James R Campbell

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7301015/publications.pdf

Version: 2024-02-01

		81839	88593
106	5,681	39	70
papers	citations	h-index	g-index

122	122	122	4924
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Advancements in the Aerosol Robotic NetworkÂ(AERONET) VersionÂ3 database â€“ automated near-real-time quality control algorithm with improved cloud screening for Sun photometer aerosol optical depthÂ(AOD) measurements. Atmospheric Measurement Techniques, 2019, 12, 169-209.	1.2	707
2	Full-Time, Eye-Safe Cloud and Aerosol Lidar Observation at Atmospheric Radiation Measurement Program Sites: Instruments and Data Processing. Journal of Atmospheric and Oceanic Technology, 2002, 19, 431-442.	0.5	316
3	Observing and understanding the Southeast Asian aerosol system by remote sensing: An initial review and analysis for the Seven Southeast Asian Studies (7SEAS) program. Atmospheric Research, 2013, 122, 403-468.	1.8	269
4	Clouds at Arctic Atmospheric Observatories. Part I: Occurrence and Macrophysical Properties. Journal of Applied Meteorology and Climatology, 2011, 50, 626-644.	0.6	206
5	Global monitoring of clouds and aerosols using a network of micropulse lidar systems. , 2001, 4153, 151.		202
6	Clouds at Arctic Atmospheric Observatories. Part II: Thermodynamic Phase Characteristics. Journal of Applied Meteorology and Climatology, 2011, 50, 645-661.	0.6	194
7	Using the OMI aerosol index and absorption aerosol optical depth to evaluate the NASA MERRA Aerosol Reanalysis. Atmospheric Chemistry and Physics, 2015, 15, 5743-5760.	1.9	184
8	Measurements of aerosol vertical profiles and optical properties during INDOEX 1999 using micropulse lidars. Journal of Geophysical Research, 2002, 107, INX2 18-1.	3.3	166
9	A Midlatitude Cirrus Cloud Climatology from the Facility for Atmospheric Remote Sensing. Part I: Macrophysical and Synoptic Properties. Journals of the Atmospheric Sciences, 2001, 58, 481-496.	0.6	160
10	Wildfire-driven thunderstorms cause a volcano-like stratospheric injection of smoke. Npj Climate and Atmospheric Science, 2018, 1, .	2.6	152
11	An 11-year global gridded aerosol optical thickness reanalysis (v1.0) for atmospheric and climate sciences. Geoscientific Model Development, 2016, 9, 1489-1522.	1.3	149
12	Analysis of measurements of Saharan dust by airborne and ground-based remote sensing methods during the Puerto Rico Dust Experiment (PRIDE). Journal of Geophysical Research, 2003, 108, .	3.3	145
13	Tropical cirrus cloud contamination in sun photometer data. Atmospheric Environment, 2011, 45, 6724-6731.	1.9	131
14	Micropulse Lidar Signals: Uncertainty Analysis. Journal of Atmospheric and Oceanic Technology, 2002, 19, 2089-2094.	0.5	121
15	Coordinated airborne, spaceborne, and ground-based measurements of massive thick aerosol layers during the dry season in southern Africa. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	96
16	The 2013 Rim Fire: Implications for Predicting Extreme Fire Spread, Pyroconvection, and Smoke Emissions. Bulletin of the American Meteorological Society, 2015, 96, 229-247.	1.7	95
17	Characterizing the vertical profile of aerosol particle extinction and linear depolarization over Southeast Asia and the Maritime Continent: The 2007â€“2009 view from CALIOP. Atmospheric Research, 2013, 122, 520-543.	1.8	79
18	Australiaâ€™s Black Summer pyrocumulonimbus super outbreak reveals potential for increasingly extreme stratospheric smoke events. Npj Climate and Atmospheric Science, 2021, 4, .	2.6	78

