

# Detlef Mueller

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2492320/publications.pdf>

Version: 2024-02-01

178  
papers

10,497  
citations

29994

54  
h-index

51492

86  
g-index

206  
all docs

206  
docs citations

206  
times ranked

4519  
citing authors

#	ARTICLE	IF	CITATIONS
1	Aerosol type-dependent lidar ratios observed with Raman lidar. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	442
2	Depolarization ratio profiling at several wavelengths in pure Saharan dust during SAMUM 2006. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 61, 165.	0.8	436
3	Microphysical particle parameters from extinction and backscatter lidar data by inversion with regularization: theory. <i>Applied Optics</i> , 1999, 38, 2346.	2.1	309
4	Systematic lidar observations of Saharan dust over Europe in the frame of EARLINET (2000â€“2002). <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	295
5	Vertically resolved separation of dust and smoke over Cape Verde using multiwavelength Raman and polarization lidars during Saharan Mineral Dust Experiment 2008. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	292
6	Inversion with regularization for the retrieval of tropospheric aerosol parameters from multiwavelength lidar sounding. <i>Applied Optics</i> , 2002, 41, 3685.	2.1	239
7	Long-range transport of Saharan dust to northern Europe: The 11-16 October 2001 outbreak observed with EARLINET. <i>Journal of Geophysical Research</i> , 2003, 108, n/a-n/a.	3.3	229
8	Raman lidar observations of aged Siberian and Canadian forest fire smoke in the free troposphere over Germany in 2003: Microphysical particle characterization. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	207
9	The 16 April 2010 major volcanic ash plume over central Europe: EARLINET lidar and AERONET photometer observations at Leipzig and Munich, Germany. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	202
10	Vertical profiling of Saharan dust with Raman lidars and airborne HSRL in southern Morocco during SAMUM. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 61, 144.	0.8	196
11	Saharan Mineral Dust Experiments SAMUMâ€™1 and SAMUMâ€™2: what have we learned?. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 63, 403.	0.8	187
12	Characterization of Asian dust and Siberian smoke with multi-wavelength Raman lidar over Tokyo, Japan in spring 2003. <i>Geophysical Research Letters</i> , 2004, 31, .	1.5	182
13	Optical and microphysical characterization of biomass-burning and industrial-pollution aerosols from multiwavelength lidar and aircraft measurements. <i>Journal of Geophysical Research</i> , 2002, 107, LAC 7-1-LAC 7-20.	3.3	169
14	Dual-wavelength Raman lidar observations of the extinction-to-backscatter ratio of Saharan dust. <i>Geophysical Research Letters</i> , 2002, 29, 20-1-20-4.	1.5	162
15	Measuring atmospheric composition change. <i>Atmospheric Environment</i> , 2009, 43, 5351-5414.	1.9	160
16	Influence of Saharan dust on cloud glaciation in southern Morocco during the Saharan Mineral Dust Experiment. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	156
17	Dust and smoke transport from Africa to South America: Lidar profiling over Cape Verde and the Amazon rainforest. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	146
18	Portable Raman Lidar PollyXT for Automated Profiling of Aerosol Backscatter, Extinction, and Depolarization. <i>Journal of Atmospheric and Oceanic Technology</i> , 2009, 26, 2366-2378.	0.5	145

