

# Jordi Vila-Guerau de Arellano

## List of Publications by Year in descending order

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150  
papers

6,413  
citations

81839

39  
h-index

88593

70  
g-index

212  
all docs

212  
docs citations

212  
times ranked

6090  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mega-heatwave temperatures due to combined soil desiccation and atmospheric heat accumulation. <i>Nature Geoscience</i> , 2014, 7, 345-349.	5.4	694
2	The Meso-NH Atmospheric Simulation System. Part I: adiabatic formulation and control simulations. <i>Annales Geophysicae</i> , 1998, 16, 90-109.	0.6	673
3	Formulation of the Dutch Atmospheric Large-Eddy Simulation (DALES) and overview of its applications. <i>Geoscientific Model Development</i> , 2010, 3, 415-444.	1.3	213
4	Amplification of mega-heatwaves through heat torrents fuelled by upwind drought. <i>Nature Geoscience</i> , 2019, 12, 712-717.	5.4	168
5	The BLLAST field experiment: Boundary-Layer Late Afternoon and Sunset Turbulence. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 10931-10960.	1.9	151
6	The impact of weather and atmospheric circulation on O <sub>3</sub> and PM <sub>10</sub> levels at a rural mid-latitude site. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 2695-2714.	1.9	137
7	Interactions between dry-air entrainment, surface evaporation and convective boundary-layer development. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2009, 135, 1277-1291.	1.0	132
8	Summertime total OH reactivity measurements from boreal forest during HUMPPA-COPEC 2010. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 8257-8270.	1.9	111
9	The summertime Boreal forest field measurement intensive (HUMPPA-COPEC-2010): an overview of meteorological and chemical influences. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10599-10618.	1.9	108
10	The Contribution of Shear to the Evolution of a Convective Boundary Layer. <i>Journals of the Atmospheric Sciences</i> , 2003, 60, 1913-1926.	0.6	104
11	Observational evidence for cloud cover enhancement over western European forests. <i>Nature Communications</i> , 2017, 8, 14065.	5.8	104
12	Evaluation of Limited-Area Models for the Representation of the Diurnal Cycle and Contrasting Nights in CASES-99. <i>Journal of Applied Meteorology and Climatology</i> , 2008, 47, 869-887.	0.6	102
13	Surface Wind Regionalization over Complex Terrain: Evaluation and Analysis of a High-Resolution WRF Simulation. <i>Journal of Applied Meteorology and Climatology</i> , 2010, 49, 268-287.	0.6	96
14	Relative Humidity as an Indicator for Cloud Formation over Heterogeneous Land Surfaces. <i>Journals of the Atmospheric Sciences</i> , 2008, 65, 3263-3277.	0.6	92
15	Understanding the Daily Cycle of Evapotranspiration: A Method to Quantify the Influence of Forcings and Feedbacks. <i>Journal of Hydrometeorology</i> , 2010, 11, 1405-1422.	0.7	89
16	Entrainment process of carbon dioxide in the atmospheric boundary layer. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	85
17	Modelled suppression of boundary-layer clouds by plants in a CO <sub>2</sub> -rich atmosphere. <i>Nature Geoscience</i> , 2012, 5, 701-704.	5.4	81
18	Surface and boundary layer exchanges of volatile organic compounds, nitrogen oxides and ozone during the GABRIEL campaign. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 6223-6243.	1.9	76