#	Article	IF	Citations
19	A Conceptual Model for Development of Intense Pyrocumulonimbus in Western North America. Monthly Weather Review, 2017, 145, 2235-2255.	0.5	76
20	Evaluating the impact of assimilating CALIOP-derived aerosol extinction profiles on a global mass transport model. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	70
21	Micropulse lidar observations of tropospheric aerosols over northeastern South Africa during the ARREX and SAFARI 2000 dry season experiments. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	65
22	Airborne lidar measurements of aerosol optical properties during SAFARI-2000. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	64
23	Impact of data quality and surface-to-column representativeness on the PM_{2.5} / satellite AOD relationship for the contiguous United States. Atmospheric Chemistry and Physics, 2014, 14, 6049-6062.	1.9	60
24	ARM Southern Great Plains Site Observations of the Smoke Pall Associated with the 1998 Central American Fires. Bulletin of the American Meteorological Society, 2000, 81, 2563-2591.	1.7	59
25	A Simplified and Robust Surface Reflectance Estimation Method (SREM) for Use over Diverse Land Surfaces Using Multi-Sensor Data. Remote Sensing, 2019, 11, 1344.	1.8	58
26	Evaluating nighttime CALIOP 0.532 Î¼m aerosol optical depth and extinction coefficient retrievals. Atmospheric Measurement Techniques, 2012, 5, 2143-2160.	1.2	56
27	Investigating enhanced Aqua MODIS aerosol optical depth retrievals over the midâ€toâ€high latitude Southern Oceans through intercomparison with coâ€located CALIOP, MAN, and AERONET data sets. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4700-4714.	1.2	56
28	Correcting the record of volcanic stratospheric aerosol impact: Nabro and Sarychev Peak. Journal of Geophysical Research D: Atmospheres, 2014, 119, 10,343.	1.2	56
29	Observations of blowing snow at the South Pole. Journal of Geophysical Research, 2003, 108, .	3.3	55
30	Physical and optical characteristics of the October 2010 haze event over Singapore: A photometric and lidar analysis. Atmospheric Research, 2013, 122, 555-570.	1.8	55
31	Daytime Cirrus Cloud Top-of-the-Atmosphere Radiative Forcing Properties at a Midlatitude Site and Their Global Consequences. Journal of Applied Meteorology and Climatology, 2016, 55, 1667-1679.	0.6	55
32	Evaluating the impact of multisensor data assimilation on a global aerosol particle transport model. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4674-4689.	1.2	53
33	CloudSat spaceborne 94 GHz radar bright bands in the melting layer: An attenuationâ€driven upsideâ€down lidar analog. Geophysical Research Letters, 2007, 34, .	1.5	51
34	Distinguishing cirrus cloud presence in autonomous lidar measurements. Atmospheric Measurement Techniques, 2015, 8, 435-449.	1.2	47
35	A New MODIS C6 Dark Target and Deep Blue Merged Aerosol Product on a 3 km Spatial Grid. Remote Sensing, 2018, 10, 463.	1.8	47
36	Elevated Cloud and Aerosol Layer Retrievals from Micropulse Lidar Signal Profiles. Journal of Atmospheric and Oceanic Technology, 2008, 25, 685-700.	0.5	45

