Arlindo da Silva

List of Publications by Year
in descending order

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Version: 2024-02-01

100 papers	14,460 citations	76294 40 h-index	32815 100 g-index
122 all docs	122 docs citations	122 times ranked	15028 citing authors

#	Article	IF	Citations
1	Modeled and observed properties related to the direct aerosol radiative effect of biomass burning aerosol over the southeastern Atlantic. Atmospheric Chemistry and Physics, 2022, 22, 1-46.	1.9	22
2	Analysis of the MODIS above-cloud aerosol retrieval algorithm using MCARS. Geoscientific Model Development, 2022, 15, 1-14.	1.3	1
3	Inferring iron-oxide species content in atmospheric mineral dust from DSCOVR EPIC observations. Atmospheric Chemistry and Physics, 2022, 22, 1395-1423.	1.9	13
4	Trends in sulfur dioxide over the Indian subcontinent during 2003â€“2019. Atmospheric Environment, 2022, 284, 119189.	1.9	11
5	Aerosol atmospheric rivers: climatology, event characteristics, and detection algorithm sensitivities. Atmospheric Chemistry and Physics, 2022, 22, 8175-8195.	1.9	5
6	An overview of the ORACLES (ObseRvations of Aerosols above CLouds and their intEractionS) project: aerosolâ€“cloudâ€“radiation interactions in the southeast Atlantic basin. Atmospheric Chemistry and Physics, 2021, 21, 1507-1563.	1.9	97
7	Extending the Atmospheric River Concept to Aerosols: Climate and Air Quality Impacts. Geophysical Research Letters, 2021, 48, e2020GL091827.	1.5	16
8	Relationship between circum-Arctic atmospheric wave patterns and large-scale wildfires in boreal summer. Environmental Research Letters, 2021, 16, 064009.	2.2	17
9	Exploring the elevated water vapor signal associated with the free tropospheric biomass burning plume over the southeast Atlantic Ocean. Atmospheric Chemistry and Physics, 2021, 21, 9643-9668.	1.9	17
10	Evaluation and intercomparison of wildfire smoke forecasts from multiple modeling systems for the 2019 Williams Flats fire. Atmospheric Chemistry and Physics, 2021, 21, 14427-14469.	1.9	37
11	Influence of Synopticâ€Dynamic Meteorology on the Longâ€Range Transport of Indochina Biomass Burning Aerosols. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031260.	1.2	15
12	To What Extent Biomass Burning Aerosols Impact South America Seasonal Climate Predictions?. Geophysical Research Letters, 2020, 47, e2020GL088096.	1.5	3
13	How emissions uncertainty influences the distribution and radiative impacts of smoke from fires in North America. Atmospheric Chemistry and Physics, 2020, 20, 2073-2097.	1.9	67
14	Six global biomass burning emission datasets: intercomparison and application in one global aerosol model. Atmospheric Chemistry and Physics, 2020, 20, 969-994.	1.9	120
15	Study of SO Pollution in the Middle East Using MERRAâ€2, CAMS Data Assimilation Products, and Highâ€Resolution WRFâ€Chem Simulations. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031993.	1.2	26
16	Modeling the smoky troposphere of the southeast Atlantic: a comparison to ORACLES airborne observations from September of 2016. Atmospheric Chemistry and Physics, 2020, 20, 11491-11526.	1.9	32
17	Assessment of natural and anthropogenic aerosol air pollution in the Middle East using MERRA-2, CAMS data assimilation products, and high-resolution WRF-Chem model simulations. Atmospheric Chemistry and Physics, 2020, 20, 9281-9310.	1.9	71
18	The Aerosol Characterization from Polarimeter and Lidar (ACEPOL) airborne field campaign. Earth System Science Data, 2020, 12, 2183-2208.	3.7	10