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19	The Stove, Dome, and Umbrella Effects of Atmospheric Aerosol on the Development of the Planetary Boundary Layer in Hazy Regions. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087373.	1.5	73
20	Influence of chemistry on the flux-gradient relationships for the NO-O <sub>3</sub> -NO <sub>2</sub> system. <i>Boundary-Layer Meteorology</i> , 1992, 61, 375-387.	1.2	69
21	On the segregation of chemical species in a clear boundary layer over heterogeneous land surfaces. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10681-10704.	1.9	67
22	Impacts of topography and land degradation on the sea breeze over eastern Spain. <i>Meteorology and Atmospheric Physics</i> , 2003, 84, 157-170.	0.9	64
23	Flux estimates of isoprene, methanol and acetone from airborne PTR-MS measurements over the tropical rainforest during the GABRIEL 2005 campaign. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 4207-4227.	1.9	64
24	Role of Shear and the Inversion Strength During Sunset Turbulence Over Land: Characteristic Length Scales. <i>Boundary-Layer Meteorology</i> , 2006, 121, 537-556.	1.2	63
25	Tethered-balloon measurements of actinic flux in a cloud-capped marine boundary layer. <i>Journal of Geophysical Research</i> , 1994, 99, 3699.	3.3	62
26	Impacts of Aerosol Shortwave Radiation Absorption on the Dynamics of an Idealized Convective Atmospheric Boundary Layer. <i>Boundary-Layer Meteorology</i> , 2013, 148, 31-49.	1.2	58
27	Transport and chemical transformations influenced by shallow cumulus over land. <i>Atmospheric Chemistry and Physics</i> , 2005, 5, 3219-3231.	1.9	54
28	Diurnal and vertical variability of the sensible heat and carbon dioxide budgets in the atmospheric surface layer. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	53
29	The role of boundary layer dynamics on the diurnal evolution of isoprene and the hydroxyl radical over tropical forests. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	53
30	Introducing effective reaction rates to account for the inefficient mixing of the convective boundary layer. <i>Atmospheric Environment</i> , 2005, 39, 445-461.	1.9	49
31	Control of Chemical Reactions by Convective Turbulence in the Boundary Layer. <i>Journals of the Atmospheric Sciences</i> , 1998, 55, 568-579.	0.6	48
32	On inferring isoprene emission surface flux from atmospheric boundary layer concentration measurements. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 3629-3640.	1.9	48
33	Turbulence vertical structure of the boundary layer during the afternoon transition. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 10071-10086.	1.9	47
34	Role of the residual layer and large-scale subsidence on the development and evolution of the convective boundary layer. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 4515-4530.	1.9	46
35	Direct and Diffuse Radiation in the Shallow Cumulus "Vegetation System: Enhanced and Decreased Evapotranspiration Regimes. <i>Journal of Hydrometeorology</i> , 2017, 18, 1731-1748.	0.7	46
36	Atmospheric surface layer similarity theory applied to chemically reactive species. <i>Journal of Geophysical Research</i> , 1995, 100, 1397-1408.	3.3	45