#	ARTICLE	IF	CITATIONS
19	Inversion of multiwavelength Raman lidar data for retrieval of bimodal aerosol size distribution. <i>Applied Optics</i> , 2004, 43, 1180.	2.1	140
20	Multiyear aerosol observations with dual-wavelength Raman lidar in the framework of EARLINET. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a.	3.3	136
21	Evolution of the ice phase in tropical altocumulus: SAMUM lidar observations over Cape Verde. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	128
22	Profiling of Saharan dust and biomass-burning smoke with multiwavelength polarization Raman lidar at Cape Verde. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 63, 649.	0.8	128
23	Scanning 6-Wavelength 11-Channel Aerosol Lidar. <i>Journal of Atmospheric and Oceanic Technology</i> , 2000, 17, 1469-1482.	0.5	123
24	Microphysical particle parameters from extinction and backscatter lidar data by inversion with regularization: simulation. <i>Applied Optics</i> , 1999, 38, 2358.	2.1	117
25	Optical and microphysical properties of fresh biomass burning aerosol retrieved by Raman lidar, and star-and sun-photometry. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	117
26	Microphysical aerosol parameters from multiwavelength lidar. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2005, 22, 518.	0.8	113
27	Optical properties of the Indo-Asian haze layer over the tropical Indian Ocean. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	104
28	Saharan dust and heterogeneous ice formation: Eleven years of cloud observations at a central European EARLINET site. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	102
29	Saharan dust over a central European EARLINET-AERONET site: Combined observations with Raman lidar and Sun photometer. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	98
30	Relative-humidity profiling in the troposphere with a Raman lidar. <i>Applied Optics</i> , 2002, 41, 6451.	2.1	95
31	Aerosol profiling with lidar in the Amazon Basin during the wet and dry season. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	95
32	Vertical profiling of the Indian aerosol plume with six-wavelength lidar during INDOEX: A first case study. <i>Geophysical Research Letters</i> , 2000, 27, 963-966.	1.5	90
33	Optical and microphysical properties of smoke over Cape Verde inferred from multiwavelength lidar measurements. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 63, 677.	0.8	90
34	Characterization of fresh and aged biomass burning events using multiwavelength Raman lidar and mass spectrometry. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 2956-2965.	1.2	89
35	Comprehensive particle characterization from three-wavelength Raman-lidar observations: case study. <i>Applied Optics</i> , 2001, 40, 4863.	2.1	88
36	Lidar Measurements for Desert Dust Characterization: An Overview. <i>Advances in Meteorology</i> , 2012, 2012, 1-36.	0.6	88

#	ARTICLE	IF	CITATIONS
37	Atmospheric dust modeling from meso to global scales with the online NMMB/BSC-Dust model – Part 2: Experimental campaigns in Northern Africa. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 2933-2958.	1.9	87
38	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.	1.9	83
39	Lidar and Atmospheric Aerosol Particles. , 2005, , 105-141.		82
40	Ice formation in Saharan dust over central Europe observed with temperature/humidity/aerosol Raman lidar. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	81
41	European pollution outbreaks during ACE 2: Optical particle properties inferred from multiwavelength lidar and star-Sun photometry. <i>Journal of Geophysical Research</i> , 2002, 107, AAC 8-1.	3.3	80
42	Ten years of multiwavelength Raman lidar observations of free-tropospheric aerosol layers over central Europe: Geometrical properties and annual cycle. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	80
43	Dust mobilization and transport in the northern Sahara during SAMUM 2006 – a meteorological overview. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 61, 12.	0.8	79
44	Airborne Multiwavelength High Spectral Resolution Lidar (HSRL-2) observations during TCAP 2012: vertical profiles of optical and microphysical properties of a smoke/urban haze plume over the northeastern coast of the US. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 3487-3496.	1.2	79
45	European pollution outbreaks during ACE 2: Lofted aerosol plumes observed with Raman lidar at the Portuguese coast. <i>Journal of Geophysical Research</i> , 2001, 106, 20725-20733.	3.3	76
46	Size matters: Influence of multiple scattering on CALIPSO light-extinction profiling in desert dust. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	75
47	Volcanic aerosol layers observed with multiwavelength Raman lidar over central Europe in 2008–2009. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	73
48	Information content of multiwavelength lidar data with respect to microphysical particle properties derived from eigenvalue analysis. <i>Applied Optics</i> , 2005, 44, 5292.	2.1	72
49	High aerosol load over the Pearl River Delta, China, observed with Raman lidar and Sun photometer. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	72
50	Multiwavelength Raman lidar observations of particle growth during long-range transport of forest-fire smoke in the free troposphere. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	71
51	Ground-based validation of CALIPSO observations of dust and smoke in the Cape Verde region. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 2889-2902.	1.2	70
52	Optical and microphysical properties of severe haze and smoke aerosol measured by integrated remote sensing techniques in Gwangju, Korea. <i>Atmospheric Environment</i> , 2009, 43, 879-888.	1.9	69
53	Vertical profiling of convective dust plumes in southern Morocco during SAMUM. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 61, 340.	0.8	68
54	Spectral surface albedo over Morocco and its impact on radiative forcing of Saharan dust. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 61, 252.	0.8	68

