Pierre Gentine

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2799798/publications.pdf

Version: 2024-02-01

185 papers 12,140 citations

28274 55 h-index 30922 102 g-index

204 all docs

204 docs citations

times ranked

204

12005 citing authors

#	Article	IF	CITATIONS
1	Near-real-time global gridded daily CO2 emissions. Innovation(China), 2022, 3, 100182.	9.1	24
2	Tropical tall forests are more sensitive and vulnerable to drought than short forests. Global Change Biology, 2022, 28, 1583-1595.	9.5	20
3	Estimating evapotranspiration using remotely sensed solar-induced fluorescence measurements. Agricultural and Forest Meteorology, 2022, 314, 108800.	4.8	10
4	Amplified warming induced by large-scale application of water-saving techniques. Environmental Research Letters, 2022, 17, 034018.	5.2	10
5	Diurnal and Seasonal Variations of Passive and Active Microwave Satellite Observations Over Tropical Forests. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	5
6	Recent increase in the observation-derived land evapotranspiration due to global warming. Environmental Research Letters, 2022, 17, 024020.	5.2	31
7	Observational evidenceÂofÂregional increasing hot extreme accelerated by surface energy partitioning. Journal of Hydrometeorology, 2022, , .	1.9	3
8	Atmospheric dryness reduces photosynthesis along a large range of soil water deficits. Nature Communications, 2022, 13, 989.	12.8	100
9	Surface temperatures reveal the patterns of vegetation water stress and their environmental drivers across the tropical Americas. Global Change Biology, 2022, 28, 2940-2955.	9.5	9
10	Emissions rebound from the COVID-19 pandemic. Nature Climate Change, 2022, 12, 412-414.	18.8	41
11	Evaluating the Variability of Surface Soil Moisture Simulated Within CMIP5 Using SMAP Data. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	2
12	Observed strong atmospheric water constraints on forest photosynthesis using eddy covariance and satellite-based data across the Northern Hemisphere. International Journal of Applied Earth Observation and Geoinformation, 2022, 110, 102808.	1.9	0
13	Two for one: Partitioning CO2 fluxes and understanding the relationship between solar-induced chlorophyll fluorescence and gross primary productivity using machine learning. Agricultural and Forest Meteorology, 2022, 321, 108980.	4.8	11
14	Regional and seasonal partitioning of water and temperature controls on global land carbon uptake variability. Nature Communications, 2022, 13, .	12.8	18
15	Timing and Order of Extreme Drought and Wetness Determine Bioclimatic Sensitivity of Tree Growth. Earth's Future, 2022, 10, .	6.3	7
16	Global patterns of daily CO2 emissions reductions in the first year of COVID-19. Nature Geoscience, 2022, 15, 615-620.	12.9	46
17	Nonâ€Linear Dimensionality Reduction With a Variational Encoder Decoder to Understand Convective Processes in Climate Models. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	4
18	Biophysical impacts of northern vegetation changes on seasonal warming patterns. Nature Communications, 2022, 13, .	12.8	26

#	Article	IF	CITATIONS
19	Improving predictions of evapotranspiration by integrating multi-source observations and land surface model. Agricultural Water Management, 2022, 272, 107827.	5. 6	12
20	Water Availability Impacts on Evapotranspiration Partitioning. Agricultural and Forest Meteorology, 2021, 297, 108251.	4.8	39
21	Soil moisture–atmosphere feedbacks mitigate declining water availability in drylands. Nature Climate Change, 2021, 11, 38-44.	18.8	138
22	Does the Hook Structure Constrain Future Flood Intensification Under Anthropogenic Climate Warming?. Water Resources Research, 2021, 57, e2020WR028491.	4.2	78
23	Shallow groundwater inhibits soil respiration and favors carbon uptake in a wet alpine meadow ecosystem. Agricultural and Forest Meteorology, 2021, 297, 108254.	4.8	13
24	Development of a Daily Multilayer Cropland Soil Moisture Dataset for China Using Machine Learning and Application to Cropping Patterns. Journal of Hydrometeorology, 2021, 22, 445-461.	1.9	3
25	Patterns of plant rehydration and growth following pulses of soil moisture availability. Biogeosciences, 2021, 18, 831-847.	3.3	21
26	Satellite Observations of the Tropical Terrestrial Carbon Balance and Interactions With the Water Cycle During the 21st Century. Reviews of Geophysics, 2021, 59, e2020RG000711.	23.0	13
27	Logarithmic profile of temperature in sheared and unstably stratified atmospheric boundary layers. Physical Review Fluids, 2021, 6, .	2.5	14
28	PrecipGAN: Merging Microwave and Infrared Data for Satellite Precipitation Estimation Using Generative Adversarial Network. Geophysical Research Letters, 2021, 48, e2020GL092032.	4.0	13
29	Peak growing season patterns and climate extremes-driven responses of gross primary production estimated by satellite and process based models over North America. Agricultural and Forest Meteorology, 2021, 298-299, 108292.	4.8	12
30	Soil moisture–atmosphere feedback dominates land carbon uptake variability. Nature, 2021, 592, 65-69.	27.8	241
31	Advances in Land Surface Models and Indicators for Drought Monitoring and Prediction. Bulletin of the American Meteorological Society, 2021, 102, E1099-E1122.	3.3	15
32	Enforcing Analytic Constraints in Neural Networks Emulating Physical Systems. Physical Review Letters, 2021, 126, 098302.	7.8	124
33	Connection Between Mass Flux Transport and Eddy Diffusivity in Convective Atmospheric Boundary Layers. Geophysical Research Letters, 2021, 48, e2020GL092073.	4.0	4
34	Assessing the Potential of Deep Learning for Emulating Cloud Superparameterization in Climate Models With Realâ€Geography Boundary Conditions. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002385.	3.8	20
35	Disentangling the Effects of Vapor Pressure Deficit and Soil Water Availability on Canopy Conductance in a Seasonal Tropical Forest During the 2015 El Niño Drought. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035004.	3.3	17
36	Vapor Pressure Deficit and Sunlight Explain Seasonality of Leaf Phenology and Photosynthesis Across Amazonian Evergreen Broadleaved Forest. Global Biogeochemical Cycles, 2021, 35, e2020GB006893.	4.9	31

