Jordi Vila-Guerau de Arellano

List of Publications by Year in Descending Order

162 papers	4,827 citations	35 h-index	64 g-index
210 ext. papers	5,578 ext. citations	5.1 avg, IF	5.5 L-index

#	Paper	IF	Citations
162	Soil drought can mitigate deadly heat stress thanks to a reduction of air humidity.. *Science Advances* , **2022**, 8, eabe6653	14.3	6
161	How do aerosols above the residual layer affect the planetary boundary layer height?. *Science of the Total Environment*, **2021**, 814, 151953	10.2	3
160	Evaluation of Atmospheric Boundary Layer Height From Wind Profiling Radar and Slab Models and Its Responses to Seasonality of Land Cover, Subsidence, and Advection. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD033775	4.4	6
159	Optimization and Representativeness of Atmospheric Chemical Sampling by Hovering Unmanned Aerial Vehicles Over Tropical Forests. *Earth and Space Science*, **2021**, 8, e2020EA001335	3.1	1
158	Surface representation impacts on turbulent heat fluxes in the Weather Research and Forecasting (WRF) model (v.4.1.3). *Geoscientific Model Development*, **2021**, 14, 3939-3967	6.3	1
157	Local evaporation controlled by regional atmospheric circulation in the Altiplano of the Atacama Desert. *Atmospheric Chemistry and Physics*, **2021**, 21, 9125-9150	6.8	2
156	Cloud Patterns in the Trades Have Four Interpretable Dimensions. *Geophysical Research Letters*, **2021**, 48, e2020GL091001	4.9	6
155	Unraveling the diurnal atmospheric ammonia budget of a prototypical convective boundary layer. *Atmospheric Environment*, **2021**, 249, 118153	5.3	2
154	Soil moisture signature in global weather balloon soundings. *Npj Climate and Atmospheric Science*, **2021**, 4,	8	3
153	Integrating continuous atmospheric boundary layer and tower-based flux measurements to advance understanding of land-atmosphere interactions. *Agricultural and Forest Meteorology*, **2021**, 307, 108509	5.8	10
152	River winds and pollutant recirculation near the Manaus city in the central Amazon. *Communications Earth & Environment*, **2021**, 2,	6.1	2
151	Reductions in nitrogen oxides over the Netherlands between 2005 and 2018 observed from space and on the ground: Decreasing emissions and increasing O3 indicate changing NOx chemistry. *Atmospheric Environment: X*, **2021**, 9, 100104	2.8	8
150	The Stove, Dome, and Umbrella Effects of Atmospheric Aerosol on the Development of the Planetary Boundary Layer in Hazy Regions. *Geophysical Research Letters*, **2020**, 47, e2020GL087373	4.9	31
149	Analyzing the Synoptic-, Meso- and Local- Scale Involved in Sea Breeze Formation and Frontal Characteristics. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD031302	4.4	3
148	The diurnal stratocumulus-to-cumulus transition over land in southern West Africa. *Atmospheric Chemistry and Physics*, **2020**, 20, 2735-2754	6.8	5
147	Interactions Between the Amazonian Rainforest and Cumuli Clouds: A Large-Eddy Simulation, High-Resolution ECMWF, and Observational Intercomparison Study. *Journal of Advances in Modeling Earth Systems*, **2020**, 12, e2019MS001828	7.1	1
146	Ozone exchange within and above an irrigated Californian orchard. *Tellus, Series B: Chemical and Physical Meteorology*, **2020**, 72, 1-17	3.3	1