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37	Characterization of a boreal convective boundary layer and its impact on atmospheric chemistry during HUMPPA-COPEC-2010. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 9335-9353.	1.9	45
38	An evaluation of WRF's ability to reproduce the surface wind over complex terrain based on typical circulation patterns. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 7651-7669.	1.2	45
39	Aerosols in the convective boundary layer: Shortwave radiation effects on the coupled land-atmosphere system. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 5845-5863.	1.2	45
40	Tomography of the lower troposphere using a small dense network of GPS receivers. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2001, 39, 439-447.	2.7	44
41	Representing Sheared Convective Boundary Layer by Zeroth- and First-Order-Jump Mixed-Layer Models: Large-Eddy Simulation Verification. <i>Journal of Applied Meteorology and Climatology</i> , 2006, 45, 1224-1243.	0.6	43
42	Land-atmosphere interactions in the tropics – a review. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 4171-4197.	1.9	43
43	Dispersion of a Passive Tracer in Buoyancy- and Shear-Driven Boundary Layers. <i>Journal of Applied Meteorology and Climatology</i> , 2003, 42, 1116-1130.	1.7	41
44	Shallow cumulus rooted in photosynthesis. <i>Geophysical Research Letters</i> , 2014, 41, 1796-1802.	1.5	40
45	Relating Eulerian and Lagrangian Statistics for the Turbulent Dispersion in the Atmospheric Convective Boundary Layer. <i>Journals of the Atmospheric Sciences</i> , 2005, 62, 1175-1191.	0.6	38
46	Fluxes and (co-)variances of reacting scalars in the convective boundary layer. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2003, 55, 935-949.	0.8	37
47	The dispersion of chemically reactive species in the atmospheric boundary layer. <i>Meteorology and Atmospheric Physics</i> , 2004, 87, 23.	0.9	36
48	Case study of the diurnal variability of chemically active species with respect to boundary layer dynamics during DOMINO. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 5329-5341.	1.9	35
49	Subcloud-Layer Feedbacks Driven by the Mass Flux of Shallow Cumulus Convection over Land. <i>Journals of the Atmospheric Sciences</i> , 2014, 71, 881-895.	0.6	35
50	Land-atmosphere coupling explains the link between pan evaporation and actual evapotranspiration trends in a changing climate. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	33
51	Parameterization of Entrainment in a Sheared Convective Boundary Layer Using a First-order Jump Model. <i>Boundary-Layer Meteorology</i> , 2006, 120, 455-475.	1.2	32
52	Fifty Years of Atmospheric Boundary-Layer Research at Cabauw Serving Weather, Air Quality and Climate. <i>Boundary-Layer Meteorology</i> , 2020, 177, 583-612.	1.2	31
53	Integrating continuous atmospheric boundary layer and tower-based flux measurements to advance understanding of land-atmosphere interactions. <i>Agricultural and Forest Meteorology</i> , 2021, 307, 108509.	1.9	31
54	How do aerosols above the residual layer affect the planetary boundary layer height?. <i>Science of the Total Environment</i> , 2022, 814, 151953.	3.9	30

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55	Soil drought can mitigate deadly heat stress thanks to a reduction of air humidity. <i>Science Advances</i> , 2022, 8, eabe6653.	4.7	30
56	The divergence of the turbulent diffusion flux in the surface layer due to chemical reactions: the NO-O <sub>3</sub> -NO <sub>2</sub> system. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 1993, 45, 23-33.	0.8	29
57	Effects of shear in the convective boundary layer: analysis of the turbulent kinetic energy budget. <i>Acta Geophysica</i> , 2008, 56, 167-193.	1.0	29
58	A chemically reactive plume model for the NO <sub>x</sub> -NO <sub>2</sub> -O <sub>3</sub> system. <i>Atmospheric Environment Part A General Topics</i> , 1990, 24, 2237-2246.	1.3	28
59	The effect of micro-scale turbulence on the reaction rate in a chemically reactive plume. <i>Atmospheric Environment</i> , 1995, 29, 87-95.	1.9	28
60	Analysis of the role of the planetary boundary layer schemes during a severe convective storm. <i>Annales Geophysicae</i> , 2004, 22, 1861-1874.	0.6	28
61	Ozone exchange within and above an irrigated Californian orchard. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 72, 1723346.	0.8	28
62	Stable Nocturnal Boundary Layers: A Comparison of One-Dimensional and Large-Eddy Simulation Models. <i>Boundary-Layer Meteorology</i> , 1998, 88, 181-210.	1.2	27
63	Combined effects of surface conditions, boundary layer dynamics and chemistry on diurnal SOA evolution. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 6827-6843.	1.9	27
64	Study of a prototypical convective boundary layer observed during BLLAST: contributions by large-scale forcings. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 4241-4257.	1.9	27
65	BRIDGING THE GAP BETWEEN ATMOSPHERIC PHYSICS AND CHEMISTRY IN STUDIES OF SMALL-SCALE TURBULENCE. <i>Bulletin of the American Meteorological Society</i> , 2003, 84, 51-56.	1.7	26
66	Understanding isoprene photooxidation using observations and modeling over a subtropical forest in the southeastern US. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 7725-7741.	1.9	26
67	Plant water-stress parameterization determines the strength of land-atmosphere coupling. <i>Agricultural and Forest Meteorology</i> , 2016, 217, 61-73.	1.9	26
68	Scaling the turbulent transport of chemical compounds in the surface layer under neutral and stratified conditions. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1997, 123, 223-242.	1.0	25
69	A conceptual framework to quantify the influence of convective boundary layer development on carbon dioxide mixing ratios. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 2969-2985.	1.9	25
70	Large-Eddy Simulation Comparison of Neutral Flow Over a Canopy: Sensitivities to Physical and Numerical Conditions, and Similarity to Other Representations. <i>Boundary-Layer Meteorology</i> , 2017, 162, 71-89.	1.2	25
71	Combined measurements of UV-A actinic flux, UV-A irradiance and global radiation in relation to photodissociation rates. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 1995, 47, 353-364.	0.8	24
72	The combined effect of elevation and meteorology on potato crop dynamics: a 10-year study in the Gamo Highlands, Ethiopia. <i>Agricultural and Forest Meteorology</i> , 2018, 262, 166-177.	1.9	24