#	ARTICLE	IF	CITATIONS
55	Seasonal characteristics of lidar ratios measured with a Raman lidar at Gwangju, Korea in spring and autumn. <i>Atmospheric Environment</i> , 2008, 42, 2208-2224.	1.9	67
56	The water vapour intercomparison effort in the framework of the Convective and Orographically-induced Precipitation Study: airborne-ground-based and airborne-airborne lidar systems. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2011, 137, 325-348.	1.0	66
57	One-year observations of particle lidar ratio over the tropical Indian Ocean with Raman lidar. <i>Geophysical Research Letters</i> , 2001, 28, 4559-4562.	1.5	65
58	Microphysical particle parameters from extinction and backscatter lidar data by inversion with regularization: experiment. <i>Applied Optics</i> , 2000, 39, 1879.	2.1	64
59	Cirrus optical properties observed with lidar, radiosonde, and satellite over the tropical Indian Ocean during the aerosol-polluted northeast and clean maritime southwest monsoon. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	64
60	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. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 4513-4524.	1.9	63
61	Unexpectedly high aerosol load in the free troposphere over central Europe in spring/summer 2003. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	62
62	Indo-Asian pollution during INDOEX: Microphysical particle properties and single-scattering albedo inferred from multiwavelength lidar observations. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	61
63	Comparison of optical and microphysical properties of pure Saharan mineral dust observed with AERONET Sun photometer, Raman lidar, and in situ instruments during SAMUM 2006. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	61
64	Vertical profiles of pure dust and mixed smoke – dust plumes inferred from inversion of multiwavelength Raman/polarization lidar data and comparison to AERONET retrievals and in situ observations. <i>Applied Optics</i> , 2013, 52, 3178.	0.9	61
65	Radiative and dynamic effects of absorbing aerosol particles over the Pearl River Delta, China. <i>Atmospheric Environment</i> , 2008, 42, 6405-6416.	1.9	60
66	Effect of internal mixture on black carbon radiative forcing. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 64, 10925.	0.8	60
67	Particle backscatter, extinction, and lidar ratio profiling with Raman lidar in south and north China. <i>Applied Optics</i> , 2007, 46, 6302.	2.1	59
68	Optical properties of aerosol mixtures derived from sun-sky radiometry during SAMUM-2. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 63, 635.	0.8	58
69	Desert dust aerosol air mass mapping in the western Sahara, using particle properties derived from space-based multi-angle imaging. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 61, 239.	0.8	57
70	Spectral aerosol optical depth characterization of desert dust during SAMUM 2006. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2009, 61, 216-228.	0.8	57
71	Retrieval of physical particle properties from lidar observations of extinction and backscatter at multiple wavelengths. <i>Applied Optics</i> , 1998, 37, 2260.	2.1	56
72	Vertical profiling of optical and physical particle properties over the tropical Indian Ocean with six-wavelength lidar: 1. Seasonal cycle. <i>Journal of Geophysical Research</i> , 2001, 106, 28567-28575.	3.3	55

#	ARTICLE	IF	CITATIONS
73	Daytime operation of a pure rotational Raman lidar by use of a Fabry-Pérot interferometer. <i>Applied Optics</i> , 2005, 44, 3593.	2.1	55
74	On the spectral depolarisation and lidar ratio of mineral dust provided in the AERONET version 3 inversion product. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 12735-12746.	1.9	53
75	Aerosol-type classification based on AERONET version 3 inversion products. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 3789-3803.	1.2	52
76	Vertical profiling of optical and physical particle properties over the tropical Indian Ocean with six-wavelength lidar: 2. Case studies. <i>Journal of Geophysical Research</i> , 2001, 106, 28577-28595.	3.3	51
77	Optical and microphysical characterization of aerosol layers over South Africa by means of multi-wavelength depolarization and Raman lidar measurements. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 8109-8123.	1.9	51
78	Calibration of a high spectral resolution lidar using a Michelson interferometer, with data examples from ORACLES. <i>Applied Optics</i> , 2018, 57, 6061.	0.9	51
79	Mineral dust observed with AERONET Sun photometer, Raman lidar, and in situ instruments during SAMUM 2006: Shape-independent particle properties. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	49
80	Lidar Observations of the Vertical Aerosol Flux in the Planetary Boundary Layer. <i>Journal of Atmospheric and Oceanic Technology</i> , 2008, 25, 1296-1306.	0.5	48
81	Regional Saharan dust modelling during the SAMUM 2006 campaign. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 61, 307.	0.8	48
82	EARLINET observations of the 14-May long-range dust transport event during SAMUM 2006: validation of results from dust transport modelling. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 61, 325.	0.8	47
83	Regional modelling of Saharan dust and biomass-burning smoke: Part 1: Model description and evaluation. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 63, 781.	0.8	47
84	Microphysical particle properties derived from inversion algorithms developed in the framework of EARLINET. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 5007-5035.	1.2	47
85	Strong particle light absorption over the Pearl River Delta (south China) and Beijing (north China) determined from combined Raman lidar and Sun photometer observations. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	46
86	HSRL-2 aerosol optical measurements and microphysical retrievals vs. airborne in situ measurements during DISCOVER-AQ 2013: an intercomparison study. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 7229-7243.	1.9	46
87	European pollution outbreaks during ACE 2: Microphysical particle properties and single-scattering albedo inferred from multiwavelength lidar observations. <i>Journal of Geophysical Research</i> , 2002, 107, AAC 3-1.	3.3	44
88	Regional dust model performance during SAMUM 2006. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	41
89	Investigation of the diurnal pattern of the vertical distribution of pollen in the lower troposphere using LIDAR. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 7619-7629.	1.9	41
90	Physical properties of the Indian aerosol plume derived from six-wavelength lidar Observations on 25 March 1999 of the Indian Ocean Experiment. <i>Geophysical Research Letters</i> , 2000, 27, 1403-1406.	1.5	40