#	Article	IF	CITATIONS
37	Long-term relative decline in evapotranspiration with increasing runoff on fractional land surfaces. Hydrology and Earth System Sciences, 2021, 25, 3805-3818.	4.9	22
38	Global Coordination in Plant Physiological and Rooting Strategies in Response to Water Stress. Global Biogeochemical Cycles, 2021, 35, e2020GB006758.	4.9	16
39	Remote Sensing of Global Daily Evapotranspiration based on a Surface Energy Balance Method and Reanalysis Data. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD032873.	3.3	32
40	Accounting for canopy structure improves hyperspectral radiative transfer and sun-induced chlorophyll fluorescence representations in a new generation Earth System model. Remote Sensing of Environment, 2021, 261, 112497.	11.0	34
41	Detecting forest response to droughts with global observations of vegetation water content. Global Change Biology, 2021, 27, 6005-6024.	9.5	73
42	Comment on "Recent global decline of CO ₂ fertilization effects on vegetation photosynthesis― Science, 2021, 373, eabg2947.	12.6	18
43	A comprehensive framework for seasonal controls of leaf abscission and productivity in evergreen broadleaved tropical and subtropical forests. Innovation(China), 2021, 2, 100154.	9.1	19
44	Vulnerability of European ecosystems to two compound dry and hot summers in 2018 and 2019. Earth System Dynamics, 2021, 12, 1015-1035.	7.1	49
45	Development of a Deep Learning Emulator for a Distributed Groundwater–Surface Water Model: ParFlow-ML. Water (Switzerland), 2021, 13, 3393.	2.7	18
46	Site Characteristics Mediate the Relationship Between Forest Productivity and Satellite Measured Solar Induced Fluorescence. Frontiers in Forests and Global Change, 2021, 4, .	2.3	4
47	Estimation of Turbulent Heat Fluxes via Assimilation of Air Temperature and Specific Humidity into an Atmospheric Boundary Layer Model. Journal of Hydrometeorology, 2020, 21, 205-225.	1.9	11
48	Biophysical impacts of Earth greening largely controlled by aerodynamic resistance. Science Advances, 2020, 6, .	10.3	67
49	Amazon rainforest photosynthesis increases in response to atmospheric dryness. Science Advances, 2020, 6, .	10.3	98
50	Constraining Uncertainty in Projected Gross Primary Production With Machine Learning. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005619.	3.0	21
51	Connections between the hydrological cycle and crop yield in the rainfed U.S. Corn Belt. Journal of Hydrology, 2020, 590, 125398.	5.4	21
52	Power-Law Scaling of Turbulence Cospectra for the Stably Stratified Atmospheric Boundary Layer. Boundary-Layer Meteorology, 2020, 177, 1-18.	2.3	3
53	Sun-induced fluorescence closely linked to ecosystem transpiration as evidenced by satellite data and radiative transfer models. Remote Sensing of Environment, 2020, 249, 112030.	11.0	35
54	Vulnerability of Antarctica's ice shelves to meltwater-driven fracture. Nature, 2020, 584, 574-578.	27.8	98

