 2018, 176, 05014.	0.3	0
58	Experimental techniques for the calibration of lidar depolarization channels in EARLINET. Atmospheric Measurement Techniques, 2018, 11, 1119-1141.	3.1	35
59	Lidar Ice nuclei estimates and how they relate with airborne in-situ measurements. EPJ Web of Conferences, 2018, 176, 05018.	0.3	0
60	Mineral dust in central asia: 18-month lidar measurements in tajikistan during the central Asian dust experiment (CADEX). EPJ Web of Conferences, 2018, 176, 04001.	0.3	3
61	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
62	Profiling of Saharan dust from the Caribbean to western Africa â€“ Part 1: Layering structures and optical properties from shipborne polarization/Raman lidar observations. Atmospheric Chemistry and Physics, 2017, 17, 12963-12983.	4.9	35
63	Long-term profiling of mineral dust and pollution aerosol with multiwavelength polarization Raman lidar at the Central Asian site of Dushanbe, Tajikistan: case studies. Atmospheric Chemistry and Physics, 2017, 17, 14559-14577.	4.9	93
64	Profiling of Saharan dust from the Caribbean to western Africa â€“ Part 2: Shipborne lidar measurements versus forecasts. Atmospheric Chemistry and Physics, 2017, 17, 14987-15006.	4.9	43
65	Detecting volcanic sulfur dioxide plumes in the Northern Hemisphere using the Brewer spectrophotometers, other networks, and satellite observations. Atmospheric Chemistry and Physics, 2017, 17, 551-574.	4.9	18
66	Target categorization of aerosol and clouds by continuous multiwavelength-polarization lidar measurements. Atmospheric Measurement Techniques, 2017, 10, 3175-3201.	3.1	66
67	GARRLIC and LIRIC: strengths and limitations for the characterization of dust and marine particles along with their mixtures. Atmospheric Measurement Techniques, 2017, 10, 4995-5016.	3.1	42
68	Effect of Heat Wave Conditions on Aerosol Optical Properties Derived from Satellite and Ground-Based Remote Sensing over Poland. Remote Sensing, 2017, 9, 1199.	4.0	26
69	Retrieval of microphysical properties of liquid water clouds from atmospheric lidar measurements: comparison of the Raman dual field of view and the depolarization techniques. , 2017, , .		4
70	Central Asian Dust EXperiment (CADEX): Long-term Aerosol Profiling in Tajikistan. , 2017, , .		0
71	Strategic positioning of the ERATOSTHENES Research Centre for atmospheric remote sensing research in the Eastern Mediterranean and Middle East region. , 2017, , .		1
72	Study Case of Air-Mass Modification over Poland and Romania Observed by the Means of Multiwavelength Raman Depolarization Lidars. EPJ Web of Conferences, 2016, 119, 08008.	0.3	0

#	ARTICLE	IF	CITATIONS
73	Central Asian Dust Experiment (CADEX): Multiwavelength Polarization Raman Lidar Observations in Tajikistan. EPJ Web of Conferences, 2016, 119, 18006.	0.3	2
74	EARLINET instrument intercomparison campaigns: overview on strategy and results. Atmospheric Measurement Techniques, 2016, 9, 1001-1023.	3.1	58
75	Observation of Arabian and Saharan Dust in Cyprus with a New Generation of the Smart Raman Lidar Polly. EPJ Web of Conferences, 2016, 119, 27003.	0.3	3
76	Near-Range Receiver Unit of Next Generation PollyXTUsed with Koldeway Aerosol Raman Lidar in Arctic. EPJ Web of Conferences, 2016, 119, 06015.	0.3	3
77	The automated multiwavelength Raman polarization and water-vapor lidar Polly&lt;sup&gt;XT&lt;/sup&gt;; the neXT generation. Atmospheric Measurement Techniques, 2016, 9, 1767-1784.	3.1	249
78	1064â€nm rotational Raman lidar for particle extinction and lidar-ratio profiling: cirrus case study. Atmospheric Measurement Techniques, 2016, 9, 4269-4278.	3.1	52
79	Lidar Measurements of Canadian Forest Fire Smoke Episode Observed in July 2013 over Warsaw, Poland. EPJ Web of Conferences, 2016, 119, 18005.	0.3	4
80	BAECC: A Field Campaign to Elucidate the Impact of Biogenic Aerosols on Clouds and Climate. Bulletin of the American Meteorological Society, 2016, 97, 1909-1928.	3.3	71
81	Application of the Garrlic Algorithm for the Characterization of Dust and Marine Particles Utilizing the Lidar-Sunphotometer Synergy. EPJ Web of Conferences, 2016, 119, 23021.	0.3	2
82	Four-year long-path monitoring of ambient aerosol extinction at a central European urban site: dependence on relative humidity. Atmospheric Chemistry and Physics, 2016, 16, 1863-1876.	4.9	19
83	An overview of the first decade of Polly&lt;sup&gt;NET&lt;/sup&gt;; an emerging network of automated Raman-polarization lidars for continuous aerosol profiling. Atmospheric Chemistry and Physics, 2016, 16, 5111-5137.	4.9	212
84	HETEAC: The Aerosol Classification Model for EarthCARE. EPJ Web of Conferences, 2016, 119, 01004.	0.3	26
85	Measurement of the Linear Depolarization Ratio of Aged Dust at Three Wavelengths (355, 532 and 1064) Tj ETQq11 0.784314 rgBT 0.3 18	0.3	18
86	Free Tropospheric Aerosols Over South Africa. EPJ Web of Conferences, 2016, 119, 23015.	0.3	0
87	Central Asian Dust EXperiment (CADEX): First Year Lidar Observations. , 2016, , .		2
88	Relationship between temperature and apparent shape of pristine ice crystals derived from polarimetric cloud radar observations during the ACCEPT campaign. Atmospheric Measurement Techniques, 2016, 9, 3739-3754.	3.1	38
89	Assessment of lidar depolarization uncertainty by means of a polarimetric lidar simulator. Atmospheric Measurement Techniques, 2016, 9, 4935-4953.	3.1	38
90	One year of Raman lidar observations of free-tropospheric aerosol layers over South Africa. Atmospheric Chemistry and Physics, 2015, 15, 5429-5442.	4.9	26