145	Quantifying the Feedback Between Rice Architecture, Physiology, and Microclimate Under Current and Future CO2 Conditions. *Journal of Geophysical Research G: Biogeosciences*, **2020**, 125, e2019JG005452	3.7	3
144	CloudRoots: integration of advanced instrumental techniques and process modelling of sub-hourly and sub-kilometre land–atmosphere interactions. *Biogeosciences*, **2020**, 17, 4375-4404	4.6	5
143	E-DATA: A Comprehensive Field Campaign to Investigate Evaporation Enhanced by Advection in the Hyper-Arid Altiplano. *Water (Switzerland)*, **2020**, 12, 745	3	5
142	Three-Dimensional Radiative Effects By Shallow Cumulus Clouds on Dynamic Heterogeneities Over a Vegetated Surface. *Journal of Advances in Modeling Earth Systems*, **2020**, 12, e2019MS001990	7.1	3
141	Fifty Years of Atmospheric Boundary-Layer Research at Cabauw Serving Weather, Air Quality and Climate. *Boundary-Layer Meteorology*, **2020**, 177, 583-612	3.4	10
140	Biogenic emissions and land–atmosphere interactions as drivers of the daytime evolution of secondary organic aerosol in the southeastern US. *Atmospheric Chemistry and Physics*, **2019**, 19, 701-729	6.8	6
139	Shallow Cumulus Representation and Its Interaction with Radiation and Surface at the Convection Gray Zone. *Monthly Weather Review*, **2019**, 147, 2467-2483	2.4	1
138	From weak to intense downslope winds: origin, interaction with boundary-layer turbulence and impact on CO₂ variability. *Atmospheric Chemistry and Physics*, **2019**, 19, 4615-4635	6.8	2
137	Sub-diurnal variability of the carbon dioxide and water vapor isotopologues at the field observational scale. *Agricultural and Forest Meteorology*, **2019**, 275, 114-135	5.8	7
136	Atmospheric boundary layer dynamics from balloon soundings worldwide: CLASS4GL v1.0. *Geoscientific Model Development*, **2019**, 12, 2139-2153	6.3	9
135	Amplification of mega-heatwaves through heat torrents fuelled by upwind drought. *Nature Geoscience*, **2019**, 12, 712-717	18.3	69
134	Teaching Atmospheric Modeling at the Graduate Level: 15 Years of Using Mesoscale Models as Educational Tools in an Active Learning Environment. *Bulletin of the American Meteorological Society*, **2019**, 100, 2157-2174	6.1	3
133	Impact of Future Warming and Enhanced [CO2] on the Vegetation-Cloud Interaction. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 12444-12454	4.4	6
132	Land–atmosphere interactions in the tropics – a review. *Hydrology and Earth System Sciences*, **2019**, 23, 4171-4197	5.5	20
131	Substantial Reductions in Cloud Cover and Moisture Transport by Dynamic Plant Responses. *Geophysical Research Letters*, **2019**, 46, 1870-1878	4.9	11
130	Explicit aerosol–cloud interactions in the Dutch Atmospheric Large-Eddy Simulation model DALES4.1-M7. *Geoscientific Model Development*, **2019**, 12, 5177-5196	6.3	3
129	Impacts of afternoon and evening sea-breeze fronts on local turbulence, and on CO2 and radon-222 transport. *Quarterly Journal of the Royal Meteorological Society*, **2018**, 144, 990-1011	6.4	14
128	Interactions between vegetation, atmospheric turbulence and clouds under a wide range of background wind conditions. *Agricultural and Forest Meteorology*, **2018**, 255, 31-43	5.8	10