#	Article	IF	Citations
37	Daytime Top-of-the-Atmosphere Cirrus Cloud Radiative Forcing Properties at Singapore. Journal of Applied Meteorology and Climatology, 2017, 56, 1249-1257.	0.6	45
38	Overview of MPLNET Version 3 Cloud Detection. Journal of Atmospheric and Oceanic Technology, 2016, 33, 2113-2134.	0.5	44
39	Airborne Sun photometer measurements of aerosol optical depth and columnar water vapor during the Puerto Rico Dust Experiment and comparison with land, aircraft, and satellite measurements. Journal of Geophysical Research, 2003, 108, .	3.3	43
40	Minimum aerosol layer detection sensitivities and their subsequent impacts on aerosol optical thickness retrievals in CALIPSO level 2 data products. Atmospheric Measurement Techniques, 2018, 11, 499-514.	1.2	40
41	Evaluating Light Rain Drop Size Estimates from Multiwavelength Micropulse Lidar Network Profiling. Journal of Atmospheric and Oceanic Technology, 2013, 30, 2798-2807.	0.5	39
42	Observations of the temporal variability in aerosol properties and their relationships to meteorology in the summer monsoonal South China Sea/East Sea: the scale-dependent role of monsoonal flows, the Maddenâ€“Julian Oscillation, tropical cyclones, squall lines and cold pools. Atmospheric Chemistry and Physics, 2015, 15, 1745-1768.	1.9	39
43	Evaluation of Terra-MODIS C6 and C6.1 Aerosol Products against Beijing, XiangHe, and Xinglong AERONET Sites in China during 2004-2014. Remote Sensing, 2019, 11, 486.	1.8	39
44	Lidar and Triple-Wavelength Doppler Radar Measurements of the Melting Layer: A Revised Model for Dark- and Brightband Phenomena. Journal of Applied Meteorology and Climatology, 2005, 44, 301-312.	1.7	38
45	Aerosol meteorology of Maritime Continent for the 2012 7SEAS southwest monsoon intensive study â€“ Part 2: Philippine receptor observations of fine-scale aerosol behavior. Atmospheric Chemistry and Physics, 2016, 16, 14057-14078.	1.9	38
46	Aerosol particle vertical distributions and optical properties over Singapore. Atmospheric Environment, 2013, 79, 599-613.	1.9	35
47	Impact of varying lidar measurement and data processing techniques in evaluating cirrus cloud and aerosol direct radiative effects. Atmospheric Measurement Techniques, 2018, 11, 1639-1651.	1.2	34
48	Applying Advanced Ground-Based Remote Sensing in the Southeast Asian Maritime Continent to Characterize Regional Proficiencies in Smoke Transport Modeling. Journal of Applied Meteorology and Climatology, 2016, 55, 3-22.	0.6	31
49	Attributing Accelerated Summertime Warming in the Southeast United States to Recent Reductions in Aerosol Burden: Indications from Vertically-Resolved Observations. Remote Sensing, 2017, 9, 674.	1.8	31
50	CALIOP Aerosol Subset Processing for Global Aerosol Transport Model Data Assimilation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2010, 3, 203-214.	2.3	30
51	Relationship between Aerosol Optical Depth and Particulate Matter over Singapore: Effects of Aerosol Vertical Distributions. Aerosol and Air Quality Research, 2016, 16, 2818-2830.	0.9	30
52	Aerosol meteorology of the Maritime Continent for the 2012 7SEAS southwest monsoon intensive study â€“ Part 1: regional-scale phenomena. Atmospheric Chemistry and Physics, 2016, 16, 14041-14056.	1.9	28
53	A multi-scale hybrid neural network retrieval model for dust storm detection, a study in Asia. Atmospheric Research, 2015, 158-159, 89-106.	1.8	27
54	Vertically Resolved Precipitation Intensity Retrieved through a Synergy between the Ground-Based NASA MPLNET Lidar Network Measurements, Surface Disdrometer Datasets and an Analytical Model Solution. Remote Sensing, 2018, 10, 1102.	1.8	27

#	Article	IF	Citations
55	Detection and Inventory of Intense Pyroconvection in Western North America using GOES-15 Daytime Infrared Data. Journal of Applied Meteorology and Climatology, 2017, 56, 471-493.	0.6	26
56	Midlatitude cirrus cloud radiative forcing over China. Journal of Geophysical Research, 2010, 115, .	3.3	25
57	Temporal variability of aerosol optical thickness vertical distribution observed from CALIOP. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9117-9139.	1.2	25
58	Unusually Deep Wintertime Cirrus Clouds Observed over the Alaskan Subarctic. Bulletin of the American Meteorological Society, 2018, 99, 27-32.	1.7	23
59	Evaluating the impact of aerosol particles above cloud on cloud optical depth retrievals from MODIS. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5410-5423.	1.2	22
60	Investigating the frequency and interannual variability in global above-cloud aerosol characteristics with CALIOP and OMI. Atmospheric Chemistry and Physics, 2016, 16, 47-69.	1.9	22
61	Contrasting cloud composition between coupled and decoupled marine boundary layer clouds. Journal of Geophysical Research D: Atmospheres, 2016, 121, 11,679.	1.2	21
62	Disproving the BodÃ©lÃ© Depression as the Primary Source of Dust Fertilizing the Amazon Rainforest. Geophysical Research Letters, 2020, 47, e2020GL088020.	1.5	21
63	Overview of the New Version 3 NASA Micro-Pulse Lidar Network (MPLNET) Automatic Precipitation Detection Algorithm. Remote Sensing, 2020, 12, 71.	1.8	19
64	A global analysis of diurnal variability in dust and dust mixture using CATS observations. Atmospheric Chemistry and Physics, 2021, 21, 1427-1447.	1.9	19
65	Multi-year measurements of cloud base heights at South Pole by lidar. Geophysical Research Letters, 2005, 32, .	1.5	18
66	Polar stratospheric clouds at the South Pole from 5 years of continuous lidar data: Macrophysical, optical, and thermodynamic properties. Journal of Geophysical Research, 2008, 113, .	3.3	18
67	Evaluations of cirrus contamination and screening in ground aerosol observations using collocated lidar systems. Journal of Geophysical Research, 2012, 117, .	3.3	18
68	Sensitivity of infrared sea surface temperature retrievals to the vertical distribution of airborne dust aerosol. Remote Sensing of Environment, 2015, 159, 1-13.	4.6	18
69	Status of the NASA Micro Pulse Lidar Network (MPLNET): overview of the network and future plans, new version 3 data products, and the polarized MPL. EPJ Web of Conferences, 2018, 176, 09003.	0.1	17
70	Retrieval of dust storm aerosols using an integrated Neural Network model. Computers and Geosciences, 2015, 85, 104-114.	2.0	16
71	Continuous ground-based aerosol Lidar observation during seasonal pollution events at Wuxi, China. Atmospheric Environment, 2017, 154, 189-199.	1.9	16
72	WRF-Chem simulation of aerosol seasonal variability in theÂSanÂJoaquinÂValley. Atmospheric Chemistry and Physics, 2017, 17, 7291-7309.	1.9	15