#	ARTICLE	IF	CITATIONS
91	Mineral dust observed with AERONET Sun photometer, Raman lidar, and in situ instruments during SAMUM 2006: Shape-dependent particle properties. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	38
92	Eruption of the Eyjafjallajökull Volcano in spring 2010: Multiwavelength Raman lidar measurements of sulphate particles in the lower troposphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 1804-1813.	1.2	38
93	Closure study on optical and microphysical properties of a mixed urban and Arctic haze air mass observed with Raman lidar and Sun photometer. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a.	3.3	37
94	Multi-wavelength Raman lidar, sun photometric and aircraft measurements in combination with inversion models for the estimation of the aerosol optical and physico-chemical properties over Athens, Greece. <i>Atmospheric Measurement Techniques</i> , 2012, 5, 1793-1808.	1.2	37
95	Theory of inversion with two-dimensional regularization: profiles of microphysical particle properties derived from multiwavelength lidar measurements. <i>Applied Optics</i> , 2008, 47, 4472.	2.1	36
96	Retrieval of aerosol parameters from multiwavelength lidar: investigation of the underlying inverse mathematical problem. <i>Applied Optics</i> , 2016, 55, 2188.	2.1	36
97	Systematic error of lidar profiles caused by a polarization-dependent receiver transmission: quantification and error correction scheme. <i>Applied Optics</i> , 2009, 48, 2742.	2.1	35
98	Vertical variation of optical properties of mixed Asian dust/pollution plumes according to pathway of air mass transport over East Asia. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 6707-6720.	1.9	33
99	Aerosol lofting from sea breeze during the Indian Ocean Experiment. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	32
100	Vertically resolved light-absorption characteristics and the influence of relative humidity on particle properties: Multiwavelength Raman lidar observations of East Asian aerosol types over Korea. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	32
101	An intercomparison of aerosol light extinction and 180° backscatter as derived using in situ instruments and Raman lidar during the INDOEX field campaign. <i>Journal of Geophysical Research</i> , 2002, 107, INX2 13-1.	3.3	31
102	Influence of biogenic pollen on optical properties of atmospheric aerosols observed by lidar over Gwangju, South Korea. <i>Atmospheric Environment</i> , 2013, 69, 139-147.	1.9	30
103	Depolarization ratios retrieved by AERONET sun-sky radiometer data and comparison to depolarization ratios measured with lidar. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 6271-6290.	1.9	30
104	Arrange and average algorithm for the retrieval of aerosol parameters from multiwavelength high-spectral-resolution lidar/Raman lidar data. <i>Applied Optics</i> , 2014, 53, 7252.	2.1	27
105	Estimation of radiative forcing by the dust and non-dust content in mixed East Asian pollution plumes on the basis of depolarization ratios measured with lidar. <i>Atmospheric Environment</i> , 2012, 61, 221-231.	1.9	26
106	Technical note: Absorption aerosol optical depth components from AERONET observations of mixed dust plumes. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 607-618.	1.2	26
107	Retrieval of aerosol properties from combined multiwavelength lidar and sunphotometer measurements. <i>Applied Optics</i> , 2006, 45, 7429.	2.1	25
108	Retrieval of aerosol optical thickness for desert conditions using MERIS observations during the SAMUM campaign. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 61, 229.	0.8	25