127	The combined effect of elevation and meteorology on potato crop dynamics: a 10-year study in the Gamo Highlands, Ethiopia. *Agricultural and Forest Meteorology*, **2018**, 262, 166-177	5.8	12
126	Characterizing the influence of the marine stratocumulus cloud on the land fog at the Atacama Desert. *Atmospheric Research*, **2018**, 214, 109-120	5.4	12
125	Observational Characterization of the Synoptic and Mesoscale Circulations in Relation to Crop Dynamics: Belg 2017 in the Gamo Highlands, Ethiopia. *Atmosphere*, **2018**, 9, 398	2.7	2
124	Weak and intense katabatic winds: impacts on turbulent characteristics in the stable boundary layer and CO₂ transport **2018**,		1
123	Observational evidence for cloud cover enhancement over western European forests. *Nature Communications*, **2017**, 8, 14065	17.4	71
122	Grain Yield Observations Constrain Cropland CO2 Fluxes Over Europe. *Journal of Geophysical Research G: Biogeosciences*, **2017**, 122, 3238-3259	3.7	4
121	Direct and Diffuse Radiation in the Shallow Cumulus–Vegetation System: Enhanced and Decreased Evapotranspiration Regimes. *Journal of Hydrometeorology*, **2017**, 18, 1731-1748	3.7	34
120	Large-Eddy Simulation Comparison of Neutral Flow Over a Canopy: Sensitivities to Physical and Numerical Conditions, and Similarity to Other Representations. *Boundary-Layer Meteorology*, **2017**, 162, 71-89	3.4	12
119	Integrating canopy and large-scale effects in the convective boundary-layer dynamics during the CHATS experiment. *Atmospheric Chemistry and Physics*, **2017**, 17, 1623-1640	6.8	8
118	Role of synoptic- and meso-scales on the evolution of the boundary-layer wind profile over a coastal region: the near-coast diurnal acceleration. *Meteorology and Atmospheric Physics*, **2016**, 128, 39-56	2	15
117	Understanding isoprene photooxidation using observations and modeling over a subtropical forest in the southeastern US. *Atmospheric Chemistry and Physics*, **2016**, 16, 7725-7741	6.8	18
116	Influence of Canopy Seasonal Changes on Turbulence Parameterization within the Roughness Sublayer over an Orchard Canopy. *Journal of Applied Meteorology and Climatology*, **2016**, 55, 1391-1407	2.7	10
115	Plant water-stress parameterization determines the strength of land–atmosphere coupling. *Agricultural and Forest Meteorology*, **2016**, 217, 61-73	5.8	21
114	Understanding the impact of plant competition on the coupling between vegetation and the atmosphere. *Journal of Geophysical Research G: Biogeosciences*, **2015**, 120, 2212-2228	3.7	3
113	Cloud Shading Effects on Characteristic Boundary-Layer Length Scales. *Boundary-Layer Meteorology* , **2015**, 157, 237-263	3.4	18
112	Cumulative ozone effect on canopy stomatal resistance and the impact on boundary layer dynamics and CO2 assimilation at the diurnal scale: A case study for grassland in the Netherlands. *Journal of Geophysical Research G: Biogeosciences*, **2015**, 120, 1348-1365	3.7	11
111	Turbulence vertical structure of the boundary layer during the afternoon transition. *Atmospheric Chemistry and Physics*, **2015**, 15, 10071-10086	6.8	38
110	Study of a prototypical convective boundary layer observed during BLLAST: contributions by large-scale forcings. *Atmospheric Chemistry and Physics*, **2015**, 15, 4241-4257	6.8	20

109	Two perspectives on the coupled carbon, water and energy exchange in the planetary boundary layer. *Biogeosciences*, **2015**, 12, 103-123	4.6	8
108	Numerical simulation of the interaction between ammonium nitrate aerosol and convective boundary-layer dynamics. *Atmospheric Environment*, **2015**, 105, 202-211	5.3	9
107	Atmospheric Boundary Layer: Integrating Air Chemistry and Land Interactions **2015**,		62
106	Mega-heatwave temperatures due to combined soil desiccation and atmospheric heat accumulation. *Nature Geoscience*, **2014**, 7, 345-349	18.3	459
105	Aerosols in the convective boundary layer: Shortwave radiation effects on the coupled land-atmosphere system. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 5845-5863	4.4	32
104	Shallow cumulus rooted in photosynthesis. *Geophysical Research Letters*, **2014**, 41, 1796-1802	4.9	31
103	The BLLAST field experiment: Boundary-Layer Late Afternoon and Sunset Turbulence. *Atmospheric Chemistry and Physics*, **2014**, 14, 10931-10960	6.8	126
102	Meteorology during the DOMINO campaign and its connection with trace gases and aerosols. *Atmospheric Chemistry and Physics*, **2014**, 14, 2325-2342	6.8	9
101	Role of the residual layer and large-scale subsidence on the development and evolution of the convective boundary layer. *Atmospheric Chemistry and Physics*, **2014**, 14, 4515-4530	6.8	34
100	Understanding Land–Atmosphere Interactions across a Range of Spatial and Temporal Scales. *Bulletin of the American Meteorological Society*, **2014**, 95, ES14-ES17	6.1	11
99	Subcloud-Layer Feedbacks Driven by the Mass Flux of Shallow Cumulus Convection over Land. *Journals of the Atmospheric Sciences*, **2014**, 71, 881-895	2.1	25
98	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	0.3	
97	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	0.3	
96	Analytical Solution for the Convectively-Mixed Atmospheric Boundary Layer. *Boundary-Layer Meteorology*, **2013**, 148, 557-583	3.4	11
95	Impacts of Aerosol Shortwave Radiation Absorption on the Dynamics of an Idealized Convective Atmospheric Boundary Layer. *Boundary-Layer Meteorology*, **2013**, 148, 31-49	3.4	39
94	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. *Atmospheric Environment*, **2013**, 75, 348-364	5.3	7
93	Amendment to "Analytical Solution for the Convectively-Mixed Atmospheric Boundary Layer" Inclusion of Subsidence. *Boundary-Layer Meteorology*, **2013**, 148, 585-591	3.4	
92	Quantifying the uncertainties of advection and boundary layer dynamics on the diurnal carbon dioxide budget. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 9376-9392	4.4	2