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73	An inter-comparison study to estimate zenith wet delays using VLBI, GPS, and NWP models. <i>Earth, Planets and Space</i> , 2000, 52, 691-694.	0.9	23
74	Turbulent dispersion in cloud-topped boundary layers. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 1289-1302.	1.9	23
75	Second-order closure study of the covariance between chemically reactive species in the surface layer. <i>Journal of Atmospheric Chemistry</i> , 1993, 16, 145-155.	1.4	22
76	The divergence of the turbulent diffusion flux in the surface layer due to chemical reactions: the NO-O <sub>3</sub> -NO <sub>2</sub> system. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 45, 23.	0.8	22
77	Cloud Shading Effects on Characteristic Boundary-Layer Length Scales. <i>Boundary-Layer Meteorology</i> , 2015, 157, 237-263.	1.2	22
78	Evolution of Nitrogen Oxide Chemistry in the Nocturnal Boundary Layer. <i>Journal of Applied Meteorology and Climatology</i> , 1997, 36, 943-957.	1.7	21
79	Statistics of Absolute and Relative Dispersion in the Atmospheric Convective Boundary Layer: A Large-Eddy Simulation Study. <i>Journals of the Atmospheric Sciences</i> , 2006, 63, 1253-1272.	0.6	21
80	Effects of soil moisture gradients on the path and the intensity of a West African squall line. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2010, 136, 2162-2175.	1.0	21
81	Mean and Flux Horizontal Variability of Virtual Potential Temperature, Moisture, and Carbon Dioxide: Aircraft Observations and LES Study. <i>Monthly Weather Review</i> , 2008, 136, 4435-4451.	0.5	20
82	Role of synoptic- and meso-scales on the evolution of the boundary-layer wind profile over a coastal region: the near-coast diurnal acceleration. <i>Meteorology and Atmospheric Physics</i> , 2016, 128, 39-56.	0.9	20
83	Characterizing the influence of the marine stratocumulus cloud on the land fog at the Atacama Desert. <i>Atmospheric Research</i> , 2018, 214, 109-120.	1.8	20
84	The Chemistry of a Dry Cloud: The Effects of Radiation and Turbulence. <i>Journals of the Atmospheric Sciences</i> , 2000, 57, 1573-1584.	0.6	19
85	Impacts of afternoon and evening sea breeze fronts on local turbulence, and on CO <sub>2</sub> and radon <sup>222</sup> transport. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2018, 144, 990-1011.	1.0	19
86	Interactions between vegetation, atmospheric turbulence and clouds under a wide range of background wind conditions. <i>Agricultural and Forest Meteorology</i> , 2018, 255, 31-43.	1.9	18
87	Substantial Reductions in Cloud Cover and Moisture Transport by Dynamic Plant Responses. <i>Geophysical Research Letters</i> , 2019, 46, 1870-1878.	1.5	18
88	An observational study on the effects of time and space averaging in photochemical models. <i>Atmospheric Environment Part A General Topics</i> , 1993, 27, 353-362.	1.3	17
89	Fluxes of chemically reactive species inferred from mean concentration measurements. <i>Atmospheric Environment</i> , 1997, 31, 2371-2374.	1.9	17
90	Reductions in nitrogen oxides over the Netherlands between 2005 and 2018 observed from space and on the ground: Decreasing emissions and increasing O <sub>3</sub> indicate changing NO <sub>x</sub> chemistry. <i>Atmospheric Environment: X</i> , 2021, 9, 100104.	0.8	17