#	ARTICLE	IF	CITATIONS
109	Dual-FOV Raman and Doppler lidar studies of aerosol-cloud interactions: Simultaneous profiling of aerosols, warm-cloud properties, and vertical wind. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 5512-5527.	1.2	25
110	Vertical profiles of microphysical particle properties derived from inversion with two-dimensional regularization of multiwavelength Raman lidar data: experiment. <i>Applied Optics</i> , 2011, 50, 2069.	2.1	22
111	Measurements of desert dust optical characteristics at Porte au Sahara during SAMUM. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 61, 206.	0.8	21
112	Retrieval of microphysical properties of aerosol particles from one-wavelength Raman lidar and multiwavelength Sun photometer observations. <i>Atmospheric Environment</i> , 2008, 42, 6398-6404.	1.9	20
113	Mineral quartz concentration measurements of mixed mineral dust/urban haze pollution plumes over Korea with multiwavelength aerosol Raman-quartz lidar. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	20
114	Comparison of the radiative impact of aerosols derived from vertically resolved (lidar) and vertically integrated (Sun photometer) measurements: Example of an Indian aerosol plume. <i>Journal of Geophysical Research</i> , 2001, 106, 22861-22870.	3.3	17
115	Lidar measurements of Raman scattering at ultraviolet wavelength from mineral dust over East Asia. <i>Optics Express</i> , 2011, 19, 1569.	1.7	17
116	Influence of the vertical absorption profile of mixed Asian dust plumes on aerosol direct radiative forcing over East Asia. <i>Atmospheric Environment</i> , 2016, 138, 191-204.	1.9	17
117	Automated, unsupervised inversion of multiwavelength lidar data with TiARA: assessment of retrieval performance of microphysical parameters using simulated data. <i>Applied Optics</i> , 2019, 58, 4981.	0.9	17
118	Aerosol indirect effects as a function of cloud top pressure. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	16
119	Record heavy mineral dust outbreaks over Korea in 2010: Two cases observed with multiwavelength aerosol/depolarization/Raman-quartz lidar. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	16
120	3+2%+&lt;i&gt;X&lt;/i&gt;: what is the most useful depolarization input for retrieving microphysical properties of non-spherical particles from lidar measurements using the spheroid model of Dubovik et al. (2006)? <i>Atmospheric Measurement Techniques</i> , 2019, 12, 4421-4437.	1.2	16
121	Estimation of the microphysical aerosol properties over Thessaloniki, Greece, during the SCOUT <sub>3</sub> campaign with the synergy of Raman lidar and Sun photometer data. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	15
122	The retrieval of the Asian dust depolarization ratio in Korea with the correction of the polarization-dependent transmission. <i>Asia-Pacific Journal of Atmospheric Sciences</i> , 2013, 49, 19-25.	1.3	15
123	A new method to retrieve the real part of the equivalent refractive index of atmospheric aerosols. <i>Journal of Aerosol Science</i> , 2018, 117, 54-62.	1.8	15
124	Improved identification of the solution space of aerosol microphysical properties derived from the inversion of profiles of lidar optical data, part 1: theory. <i>Applied Optics</i> , 2016, 55, 9839.	2.1	14
125	Airborne observations of dry particle absorption and scattering properties over the northern Indian Ocean. <i>Journal of Geophysical Research</i> , 2002, 107, INX2 34-1.	3.3	12
126	Arctic haze over Central Europe. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2003, 55, 796-807.	0.8	12