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19	Observationally constrained analysis of sea salt aerosol in the marine atmosphere. Atmospheric Chemistry and Physics, 2019, 19, 10773-10785.	1.9	40
20	Current state of the global operational aerosol multiâ€model ensemble: An update from the International Cooperative for Aerosol Prediction (ICAP). Quarterly Journal of the Royal Meteorological Society, 2019, 145, 176-209.	1.0	66
21	A Geostationary Instrument Simulator for Aerosol Observing System Simulation Experiments. Atmosphere, 2019, 10, 2.	1.0	12
22	Toward Improving Shortâ€Term Predictions of Fine Particulate Matter Over the United States Via Assimilation of Satellite Aerosol Optical Depth Retrievals. Journal of Geophysical Research D: Atmospheres, 2019, 124, 2753-2773.	1.2	28
23	Link Between Arctic Tropospheric BrO Explosion Observed From Space and Seaâ€Salt Aerosols From Blowing Snow Investigated Using Ozone Monitoring Instrument BrO Data and GEOSâ€5 Data Assimilation System. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6954-6983.	1.2	23
24	The implementation of NEMS GFS Aerosol Component (NGAC) Version 2.0 for global multispecies forecasting at NOAA/NCEP â€“ PartÂ1: Model descriptions. Geoscientific Model Development, 2018, 11, 2315-2332.	1.3	20
25	A new global anthropogenic SO₂ emission inventory for the last decade: a mosaic of satellite-derived and bottom-up emissions. Atmospheric Chemistry and Physics, 2018, 18, 16571-16586.	1.9	61
26	Global simulation of tropospheric chemistry at 12.5â€‰km resolution: performance and evaluation of the GEOS-Chem chemical module (v10-1) within the NASA GEOS Earth system model (GEOS-5 ESM). Geoscientific Model Development, 2018, 11, 4603-4620.	1.3	60
27	Status and future of numerical atmospheric aerosol prediction with a focus on data requirements. Atmospheric Chemistry and Physics, 2018, 18, 10615-10643.	1.9	64
28	Dust Impacts on the 2012 Hurricane Nadine Track during the NASA HS3 Field Campaign. Journals of the Atmospheric Sciences, 2018, 75, 2473-2489.	0.6	15
29	AOD distributions and trends of major aerosol species over a selection of the world's most populated cities based on the 1st version of NASA's MERRA Aerosol Reanalysis. Urban Climate, 2017, 20, 168-191.	2.4	51
30	The Modern-Era Retrospective Analysis for Research and Applications, Version 2 (MERRA-2). Journal of Climate, 2017, 30, 5419-5454.	1.2	4,520
31	Evaluation of PM surface concentrations simulated by Version 1 of NASA's MERRA Aerosol Reanalysis over Europe. Atmospheric Pollution Research, 2017, 8, 374-382.	1.8	39
32	Developing and diagnosing climate change indicators of regional aerosol optical properties. Scientific Reports, 2017, 7, 18093.	1.6	14
33	An Unreported Asian Dust (Kosa) Event in Hokkaido, Japan: A Case Study of 7 March 2016. Scientific Online Letters on the Atmosphere, 2017, 13, 96-101.	0.6	2
34	Chemical Mechanisms and Their Applications in the Goddard Earth Observing System (GEOS) Earth System Model. Journal of Advances in Modeling Earth Systems, 2017, 9, 3019-3044.	1.3	47
35	Simulation of the Ozone Monitoring Instrument aerosol index using the NASA Goddard Earth Observing System aerosol reanalysis products. Atmospheric Measurement Techniques, 2017, 10, 4121-4134.	1.2	19
36	Multi-sensor cloud and aerosol retrieval simulator and remote sensing from model parameters â€“ Part 2: Aerosols. Geoscientific Model Development, 2016, 9, 2377-2389.	1.3	6

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37	Monte Carlo Bayesian inference on a statistical model of subâ€gridcolumn moisture variability using highâ€resolution cloud observations. Part 1: Method. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 2505-2527.	1.0	3
38	Monte Carlo Bayesian inference on a statistical model of sub-gridcolumn moisture variability using high-resolution cloud observations. Part 2: Sensitivity tests and results. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 2528-2540.	1.0	3
39	Assessment of biomass burning smoke influence on environmental conditions for multiyear tornado outbreaks by combining aerosolâ€aware microphysics and fire emission constraints. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10294-10311.	1.2	21
40	Surface dimming by the 2013 Rim Fire simulated by a sectional aerosol model. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7079-7087.	1.2	16
41	Total dust deposition flux during precipitation in Toyama, Japan, in the spring of 2009: A sensitivity analysis with the NASA GEOS-5 Model. Atmospheric Research, 2016, 167, 298-313.	1.8	4
42	Revealing important nocturnal and dayâ€toâ€day variations in fire smoke emissions through a multiplatform inversion. Geophysical Research Letters, 2015, 42, 3609-3618.	1.5	73
43	Improved western U.S. background ozone estimates via constraining nonlocal and local source contributions using Aura TES and OMI observations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 3572-3592.	1.2	15
44	Development towards a global operational aerosol consensus: basic climatological characteristics of the International Cooperative for Aerosol Prediction Multi-Model Ensemble (ICAP-MME). Atmospheric Chemistry and Physics, 2015, 15, 335-362.	1.9	76
45	Use of the CALIOP vertical feature mask for evaluating global aerosol models. Atmospheric Measurement Techniques, 2015, 8, 3647-3669.	1.2	41
46	Development of a grid-independent GEOS-Chem chemical transport model (v9-02) as an atmospheric chemistry module for Earth system models. Geoscientific Model Development, 2015, 8, 595-602.	1.3	62
47	Saharan dust as a causal factor of hemispheric asymmetry in aerosols and cloud cover over the tropical Atlantic Ocean. International Journal of Remote Sensing, 2015, 36, 3423-3445.	1.3	15
48	Evaluating Observation Influence on Regional Water Budgets in Reanalyses. Journal of Climate, 2015, 28, 3631-3649.	1.2	17
49	Response of Aerosol Direct Radiative Effect to the East Asian Summer Monsoon. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 597-600.	1.4	5
50	The Use of NASA LANCE Imagery and Data for Near Real-Time Applications. , 2015, , 165-182.		8
51	Air pollution over the Ganges basin and northwest Bay of Bengal in the early postmonsoon season based on NASA MERRAero data. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1555-1570.	1.2	25
52	Impact of assimilated and interactive aerosol on tropical cyclogenesis. Geophysical Research Letters, 2014, 41, 3282-3288.	1.5	52
53	The GOddard SnoW Impurity Module (GOSWIM) for the NASA GEOS-5 Earth System Model: Preliminary Comparisons with Observations in Sapporo, Japan. Scientific Online Letters on the Atmosphere, 2014, 10, 50-56.	0.6	13
54	Direct and semiâ€direct aerosol effects in the NASA GEOSâ€5 AGCM: aerosolâ€climate interactions due to prognostic versus prescribed aerosols. Journal of Geophysical Research D: Atmospheres, 2013, 118, 149-169.	1.2	39