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91	The Effect of Heat Waves and Drought on Surface Wind Circulations in the Northeast of the Iberian Peninsula during the Summer of 2003. <i>Journal of Climate</i> , 2011, 24, 5416-5422.	1.2	16
92	The boundary layer growth in an urban area. <i>Science of the Total Environment</i> , 2004, 334-335, 207-213.	3.9	15
93	Analyzing the basic features of different complex terrain flows by means of a Doppler Sodar and a numerical model: Some implications for air pollution problems. <i>Meteorology and Atmospheric Physics</i> , 2004, 85, 141.	0.9	15
94	Characteristic Length Scales of Reactive Species in a Convective Boundary Layer. <i>Journals of the Atmospheric Sciences</i> , 2004, 61, 41-56.	0.6	15
95	Influence of Canopy Seasonal Changes on Turbulence Parameterization within the Roughness Sublayer over an Orchard Canopy. <i>Journal of Applied Meteorology and Climatology</i> , 2016, 55, 1391-1407.	0.6	15
96	Atmospheric boundary layer dynamics from balloon soundings worldwide: CLASS4GL v1.0. <i>Geoscientific Model Development</i> , 2019, 12, 2139-2153.	1.3	15
97	E-DATA: A Comprehensive Field Campaign to Investigate Evaporation Enhanced by Advection in the Hyper-Arid Altiplano. <i>Water (Switzerland)</i> , 2020, 12, 745.	1.2	15
98	Soil moisture signature in global weather balloon soundings. <i>Npj Climate and Atmospheric Science</i> , 2021, 4, .	2.6	15
99	Evaluation of Atmospheric Boundary Layer Height From Wind Profiling Radar and Slab Models and Its Responses to Seasonality of Land Cover, Subsidence, and Advection. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD033775.	1.2	15
100	Local evaporation controlled by regional atmospheric circulation in the Altiplano of the Atacama Desert. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 9125-9150.	1.9	15
101	The role of atmospheric boundary layer-surface interactions on the development of coastal fronts. <i>Annales Geophysicae</i> , 2007, 25, 341-360.	0.6	14
102	Influence of boundary layer dynamics and isoprene chemistry on the organic aerosol budget in a tropical forest. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 9351-9366.	1.2	14
103	Understanding Land-Atmosphere Interactions across a Range of Spatial and Temporal Scales. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, ES14-ES17.	1.7	14
104	Analytical Solution for the Convectively-Mixed Atmospheric Boundary Layer. <i>Boundary-Layer Meteorology</i> , 2013, 148, 557-583.	1.2	13
105	Quantifying the transport of subcloud layer reactants by shallow cumulus clouds over the Amazon. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 13,041.	1.2	13
106	Cloud Patterns in the Trades Have Four Interpretable Dimensions. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091001.	1.5	13
107	CloudRoots: integration of advanced instrumental techniques and process modelling of sub-hourly and sub-kilometre land-atmosphere interactions. <i>Biogeosciences</i> , 2020, 17, 4375-4404.	1.3	13
108	Role of nocturnal turbulence and advection in the formation of shallow cumulus over land. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2007, 133, 1615-1627.	1.0	12