91	An evaluation of WRF's ability to reproduce the surface wind over complex terrain based on typical circulation patterns. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 7651-7669	4.4	36
90	Influence of boundary layer dynamics and isoprene chemistry on the organic aerosol budget in a tropical forest. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 9351-9366	4.4	12
89	A large-eddy simulation of the phase transition of ammonium nitrate in a convective boundary layer. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 826-836	4.4	7
88	Quantifying the transport of subcloud layer reactants by shallow cumulus clouds over the Amazon. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 13,041-13,059	4.4	11
87	Modelled suppression of boundary-layer clouds by plants in a CO2-rich atmosphere. *Nature Geoscience*, **2012**, 5, 701-704	18.3	64
86	A conceptual framework to quantify the influence of convective boundary layer development on carbon dioxide mixing ratios. *Atmospheric Chemistry and Physics*, **2012**, 12, 2969-2985	6.8	22
85	Summertime total OH reactivity measurements from boreal forest during HUMPPA-COPEC 2010. *Atmospheric Chemistry and Physics*, **2012**, 12, 8257-8270	6.8	103
84	Characterization of a boreal convective boundary layer and its impact on atmospheric chemistry during HUMPPA-COPEC-2010. *Atmospheric Chemistry and Physics*, **2012**, 12, 9335-9353	6.8	35
83	Case study of the diurnal variability of chemically active species with respect to boundary layer dynamics during DOMINO. *Atmospheric Chemistry and Physics*, **2012**, 12, 5329-5341	6.8	28
82	Combined effects of surface conditions, boundary layer dynamics and chemistry on diurnal SOA evolution. *Atmospheric Chemistry and Physics*, **2012**, 12, 6827-6843	6.8	21
81	The role of boundary layer dynamics on the diurnal evolution of isoprene and the hydroxyl radical over tropical forests. *Journal of Geophysical Research*, **2011**, 116,		45
80	On the segregation of chemical species in a clear boundary layer over heterogeneous land surfaces. *Atmospheric Chemistry and Physics*, **2011**, 11, 10681-10704	6.8	57
79	The summertime Boreal forest field measurement intensive (HUMPPA-COPEC-2010): an overview of meteorological and chemical influences. *Atmospheric Chemistry and Physics*, **2011**, 11, 10599-10618	6.8	87
78	Boundary Layer Characteristics over Homogeneous and Heterogeneous Surfaces Simulated by MM5 and DALES. *Journal of Applied Meteorology and Climatology*, **2011**, 50, 1372-1386	2.7	2
77	The Effect of Heat Waves and Drought on Surface Wind Circulations in the Northeast of the Iberian Peninsula during the Summer of 2003. *Journal of Climate*, **2011**, 24, 5416-5422	4.4	15
76	Formulation of the Dutch Atmospheric Large-Eddy Simulation (DALES) and overview of its applications. *Geoscientific Model Development*, **2010**, 3, 415-444	6.3	167
75	Surface Wind Regionalization over Complex Terrain: Evaluation and Analysis of a High-Resolution WRF Simulation. *Journal of Applied Meteorology and Climatology*, **2010**, 49, 268-287	2.7	79
74	Understanding the Daily Cycle of Evapotranspiration: A Method to Quantify the Influence of Forcings and Feedbacks. *Journal of Hydrometeorology*, **2010**, 11, 1405-1422	3.7	74