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55	MODIS aerosol optical depth observations over urban areas in Pakistan: quantity and quality of the data for air quality monitoring. Atmospheric Pollution Research, 2013, 4, 43-52.	1.8	85
56	Source attributions of pollution to the Western Arctic during the NASA ARCTAS field campaign. Atmospheric Chemistry and Physics, 2013, 13, 4707-4721.	1.9	67
57	Evaluating the impact of orbital sampling on satelliteâ€“climate model comparisons. Journal of Geophysical Research D: Atmospheres, 2013, 118, 355-369.	1.2	22
58	Analysis of satellite-derived Arctic tropospheric BrO columns in conjunction with aircraft measurements during ARCTAS and ARCPAC. Atmospheric Chemistry and Physics, 2012, 12, 1255-1285.	1.9	63
59	MERRA: NASAâ€™s Modern-Era Retrospective Analysis for Research and Applications. Journal of Climate, 2011, 24, 3624-3648.	1.2	4,118
60	Reactive nitrogen, ozone and ozone production in the Arctic troposphere and the impact of stratosphere-troposphere exchange. Atmospheric Chemistry and Physics, 2011, 11, 13181-13199.	1.9	35
61	The fate of saharan dust across the atlantic and implications for a central american dust barrier. Atmospheric Chemistry and Physics, 2011, 11, 8415-8431.	1.9	42
62	NASA A-Train and Terra observations of the 2010 Russian wildfires. Atmospheric Chemistry and Physics, 2011, 11, 9287-9301.	1.9	104
63	Satellite-based estimates of ground-level fine particulate matter during extreme events: A case study of the Moscow fires in 2010. Atmospheric Environment, 2011, 45, 6225-6232.	1.9	143
64	Impact of Interactive Aerosol on the African Easterly Jet in the NASA GEOS-5 Global Forecasting System. Weather and Forecasting, 2011, 26, 504-519.	0.5	52
65	Online simulations of global aerosol distributions in the NASA GEOSâ€4 model and comparisons to satellite and groundâ€based aerosol optical depth. Journal of Geophysical Research, 2010, 115, .	3.3	400
66	A new interpretation of total column BrO during Arctic spring. Geophysical Research Letters, 2010, 37, .	1.5	116
67	Longâ€term variability in Saharan dust transport and its link to North Atlantic sea surface temperature. Geophysical Research Letters, 2008, 35, .	1.5	30
68	Direct Insertion of MODIS Radiances in a Global Aerosol Transport Model. Journals of the Atmospheric Sciences, 2007, 64, 808-827.	0.6	37
69	Assimilation of Satellite Cloud Data into the GMAO Finite-Volume Data Assimilation System Using a Parameter Estimation Method. Part I: Motivation and Algorithm Description. Journals of the Atmospheric Sciences, 2007, 64, 3880-3895.	0.6	24
70	Cross-organization interoperability experiments of weather and climate models with the Earth System Modeling Framework. Concurrency Computation Practice and Experience, 2007, 19, 583-592.	1.4	1
71	Effects of data selection and error specification on the assimilation of AIRS data. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 181-196.	1.0	10
72	Skin Temperature Analysis and Bias Correction in a Coupled Land-Atmosphere Data Assimilation System. Journal of the Meteorological Society of Japan, 2007, 85A, 205-228.	0.7	67