#	Article	IF	CITATIONS
55	Uncertainties Caused by Resistances in Evapotranspiration Estimation Using High-Density Eddy Covariance Measurements. Journal of Hydrometeorology, 2020, 21, 1349-1365.	1.9	22
56	Value of sun-induced chlorophyll fluorescence for quantifying hydrological states and fluxes: Current status and challenges. Agricultural and Forest Meteorology, 2020, 291, 108088.	4.8	62
57	Changes in Tropical Precipitation Intensity With El Niño Warming. Geophysical Research Letters, 2020, 47, e2020GL087663.	4.0	7
58	An observation-driven optimization method for continuous estimation of evaporative fraction over large heterogeneous areas. Remote Sensing of Environment, 2020, 247, 111887.	11.0	7
59	Interactions Between the Amazonian Rainforest andÂCumuli Clouds: A Largeâ€Eddy Simulation, Highâ€Resolution ECMWF, and Observational Intercomparison Study. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001828.	3.8	10
60	Light limitation regulates the response of autumn terrestrial carbon uptake to warming. Nature Climate Change, 2020, 10, 739-743.	18.8	94
61	Dry Deposition of Ozone Over Land: Processes, Measurement, and Modeling. Reviews of Geophysics, 2020, 58, e2019RG000670.	23.0	86
62	Redefining droughts for the U.S. Corn Belt: The dominant role of atmospheric vapor pressure deficit over soil moisture in regulating stomatal behavior of Maize and Soybean. Agricultural and Forest Meteorology, 2020, 287, 107930.	4.8	90
63	A Model for Turbulence Spectra in the Equilibrium Range of the Stable Atmospheric Boundary Layer. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032191.	3.3	9
64	Distinct xylem responses to acute vs prolonged drought in pine trees. Tree Physiology, 2020, 40, 605-620.	3.1	20
65	Large and projected strengthening moisture limitation on end-of-season photosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9216-9222.	7.1	69
66	Towards Physically-Consistent, Data-Driven Models of Convection. , 2020, , .		18
67	Environmental Controls on Tropical Mesoscale Convective System Precipitation Intensity. Journals of the Atmospheric Sciences, 2020, 77, 4233-4249.	1.7	12
68	Emergent constraints on equilibrium climate sensitivity in CMIP5: do they hold for CMIP6?. Earth System Dynamics, 2020, 11, 1233-1258.	7.1	63
69	Heat stored in the Earth system: where does the energy go?. Earth System Science Data, 2020, 12, 2013-2041.	9.9	181
70	Land–atmospheric feedbacks during droughts and heatwaves: state of the science and current challenges. Annals of the New York Academy of Sciences, 2019, 1436, 19-35.	3.8	407
71	The Response of Tropical Organized Convection to El Niño Warming. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8481-8500.	3.3	12
72	Evaluation and mechanism exploration of the diurnal hysteresis of ecosystem fluxes. Agricultural and Forest Meteorology, 2019, 278, 107642.	4.8	31

#	Article	IF	CITATIONS
73	The Community Land Model Version 5: Description of New Features, Benchmarking, and Impact of Forcing Uncertainty. Journal of Advances in Modeling Earth Systems, 2019, 11, 4245-4287.	3.8	692
74	Evaluation and machine learning improvement of global hydrological model-based flood simulations. Environmental Research Letters, 2019, 14, 114027.	5.2	88
75	Land–atmosphere interactions in the tropics – a review. Hydrology and Earth System Sciences, 2019, 23, 4171-4197.	4.9	43
76	Can vegetation optical depth reflect changes in leaf water potential during soil moisture dry-down events?. Remote Sensing of Environment, 2019, 234, 111451.	11.0	36
77	Probing the Response of Tropical Deep Convection to Aerosol Perturbations Using Idealized Cloud-Resolving Simulations with Parameterized Large-Scale Dynamics. Journals of the Atmospheric Sciences, 2019, 76, 2885-2897.	1.7	5
78	When Does Vapor Pressure Deficit Drive or Reduce Evapotranspiration?. Journal of Advances in Modeling Earth Systems, 2019, 11, 3305-3320.	3.8	134
79	Beyond soil water potential: An expanded view on isohydricity including land–atmosphere interactions and phenology. Plant, Cell and Environment, 2019, 42, 1802-1815.	5.7	57
80	Land–atmosphere feedbacks exacerbate concurrent soil drought and atmospheric aridity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18848-18853.	7.1	283
81	Reviews and syntheses: Turning the challenges of partitioning ecosystem evaporation and transpiration into opportunities. Biogeosciences, 2019, 16, 3747-3775.	3.3	150
82	Large influence of soil moisture on long-term terrestrial carbon uptake. Nature, 2019, 565, 476-479.	27.8	409
83	Projected increases in intensity, frequency, and terrestrial carbon costs of compound drought and aridity events. Science Advances, 2019, 5, eaau5740.	10.3	211
84	Mapping daily evapotranspiration over a large irrigation district from MODIS data using a novel hybrid dual-source coupling model. Agricultural and Forest Meteorology, 2019, 276-277, 107612.	4.8	9
85	Potential evaporation at eddy-covariance sites across the globe. Hydrology and Earth System Sciences, 2019, 23, 925-948.	4.9	54
86	Surface Flux Equilibrium Theory Explains an Empirical Estimate of Waterâ€Limited Daily Evapotranspiration. Journal of Advances in Modeling Earth Systems, 2019, 11, 2036-2049.	3.8	25
87	Coupling between the terrestrial carbon and water cycles—a review. Environmental Research Letters, 2019, 14, 083003.	5.2	118
88	Hydraulic traits explain differential responses of Amazonian forests to the 2015 El Niñoâ€induced drought. New Phytologist, 2019, 223, 1253-1266.	7.3	58
89	Masi Entropy for Satellite Color Image Segmentation Using Tournament-Based Lévy Multiverse Optimization Algorithm. Remote Sensing, 2019, 11, 942.	4.0	23
90	Exploring the Potential of Satellite Solar-Induced Fluorescence to Constrain Global Transpiration Estimates. Remote Sensing, 2019, 11, 413.	4.0	34