73	Land-atmosphere coupling explains the link between pan evaporation and actual evapotranspiration trends in a changing climate. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	28
72	Effects of soil moisture gradients on the path and the intensity of a West African squall line. *Quarterly Journal of the Royal Meteorological Society*, **2010**, 136, 2162-2175	6.4	20
71	Interactions between dry-air entrainment, surface evaporation and convective boundary-layer development. *Quarterly Journal of the Royal Meteorological Society*, **2009**, 135, 1277-1291	6.4	108
70	On inferring isoprene emission surface flux from atmospheric boundary layer concentration measurements. *Atmospheric Chemistry and Physics*, **2009**, 9, 3629-3640	6.8	40
69	The impact of weather and atmospheric circulation on O₃ and PM₁₀ levels at a rural mid-latitude site. *Atmospheric Chemistry and Physics*, **2009**, 9, 2695-2714	6.8	108
68	Flux estimates of isoprene, methanol and acetone from airborne PTR-MS measurements over the tropical rainforest during the GABRIEL 2005 campaign. *Atmospheric Chemistry and Physics*, **2009**, 9, 4207-4227	6.8	56
67	Turbulent dispersion in cloud-topped boundary layers. *Atmospheric Chemistry and Physics*, **2009**, 9, 1289-1302	6.8	20
66	Diurnal and vertical variability of the sensible heat and carbon dioxide budgets in the atmospheric surface layer. *Journal of Geophysical Research*, **2008**, 113,		44
65	Relative Humidity as an Indicator for Cloud Formation over Heterogeneous Land Surfaces. *Journals of the Atmospheric Sciences*, **2008**, 65, 3263-3277	2.1	73
64	Evaluation of Limited-Area Models for the Representation of the Diurnal Cycle and Contrasting Nights in CASES-99. *Journal of Applied Meteorology and Climatology*, **2008**, 47, 869-887	2.7	87
63	Mean and Flux Horizontal Variability of Virtual Potential Temperature, Moisture, and Carbon Dioxide: Aircraft Observations and LES Study. *Monthly Weather Review*, **2008**, 136, 4435-4451	2.4	19
62	Surface and boundary layer exchanges of volatile organic compounds, nitrogen oxides and ozone during the GABRIEL campaign. *Atmospheric Chemistry and Physics*, **2008**, 8, 6223-6243	6.8	67
61	Effects of shear in the convective boundary layer: analysis of the turbulent kinetic energy budget. *Acta Geophysica*, **2008**, 56, 167-193	2.2	23
60	The role of atmospheric boundary layer-surface interactions on the development of coastal fronts. *Annales Geophysicae*, **2007**, 25, 341-360	2	9
59	Role of nocturnal turbulence and advection in the formation of shallow cumulus over land. *Quarterly Journal of the Royal Meteorological Society*, **2007**, 133, 1615	6.4	8
58	Poster 25 Impact of meteorological factors on turbulent dispersion over complex terrain. *Developments in Environmental Science*, **2007**, 811-813		
57	Statistics of Absolute and Relative Dispersion in the Atmospheric Convective Boundary Layer: A Large-Eddy Simulation Study. *Journals of the Atmospheric Sciences*, **2006**, 63, 1253-1272	2.1	17
56	Representing Sheared Convective Boundary Layer by Zeroth- and First-Order-Jump Mixed-Layer Models: Large-Eddy Simulation Verification. *Journal of Applied Meteorology and Climatology*, **2006**, 45, 1224-1243	2.7	39