#	Article	IF	Citations
73	Glaciation of a mixed-phase boundary layer cloud at a coastal arctic site as depicted in continuous lidar measurements. Polar Science, 2008, 2, 121-127.	0.5	14
74	Cirrus cloud macrophysical and optical properties over North China from CALIOP measurements. Advances in Atmospheric Sciences, 2011, 28, 653-664.	1.9	14
75	Likely seeding of cirrus clouds by stratospheric Kasatochi volcanic aerosol particles near a mid-latitude tropopause fold. Atmospheric Environment, 2012, 46, 441-448.	1.9	14
76	Technical note: Fuâ€“Liouâ€“Gu and Cortiâ€“Peter model performance evaluation for radiative retrievals from cirrus clouds. Atmospheric Chemistry and Physics, 2017, 17, 7025-7034.	1.9	14
77	Supporting Weather Forecasters in Predicting and Monitoring Saharan Air Layer Dust Events as They Impact the Greater Caribbean. Bulletin of the American Meteorological Society, 2018, 99, 259-268.	1.7	14
78	Determining cloud thermodynamic phase from the polarized Micro Pulse Lidar. Atmospheric Measurement Techniques, 2020, 13, 6901-6913.	1.2	14
79	Estimating Infrared Radiometric Satellite Sea Surface Temperature Retrieval Cold Biases in the Tropics due to Unscreened Optically Thin Cirrus Clouds. Journal of Atmospheric and Oceanic Technology, 2017, 34, 355-373.	0.5	13
80	Cirrus Cloud Top-of-the-Atmosphere Net Daytime Forcing in the Alaskan Subarctic from Ground-Based MPLNET Monitoring. Journal of Applied Meteorology and Climatology, 2021, 60, 51-63.	0.6	13
81	Impact of Asian dust and continental pollutants on cloud chemistry observed in northern Taiwan during the experimental period of ABC/EAREX 2005. Journal of Geophysical Research, 2010, 115, .	3.3	10
82	Development of an Ozone Monitoring Instrument (OMI) aerosol index (AI) data assimilation scheme for aerosol modeling over bright surfaces â€“ a step toward direct radiance assimilation in the UV spectrum. Geoscientific Model Development, 2021, 14, 27-42.	1.3	10
83	Meteorological Influences on Tropospheric Ozone over Suburban Washington, DC. Aerosol and Air Quality Research, 2018, 18, 1168-1182.	0.9	9
84	Estimating surface visibility at Hong Kong from ground-based LIDAR, sun photometer and operational MODIS products. Journal of the Air and Waste Management Association, 2013, 63, 1098-1110.	0.9	8
85	A global record of single-layered ice cloud properties and associated radiative heating rate profiles from an A-Train perspective. Climate Dynamics, 2019, 53, 3069-3088.	1.7	7
86	Aerosol Direct Radiative Effects under Cloud-Free Conditions over Highly-Polluted Areas in Europe and Mediterranean: A Ten-Years Analysis (2007â€“2016). Remote Sensing, 2021, 13, 2933.	1.8	7
87	Assessment of MODIS, OMI, MISR and CALIOP Aerosol Products for Estimating Surface Visual Range: A Mathematical Model for Hong Kong. Remote Sensing, 2018, 10, 1333.	1.8	5
88	Quantifying the direct radiative effect of absorbing aerosols for numerical weather prediction: a case study. Atmospheric Chemistry and Physics, 2019, 19, 205-218.	1.9	5
89	Sensitivities in Satellite Lidarâ€Derived Estimates of Daytime Topâ€ofâ€theâ€Atmosphere Optically Thin Cirrus Cloud Radiative Forcing: A Case Study. Geophysical Research Letters, 2020, 47, e2020GL088871.	1.5	5
90	Conceptualizing How Severe Haze Events Are Impacting Long-Term Satellite-Based Trend Studies of Aerosol Optical Thickness over Asia. Springer Remote Sensing/photogrammetry, 2018, , 425-445.	0.4	4