#	ARTICLE	IF	CITATIONS
127	Particle extinction measured at ambient conditions with differential optical absorption spectroscopy 1 System setup and characterization. <i>Applied Optics</i> , 2005, 44, 1657.	2.1	10
128	Aerosol optical and microphysical retrievals from a hybrid multiwavelength lidar data set "DISCOVER-AQ 2011". <i>Atmospheric Measurement Techniques</i> , 2014, 7, 3095-3112.	1.2	10
129	Retrieval of the single scattering albedo of Asian dust mixed with pollutants using lidar observations. <i>Advances in Atmospheric Sciences</i> , 2014, 31, 1417-1426.	1.9	10
130	Influence of wind speed on optical properties of aerosols in the marine boundary layer measured by ship-borne DePolarization Lidar in the coastal area of Korea. <i>Atmospheric Environment</i> , 2014, 83, 282-290.	1.9	10
131	EARLINET correlative measurements for CALIPSO. , 2007, , .		9
132	EARLINET observations of the Eyjafjallajökull ash plume over Europe. , 2010, , .		9
133	Vertically-resolved profiles of mass concentrations and particle backscatter coefficients of Asian dust plumes derived from lidar observations of silicon dioxide. <i>Chemosphere</i> , 2016, 143, 24-31.	4.2	8
134	Tropospheric aerosol layers after a cold front passage in January 2000 as observed at several stations of the German Lidar Network. <i>Atmospheric Research</i> , 2002, 63, 39-58.	1.8	7
135	Particle extinction measured at ambient conditions with differential optical absorption spectroscopy 2 Closure study. <i>Applied Optics</i> , 2006, 45, 2295.	2.1	7
136	Utilization of the depolarization ratio derived by AERONET Sun/sky radiometer data for type confirmation of a mixed aerosol plume over East Asia. <i>International Journal of Remote Sensing</i> , 2016, 37, 2180-2197.	1.3	7
137	Variation of the vertical distribution of Nabro volcano aerosol layers in the stratosphere observed by LIDAR. <i>Atmospheric Environment</i> , 2017, 154, 1-8.	1.9	7
138	Measurement report: Balloon-borne in situ profiling of Saharan dust over Cyprus with the UCASS optical particle counter. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 6781-6797.	1.9	7
139	Optimization of lidar data processing: a goal of the EARLINET-ASOS project. , 2007, , .		6
140	Depolarization Ratio Retrievals Using AERONET Sun Photometer Data. <i>Journal of the Optical Society of Korea</i> , 2010, 14, 178-184.	0.6	6
141	Comparison of Raman Lidar Observations of Water Vapor with COSMO-DE Forecasts during COPS 2007. <i>Weather and Forecasting</i> , 2011, 26, 1056-1066.	0.5	6
142	Columnar aerosol optical and radiative properties according to season and air mass transport pattern over East Asia. <i>Environmental Monitoring and Assessment</i> , 2012, 184, 4763-4775.	1.3	6
143	Potential of lidar backscatter data to estimate solar aerosol radiative forcing. <i>Applied Optics</i> , 2006, 45, 770.	2.1	5
144	Improved identification of the solution space of aerosol microphysical properties derived from the inversion of profiles of lidar optical data, part 2: simulations with synthetic optical data. <i>Applied Optics</i> , 2016, 55, 9850.	2.1	5

#	ARTICLE	IF	CITATIONS
145	Aerosol absorption profiling from the synergy of lidar and sun-photometry: the ACTRIS-2 campaigns in Germany, Greece and Cyprus. EPJ Web of Conferences, 2018, 176, 08005.	0.1	5
146	Improved identification of the solution space of aerosol microphysical properties derived from the inversion of profiles of lidar optical data, part 3: case studies. Applied Optics, 2018, 57, 2499.	0.9	5
147	Arctic haze over Central Europe. Tellus, Series B: Chemical and Physical Meteorology, 2022, 55, 796.	0.8	4
148	LITES: rotational Raman spectra of air molecules measured by high-resolution-spectroscopy lidar. Optics Letters, 2021, 46, 5173.	1.7	3
149	Retrieval of Lidar Overlap Factor using Raman Lidar System. Journal of Korean Society for Atmospheric Environment, 2009, 25, 450-458.	0.2	3
150	Retrieval of Aerosol Microphysical Parameter by Inversion Algorithm using Multi-wavelength Raman Lidar Data. Journal of Korean Society for Atmospheric Environment, 2007, 23, 97-109.	0.2	3
151	Studying Taklamakan aerosol properties with lidar (STAPL). Proceedings of SPIE, 2013, , .	0.8	2
152	Instantaneous Monitoring of Pollen Distribution in the Atmosphere by Surface-based Lidar. Korean Journal of Remote Sensing, 2012, 28, 1-9.	0.4	2
153	Temperature profiling in the atmosphere using lidars. , 2001, 4397, 453.		1
154	Vertical profiles of atmospheric particle parameters measured with a scanning 6-wavelength 11-channel aerosol lidar. , 2003, 5086, 139.		1
155	Characterization of atmospheric aerosols with multiwavelength Raman lidar. Proceedings of SPIE, 2007, , .	0.8	1
156	EARLINET: the European Aerosol Research Lidar Network for the Aerosol Climatology on Continental Scale. , 2009, , .		1
157	Correction to "Volcanic aerosol layers observed with multiwavelength Raman lidar over central Europe in 2008" Journal of Geophysical Research, 2010, 115, .	3.3	1
158	Possibilities of the multichannel lidar spectrometer technique for investigation of the atmospheric aerosols and pollutions. , 2010, , .		1
159	Atmospheric aerosol characterization combining multi-wavelength Raman lidar and MAX-DOAS measurements in Gwanjgu. , 2011, , .		1
160	Lidar profiling of aerosol optical and microphysical properties from space: overview, review, and outlook. , 2013, , .		1
161	Tropospheric Vertical Profiles of Aerosol Optical, Microphysical and Concentration Properties in the Frame of the Hygra-CD Campaign (Athens, Greece 2014): A Case Study of Long-Range Transport of Mixed Aerosols. EPJ Web of Conferences, 2016, 119, 23016.	0.1	1
162	Perspectives of the Explicit Retrieval of the Complex Refractive Index of Aerosols from Optical Data Taken with Lidar. EPJ Web of Conferences, 2016, 119, 17016.	0.1	1