55	Parameterization of Entrainment in a Sheared Convective Boundary Layer Using a First-order Jump Model. *Boundary-Layer Meteorology*, **2006**, 120, 455-475	3.4	30
54	Role of Shear and the Inversion Strength During Sunset Turbulence Over Land: Characteristic Length Scales. *Boundary-Layer Meteorology*, **2006**, 121, 537-556	3.4	59
53	Transport and chemical transformations influenced by shallow cumulus over land. *Atmospheric Chemistry and Physics*, **2005**, 5, 3219-3231	6.8	43
52	Introducing effective reaction rates to account for the inefficient mixing of the convective boundary layer. *Atmospheric Environment*, **2005**, 39, 445-461	5.3	43
51	Relating Eulerian and Lagrangian Statistics for the Turbulent Dispersion in the Atmospheric Convective Boundary Layer. *Journals of the Atmospheric Sciences*, **2005**, 62, 1175-1191	2.1	31
50	Analysis of the role of the planetary boundary layer schemes during a severe convective storm. *Annales Geophysicae*, **2004**, 22, 1861-1874	2	25
49	The boundary layer growth in an urban area. *Science of the Total Environment*, **2004**, 334-335, 207-13	10.2	12
48	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. *Meteorology and Atmospheric Physics*, **2004**, 85, 141	2	11
47	The dispersion of chemically reactive species in the atmospheric boundary layer. *Meteorology and Atmospheric Physics*, **2004**, 87, 23	2	32
46	Entrainment process of carbon dioxide in the atmospheric boundary layer. *Journal of Geophysical Research*, **2004**, 109,		73
45	Characteristic Length Scales of Reactive Species in a Convective Boundary Layer. *Journals of the Atmospheric Sciences*, **2004**, 61, 41-56	2.1	10
44	The Contribution of Shear to the Evolution of a Convective Boundary Layer. *Journals of the Atmospheric Sciences*, **2003**, 60, 1913-1926	2.1	90
43	Dispersion of a Passive Tracer in Buoyancy- and Shear-Driven Boundary Layers. *Journal of Applied Meteorology and Climatology*, **2003**, 42, 1116-1130		31
42	BRIDGING THE GAP BETWEEN ATMOSPHERIC PHYSICS AND CHEMISTRY IN STUDIES OF SMALL-SCALE TURBULENCE. *Bulletin of the American Meteorological Society*, **2003**, 84, 51-56	6.1	24
41	Impacts of topography and land degradation on the sea breeze over eastern Spain. *Meteorology and Atmospheric Physics*, **2003**, 84, 157-170	2	54
40	. *Tellus, Series B: Chemical and Physical Meteorology*, **2003**, 55, 935-949	3.3	34
39	Tomography of the lower troposphere using a small dense network of GPS receivers. *IEEE Transactions on Geoscience and Remote Sensing*, **2001**, 39, 439-447	8.1	32
38	Spatio-temporal tomography of the lower troposphere using GPS signals. *Physics and Chemistry of the Earth*, **2001**, 26, 405-411		6