#	Article	IF	Citations
91	Lidar Ratio Derived for Pure Dust Aerosols: Multi-Year Micro Pulse Lidar Observations in a Saharan Dust-Influenced Region. EPJ Web of Conferences, 2016, 119, 23017.	0.1	3
92	Characterizing the Impact of Aerosols on Pre-Hurricane Sandy. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 1378-1386.	2.3	3
93	Conceptualizing the Impact of Dust-Contaminated Infrared Radiances on Data Assimilation for Numerical Weather Prediction. Journal of Atmospheric and Oceanic Technology, 2021, 38, 209-221.	0.5	3
94	High Spectral Resolution Lidar and MPLNET Micro Pulse Lidar aerosol optical property retrieval intercomparison during the 2012 7-SEAS field campaign at Singapore. , 2014, , .		2
95	Advancing Maritime Transparent Cirrus Detection Using the Advanced Baseline Imager â€œCirrusâ€•Band. Journal of Atmospheric and Oceanic Technology, 2021, , .	0.5	2
96	Retrieving particulate matter concentrations over the contiguous United States using CALIOP observations. Atmospheric Environment, 2022, 274, 118979.	1.9	2
97	Continuous Lidar Monitoring of Polar Stratospheric Clouds at the South Pole. Bulletin of the American Meteorological Society, 2009, 90, 613-618.	1.7	1
98	Fully Automated Light Precipitation Detection from MPLNET and EARLINET Network Lidar Measurements. EPJ Web of Conferences, 2020, 237, 05006.	0.1	1
99	Understanding Seasonal Variability in thin Cirrus Clouds from Continuous MPLNET Observations at GSFC in 2012. EPJ Web of Conferences, 2016, 119, 11004.	0.1	0
100	MPLNET V3 Cloud and Planetary Boundary Layer Detection. EPJ Web of Conferences, 2016, 119, 16011.	0.1	0
101	Editorial for Special Issue â€œHigh Resolution Active Optical Remote Sensing Observations of Aerosols, Clouds and Aerosolâ€“Cloud Interactions and Their Implication to Climateâ€• Remote Sensing, 2020, 12, 2166.	1.8	0
102	The NASA Micro Pulse Lidar Network (MPLNET): Early Results from Development of Diurnal Climatologies. , 2021, , .		0
103	Solving Global Cirrus Cloud Top-of-the-Atmosphere Radiative Forcing from Satellite Lidar. , 2021, , .		0
104	Preface to Special Issue - Aerosol Impact on Physical, Chemical and Biological Processes in Southeast Asia and the Maritime Continent. Aerosol and Air Quality Research, 2016, 16, I-II.	0.9	0
105	Climatological assessment of maritime atmospheric profiles: model-based and LIDAR-based approaches. , 2017, , .		0
106	Assessment of cirrus cloud and aerosol radiative effect in South-East Asia by ground-based NASA MPLNET lidar network data and CALIPSO satellite measurements. , 2017, , .		0