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73	Implementing Applications with the Earth System Modeling Framework. Lecture Notes in Computer Science, 2006, , 563-572.	1.0	8
74	Design and Implementation of Components in the Earth System Modeling Framework. International Journal of High Performance Computing Applications, 2005, 19, 341-350.	2.4	111
75	A case study of excessive subtropical transport in the stratosphere of a data assimilation system. Journal of Geophysical Research, 2004, 109, .	3.3	42
76	The architecture of the earth system modeling framework. Computing in Science and Engineering, 2004, 6, 18-28.	1.2	358
77	Tangent linear analysis of the Mosaic land surface model. Journal of Geophysical Research, 2003, 108, .	3.3	3
78	The Choice of Variable for Atmospheric Moisture Analysis. Monthly Weather Review, 2003, 131, 155-171.	0.5	88
79	Moisture budget of the bimodal pattern of the summer circulation over South America. Journal of Geophysical Research, 2002, 107, LBA 42-1.	3.3	89
80	Improving Global Analysis and Shortâ€“Range Forecast Using Rainfall and Moisture Observations Derived from TRMM and SSM/I Passive Microwave Sensors. Bulletin of the American Meteorological Society, 2001, 82, 659-679.	1.7	58
81	An adaptive buddy check for observational quality control. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 2451-2471.	1.0	49
82	Improving Assimilated Global Datasets Using TMI Rainfall and Columnar Moisture Observations. Journal of Climate, 2000, 13, 4180-4195.	1.2	25
83	Assimilation of SSM/I-Derived Surface Rainfall and Total Precipitable Water for Improving the GEOS Analysis for Climate Studies. Monthly Weather Review, 2000, 128, 509-537.	0.5	64
84	Preliminary estimation of horizontal fluxes of cloud liquid water in relation to subtropical moisture budget studies employing ISCCP, SSMI, and GEOS-1/DAS data sets. Journal of Geophysical Research, 2000, 105, 18067-18089.	3.3	3
85	Maximum-Likelihood Estimation of Forecast and Observation Error Covariance Parameters. Part I: Methodology. Monthly Weather Review, 1999, 127, 1822-1834.	0.5	138
86	Maximum-Likelihood Estimation of Forecast and Observation Error Covariance Parameters. Part II: Applications. Monthly Weather Review, 1999, 127, 1835-1849.	0.5	45
87	Reassessment of the moisture source over the Sahara Desert based on NASA reanalysis. Journal of Geophysical Research, 1999, 104, 2015-2030.	3.3	11
88	Parallel Grid Manipulations in Earth Science Calculations. Lecture Notes in Computer Science, 1999, , 666-679.	1.0	3
89	Quantification of dust-forced heating of the lower troposphere. Nature, 1998, 395, 367-370.	13.7	223
90	Data assimilation in the presence of forecast bias. Quarterly Journal of the Royal Meteorological Society, 1998, 124, 269-295.	1.0	361

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91	On the Parcel Method and the Baroclinic Wedge of Instability. Journals of the Atmospheric Sciences, 1998, 55, 788-795.	0.6	7
92	Atmospheric data assimilation on distributed-memory parallel supercomputers. Lecture Notes in Computer Science, 1998, , 115-124.	1.0	1
93	Assessing the Effects of Data Selection with the DAO Physical-Space Statistical Analysis System*. Monthly Weather Review, 1998, 126, 2913-2926.	0.5	222
94	Decadal and Interannual SST Variability in the Tropical Atlantic Ocean. Journal of Physical Oceanography, 1996, 26, 1165-1175.	0.7	233
95	Data Assimilation Using Incremental Analysis Updates. Monthly Weather Review, 1996, 124, 1256-1271.	0.5	643
96	Model-Calculated Seasonal Transport Variations through the Florida Straits: A Comparison Using Different Wind-Stress Climatologies. Journal of Physical Oceanography, 1994, 24, 30-45.	0.7	10
97	On the Establishment of Stationary Waves in the Northern Hemisphere Winter. Journals of the Atmospheric Sciences, 1993, 50, 43-61.	0.6	22
98	Comments on â€œOrographically Forced Planetary Waves in the Northern Hemisphere Winter: Steady State Model with Wave-Coupled Lower Boundary Formulationâ€• Journals of the Atmospheric Sciences, 1989, 46, 2101-2103.	0.6	2
99	A Mechanism for Excitation of Ultralong Rossby Waves. Journals of the Atmospheric Sciences, 1987, 44, 3625-3639.	0.6	8
100	Using Hough Harmonics to Validate and Assess Nonlinear shallow-Water Models. Monthly Weather Review, 1986, 114, 2191-2196.	0.5	24