37	The Chemistry of a Dry Cloud: The Effects of Radiation and Turbulence. *Journals of the Atmospheric Sciences*, **2000**, 57, 1573-1584	2.1	15
36	An inter-comparison study to estimate zenith wet delays using VLBI, GPS, and NWP models. *Earth, Planets and Space*, **2000**, 52, 691-694	2.9	22
35	Stable Nocturnal Boundary Layers: A Comparison of One-Dimensional and Large-Eddy Simulation Models. *Boundary-Layer Meteorology*, **1998**, 88, 181-210	3.4	23
34	The Meso-NH Atmospheric Simulation System. Part I: adiabatic formulation and control simulations. *Annales Geophysicae*, **1998**, 16, 90-109	2	580
33	Control of Chemical Reactions by Convective Turbulence in the Boundary Layer. *Journals of the Atmospheric Sciences*, **1998**, 55, 568-579	2.1	41
32	Evolution of Nitrogen Oxide Chemistry in the Nocturnal Boundary Layer. *Journal of Applied Meteorology and Climatology*, **1997**, 36, 943-957		16
31	Fluxes of chemically reactive species inferred from mean concentration measurements. *Atmospheric Environment*, **1997**, 31, 2371-2374	5.3	16
30	Scaling the turbulent transport of chemical compounds in the surface layer under neutral and stratified conditions. *Quarterly Journal of the Royal Meteorological Society*, **1997**, 123, 223-242	6.4	16
29	. *Tellus, Series B: Chemical and Physical Meteorology*, **1995**, 47, 353-364	3.3	22
28	The effect of micro-scale turbulence on the reaction rate in a chemically reactive plume. *Atmospheric Environment*, **1995**, 29, 87-95	5.3	23
27	Atmospheric surface layer similarity theory applied to chemically reactive species. *Journal of Geophysical Research*, **1995**, 100, 1397-1408		35
26	Assessment report on NRP subtheme Atmospheric processes & UV-B radiation *Studies in Environmental Science*, **1995**, 65, 155-233		1
25	Ultraviolet radiation and photochemistry in clouds: observations and modelling. *Studies in Environmental Science*, **1995**, 65, 237-240		
24	Tethered-balloon measurements of actinic flux in a cloud-capped marine boundary layer. *Journal of Geophysical Research*, **1994**, 99, 3699		55
23	A Photoelectric Detector Suspended under a Balloon for Actinic Flux Measurements. *Journal of Atmospheric and Oceanic Technology*, **1994**, 11, 674-679	2	8
22	Modelling Flux-Gradient Relationships for Chemically Reactive Species in the Atmospheric Surface Layer **1994**, 295-303		1
21	An observational study on the effects of time and space averaging in photochemical models. *Atmospheric Environment Part A General Topics*, **1993**, 27, 353-362		14
20	The divergence of the turbulent diffusion flux in the surface layer due to chemical reactions: the NO-O3-NO2system. *Tellus, Series B: Chemical and Physical Meteorology*, **1993**, 45, 23-33	3.3	16

19	The behaviour of vertical flux profiles of NO, O3, and NO2 explained in terms of the photostationary state relationship. *Journal of Atmospheric Chemistry*, **1993**, 16, 293-297	3.2	1
18	Second-order closure study of the covariance between chemically reactive species in the surface layer. *Journal of Atmospheric Chemistry*, **1993**, 16, 145-155	3.2	19
17	. *Tellus, Series B: Chemical and Physical Meteorology*, **1993**, 45, 23-33	3.3	24
16	Influence of chemistry on the flux-gradient relationships for the NO-O3-NO2 system. *Boundary-Layer Meteorology*, **1992**, 61, 375-387	3.4	60
15	A chemically reactive plume model for the NO?NO2?O3 system. *Atmospheric Environment Part A General Topics*, **1990**, 24, 2237-2246		22
14	The summertime Boreal forest field measurement intensive (HUMPPA-COPEC-2010): an overview of meteorological and chemical influences		3
13	Characterization of a boreal convective boundary layer and its impact on atmospheric chemistry during HUMPPA-COPEC-2010		2
12	Study of the diurnal variability of atmospheric chemistry with respect to boundary layer dynamics during DOMINO		2
11	Summertime total OH reactivity measurements from boreal forest during HUMPPA-COPEC 2010		3
10	Combined effects of surface conditions, boundary layer dynamics and chemistry on diurnal SOA-evolution		2
9	The BLLAST field experiment: Boundary-Layer Late Afternoon and Sunset Turbulence		15
8	Study of a prototypical convective boundary layer observed during BLLAST: contributions by large-scale forcings		9
7	Turbulence vertical structure of the boundary layer during the afternoon transition		5
6	Understanding isoprene photo-oxidation using observations and modelling over a subtropical forest in the Southeast US		1
5	Surface and boundary layer exchanges of volatile organic compounds, nitrogen oxides and ozone during the GABRIEL Campaign		4
4	Flux estimates of isoprene, methanol and acetone from airborne PTR-MS measurements over the tropical rainforest during the GABRIEL 2005 campaign		9
3	Two perspectives on the coupled carbon, water, and energy exchange in the planetary boundary layer		1
2	Formulation of and numerical studies with the Dutch Atmospheric Large-Eddy Simulation (DALES)		7

List of Publications

1	Role of the residual layer and large-scale subsidence on the development and evolution of the convective boundary layer	3