#	ARTICLE	IF	CITATIONS
163	Raman Lidar for Monitoring of Aerosol Pollution in the Free Troposphere. , 2008, , 155-166.		1
164	Investigation of Source Dependent Optical and Microphysical Characteristics of Aerosol Using Multi-wavelength Raman Lidar in Anmyun, Korea. Journal of Korean Society for Atmospheric Environment, 2010, 26, 554-566.	0.2	1
165	Retrieval of Pollen Optical Depth in the Local Atmosphere by Lidar Observations. Korean Journal of Remote Sensing, 2012, 28, 11-19.	0.4	1
166	Retrieval of Dust Backscatter Coefficient using Quartz Raman Channel in Lidar Measurements. Journal of Korean Society for Atmospheric Environment, 2012, 28, 86-93.	0.2	1
167	<title>Aerosol characterization with advanced aerosol lidar for climate studies</title>. , 2000, 4341, 390.		0
168	Water vapour intercomparison effort in the frame of the Convective and Orographicallyâ€induced Precipitation Study. , 2009, , .		0
169	Vertical Variation of Optical Properties of Mixed Asian Dust/Pollution Plumes According to Pathway of Airmass Transport Over East Asia. EPJ Web of Conferences, 2016, 119, 08001.	0.1	0
170	Arrange and Average Algorithm for Microphysical Retrievals with A $\hat{\rho}^2 + 3\hat{\rho}$ Lidar Configuration. EPJ Web of Conferences, 2016, 119, 23026.	0.1	0
171	Comparison of Aerosol Optical and Microphysical Retrievals from HSRL-2 and in-Situ Measurements During DISCOVER-AQ 2013 (California and Texas). EPJ Web of Conferences, 2016, 119, 23014.	0.1	0
172	Gradient Correlation Method for the Stabilization of Inversion Results of Aerosol Microphysical Properties Retrieved from Profiles of Optical Data. EPJ Web of Conferences, 2016, 119, 23020.	0.1	0
173	Vertical Resolved Dust Mass Concentration and Backscatter Coefficient Retrieval of Asian Dust Plume Using Quartz Raman Channel in Lidar Measurements. EPJ Web of Conferences, 2016, 119, 08004.	0.1	0
174	Synergy of lidar and passive remote sensor data for retrieving profiles of microphysical properties of non-spherical particles. EPJ Web of Conferences, 2018, 176, 08001.	0.1	0
175	Lidar sprectroscopy instrument (LISSI): An infrastructure facility for chemical aerosol profiling at the University of Hertfordshire. EPJ Web of Conferences, 2018, 176, 01008.	0.1	0
176	Lidar Innovations for Technologies and Environmental Sciences (LITES) â€“ An Remote Sensing Infrastructure Facility: Setup and Measurements Examples. EPJ Web of Conferences, 2020, 237, 07017.	0.1	0
177	Measurement of Optical Properties of Ice-crystal Cloud using LIDAR System and Retrieval of Its Radiative Forcing by Radiative Transfer Model. Journal of Korean Society for Atmospheric Environment, 2009, 25, 392-401.	0.2	0
178	Application of Regularization Algorithm to HSRL-2 Observations During Oracles Campaign: Comparison of Retrieved and In Situ Particle Size Distributions and Single Scattering Albedo. EPJ Web of Conferences, 2020, 237, 02008.	0.1	0