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109	Meteorology during the DOMINO campaign and its connection with trace gases and aerosols. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 2325-2342.	1.9	11
110	Cumulative ozone effect on canopy stomatal resistance and the impact on boundary layer dynamics and CO <sub>2</sub> assimilation at the diurnal scale: A case study for grassland in the Netherlands. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 1348-1365.	1.3	11
111	Biogenic emissions and land-atmosphere interactions as drivers of the daytime evolution of secondary organic aerosol in the southeastern US. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 701-729.	1.9	11
112	Sub-diurnal variability of the carbon dioxide and water vapor isotopologues at the field observational scale. <i>Agricultural and Forest Meteorology</i> , 2019, 275, 114-135.	1.9	11
113	Three-Dimensional Radiative Effects By Shallow Cumulus Clouds on Dynamic Heterogeneities Over a Vegetated Surface. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001990.	1.3	11
114	A Photoelectric Detector Suspended under a Balloon for Actinic Flux Measurements. <i>Journal of Atmospheric and Oceanic Technology</i> , 1994, 11, 674-679.	0.5	10
115	Numerical simulation of the interaction between ammonium nitrate aerosol and convective boundary-layer dynamics. <i>Atmospheric Environment</i> , 2015, 105, 202-211.	1.9	10
116	Interactions Between the Amazonian Rainforest and Cumuli Clouds: A Large-Eddy Simulation, High-Resolution ECMWF, and Observational Intercomparison Study. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001828.	1.3	10
117	Intensive measurements of gas, water, and energy exchange between vegetation and troposphere during the MONTES campaign in a vegetation gradient from short semi-desertic shrublands to tall wet temperate forests in the NW Mediterranean Basin. <i>Atmospheric Environment</i> , 2013, 75, 348-364.	1.9	9
118	Integrating canopy and large-scale effects in the convective boundary-layer dynamics during the CHATS experiment. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 1623-1640.	1.9	9
119	Multi-scale temporal analysis of evaporation on a saline lake in the Atacama Desert. <i>Hydrology and Earth System Sciences</i> , 2022, 26, 3709-3729.	1.9	9
120	A large-eddy simulation of the phase transition of ammonium nitrate in a convective boundary layer. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 826-836.	1.2	8
121	Two perspectives on the coupled carbon, water and energy exchange in the planetary boundary layer. <i>Biogeosciences</i> , 2015, 12, 103-123.	1.3	8
122	Impact of Future Warming and Enhanced [CO <sub>2</sub> ] on the Vegetation-Cloud Interaction. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 12444-12454.	1.2	8
123	Optimization and Representativeness of Atmospheric Chemical Sampling by Hovering Unmanned Aerial Vehicles Over Tropical Forests. <i>Earth and Space Science</i> , 2021, 8, e2020EA001335.	1.1	8
124	Surface representation impacts on turbulent heat fluxes in the Weather Research and Forecasting (WRF) model (v.4.1.3). <i>Geoscientific Model Development</i> , 2021, 14, 3939-3967.	1.3	8
125	River winds and pollutant recirculation near the Manaus city in the central Amazon. <i>Communications Earth &amp; Environment</i> , 2021, 2, .	2.6	8
126	Spatio-temporal tomography of the lower troposphere using GPS signals. <i>Physics and Chemistry of the Earth</i> , 2001, 26, 405-411.	0.6	7