#	ARTICLE	IF	CITATIONS
91	Seasonal variability of heterogeneous ice formation in stratiform clouds over the Amazon Basin. Geophysical Research Letters, 2015, 42, 5587-5593.	4.0	19
92	Tracking the Saharan Air Layer with shipborne lidar across the tropical Atlantic. Geophysical Research Letters, 2014, 41, 1044-1050.	4.0	49
93	Surface matters: limitations of CALIPSO V3 aerosol typing in coastal regions. Atmospheric Measurement Techniques, 2014, 7, 2061-2072.	3.1	25
94	The Spectral Aerosol Extinction Monitoring System (S <sub>4</sub> EMS): setup, observational products, and comparisons. Atmospheric Measurement Techniques, 2014, 7, 701-712.	3.1	14
95	Atmospheric boundary layer top height in South Africa: measurements with lidar and radiosonde compared to three atmospheric models. Atmospheric Chemistry and Physics, 2014, 14, 4263-4278.	4.9	65
96	PollyNET: a network of multiwavelength polarization Raman lidars. , 2013, , .		12
97	Toward a quantitative characterization of heterogeneous ice formation with lidar/radar: Comparison of CALIPSO/CloudSat with ground-based observations. Geophysical Research Letters, 2013, 40, 4404-4408.	4.0	64
98	North-south cross sections of the vertical aerosol distribution over the Atlantic Ocean from multiwavelength Raman/polarization lidar during Polarstern cruises. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2643-2655.	3.3	53
99	LACROS: the Leipzig Aerosol and Cloud Remote Observations System. Proceedings of SPIE, 2013, , .	0.8	25
100	Removing the Laser-Chirp Influence from Coherent Doppler Lidar Datasets by Two-Dimensional Deconvolution. Journal of Atmospheric and Oceanic Technology, 2012, 29, 1042-1051.	1.3	11
101	Technical Note: One year of Raman-lidar measurements in Gual Pahari EUCAARI site close to New Delhi in India – Seasonal characteristics of the aerosol vertical structure. Atmospheric Chemistry and Physics, 2012, 12, 4513-4524.	4.9	63
102	The water vapour intercomparison effort in the framework of the Convective and Orographically-Induced Precipitation Study: airborne-to-ground-based and airborne-to-airborne lidar systems. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 325-348.	2.7	66
103	The Convective and Orographically-Induced Precipitation Study (COPS): the scientific strategy, the field phase, and research highlights. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 3-30.	2.7	181
104	Comparison of Raman Lidar Observations of Water Vapor with COSMO-DE Forecasts during COPS 2007. Weather and Forecasting, 2011, 26, 1056-1066.	1.4	6
105	Updraft and downdraft characterization with Doppler lidar: cloud-free versus cumuli-topped mixed layer. Atmospheric Chemistry and Physics, 2010, 10, 7845-7858.	4.9	46
106	Portable Raman Lidar PollyXT for Automated Profiling of Aerosol Backscatter, Extinction, and Depolarization. Journal of Atmospheric and Oceanic Technology, 2009, 26, 2366-2378.	1.3	145
107	Water vapour intercomparison effort in the frame of the Convective and Orographically-Induced Precipitation Study. , 2009, , .		0
108	Dust and smoke transport from Africa to South America: Lidar profiling over Cape Verde and the Amazon rainforest. Geophysical Research Letters, 2009, 36, .	4.0	146

#	ARTICLE	IF	CITATIONS
109	Four-Dimensional Variational Data Analysis of Water Vapor Raman Lidar Data and Their Impact on Mesoscale Forecasts. Journal of Atmospheric and Oceanic Technology, 2008, 25, 1437-1453.	1.3	32
110	Lidar Observations of the Vertical Aerosol Flux in the Planetary Boundary Layer. Journal of Atmospheric and Oceanic Technology, 2008, 25, 1296-1306.	1.3	48
111	Continuous monitoring of the boundary-layer top with lidar. Atmospheric Chemistry and Physics, 2008, 8, 7281-7296.	4.9	226
112	Particle backscatter, extinction, and lidar ratio profiling with Raman lidar in south and north China. Applied Optics, 2007, 46, 6302.	2.1	59
113	High aerosol load over the Pearl River Delta, China, observed with Raman lidar and Sun photometer. Geophysical Research Letters, 2005, 32, .	4.0	72