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127	The diurnal stratocumulus-to-cumulus transition over land in southern West Africa. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 2735-2754.	1.9	7
128	Unraveling the diurnal atmospheric ammonia budget of a prototypical convective boundary layer. <i>Atmospheric Environment</i> , 2021, 249, 118153.	1.9	7
129	Grain Yield Observations Constrain Cropland CO <sub>2</sub> Fluxes Over Europe. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 3238-3259.	1.3	6
130	Teaching Atmospheric Modeling at the Graduate Level: 15 Years of Using Mesoscale Models as Educational Tools in an Active Learning Environment. <i>Bulletin of the American Meteorological Society</i> , 2019, 100, 2157-2174.	1.7	6
131	Shallow Cumulus Representation and Its Interaction with Radiation and Surface at the Convection Gray Zone. <i>Monthly Weather Review</i> , 2019, 147, 2467-2483.	0.5	6
132	From weak to intense downslope winds: origin, interaction with boundary-layer turbulence and impact on CO <sub>2</sub> variability. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 4615-4635.	1.9	5
133	Analyzing the Synoptic, Meso- and Local-Scale Involved in Sea Breeze Formation and Frontal Characteristics. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031302.	1.2	5
134	Quantifying the Feedback Between Rice Architecture, Physiology, and Microclimate Under Current and Future CO <sub>2</sub> Conditions. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2019JG005452.	1.3	5
135	Explicit aerosol-cloud interactions in the Dutch Atmospheric Large-Eddy Simulation model DALES4.1-M7. <i>Geoscientific Model Development</i> , 2019, 12, 5177-5196.	1.3	4
136	River Winds and Transport of Forest Volatiles in the Amazonian Riparian Ecoregion. <i>Environmental Science &amp; Technology</i> , 2022, 56, 12667-12677.	4.6	4
137	Boundary Layer Characteristics over Homogeneous and Heterogeneous Surfaces Simulated by MM5 and DALES. <i>Journal of Applied Meteorology and Climatology</i> , 2011, 50, 1372-1386.	0.6	3
138	Quantifying the uncertainties of advection and boundary layer dynamics on the diurnal carbon dioxide budget. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 9376-9392.	1.2	3
139	Understanding the impact of plant competition on the coupling between vegetation and the atmosphere. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 2212-2228.	1.3	3
140	Observational Characterization of the Synoptic and Mesoscale Circulations in Relation to Crop Dynamics: Belg 2017 in the Gamo Highlands, Ethiopia. <i>Atmosphere</i> , 2018, 9, 398.	1.0	3
141	Optical Microwave Scintillometer Evaporation Measurements over a Saline Lake in a Heterogeneous Setting in the Atacama Desert. <i>Journal of Hydrometeorology</i> , 2022, 23, 909-924.	0.7	2
142	Assessing the representativity of NH <sub>3</sub> measurements influenced by boundary-layer dynamics and the turbulent dispersion of a nearby emission source. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 8241-8257.	1.9	2
143	The behaviour of vertical flux profiles of NO, O <sub>3</sub> , and NO <sub>2</sub> explained in terms of the photostationary state relationship. <i>Journal of Atmospheric Chemistry</i> , 1993, 16, 293-297.	1.4	1
144	Assessment report on NRP subtheme "Atmospheric processes & UV-B radiation". <i>Studies in Environmental Science</i> , 1995, 65, 155-233.	0.0	1

#	ARTICLE	IF	CITATIONS
145	Modelling Flux-Gradient Relationships for Chemically Reactive Species in the Atmospheric Surface Layer. , 1994, , 295-303.		1
146	Ultraviolet radiation and photochemistry in clouds: observations and modelling. Studies in Environmental Science, 1995, 65, 237-240.	0.0	0
147	Poster 25 Impact of meteorological factors on turbulent dispersion over complex terrain. Developments in Environmental Science, 2007, , 811-813.	0.5	0
148	Amendment to "Analytical Solution for the Convectively-Mixed Atmospheric Boundary Layer" Inclusion of Subsidence. Boundary-Layer Meteorology, 2013, 148, 585-591.	1.2	0
149	Impact of Aerosol Radiation Absorption on the Heat Budget and Dynamics of the Atmospheric Boundary Layer. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 113-117.	0.1	0
150	On the Segregation of Chemical Species in a Clear Boundary Layer Over Heterogeneous Surface Conditions. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 541-546.	0.1	0