#	Article	IF	Citations
91	Cover Image, Volume 1436, Issue 1. Annals of the New York Academy of Sciences, 2019, 1436, i-i.	3.8	O
92	Implementing Plant Hydraulics in the Community Land Model, Version 5. Journal of Advances in Modeling Earth Systems, 2019, 11, 485-513.	3.8	213
93	Reply to †Increases in temperature do not translate to increased flooding'. Nature Communications, 2019, 10, 5675.	12.8	10
94	Physicsâ€Constrained Machine Learning of Evapotranspiration. Geophysical Research Letters, 2019, 46, 14496-14507.	4.0	129
95	A simple and objective method to partition evapotranspiration into transpiration and evaporation at eddy-covariance sites. Agricultural and Forest Meteorology, 2019, 265, 171-182.	4.8	111
96	Land Surface Processes Relevant to Sub-seasonal to Seasonal (S2S) Prediction., 2019,, 165-181.		12
97	Vegetation Response to Rising CO ₂ Impacts Extreme Temperatures. Geophysical Research Letters, 2019, 46, 1383-1392.	4.0	28
98	Interannual variations in needle and sapwood traits of <i>Pinus edulis</i> branches under an experimental drought. Ecology and Evolution, 2018, 8, 1655-1672.	1.9	15
99	A phenomenological model of soil evaporative efficiency using surface soil moisture and temperature data. Agricultural and Forest Meteorology, 2018, 256-257, 501-515.	4.8	21
100	Spatioâ€Temporal Convergence of Maximum Daily Lightâ€Use Efficiency Based on Radiation Absorption by Canopy Chlorophyll. Geophysical Research Letters, 2018, 45, 3508-3519.	4.0	48
101	Reduced solarâ€induced chlorophyll fluorescence from <scp>GOME</scp> â€2 during Amazon drought caused by dataset artifacts. Global Change Biology, 2018, 24, 2229-2230.	9.5	71
102	Enhanced canopy growth precedes senescence in 2005 and 2010 Amazonian droughts. Remote Sensing of Environment, 2018, 211, 26-37.	11.0	33
103	Land–Atmosphere Interactions: The LoCo Perspective. Bulletin of the American Meteorological Society, 2018, 99, 1253-1272.	3.3	226
104	Diel ecosystem conductance response to vapor pressure deficit is suboptimal and independent of soil moisture. Agricultural and Forest Meteorology, 2018, 250-251, 24-34.	4.8	61
105	Reconstructed Solarâ€Induced Fluorescence: A Machine Learning Vegetation Product Based on MODIS Surface Reflectance to Reproduce GOMEâ€2 Solarâ€Induced Fluorescence. Geophysical Research Letters, 2018, 45, 3136-3146.	4.0	93
106	Critical impact of vegetation physiology on the continental hydrologic cycle in response to increasing CO ₂ . Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4093-4098.	7.1	179
107	Uncovering exposures responsible for birth season – disease effects: a global study. Journal of the American Medical Informatics Association: JAMIA, 2018, 25, 275-288.	4.4	33
108	Estimating surface soil moisture from SMAP observations using a Neural Network technique. Remote Sensing of Environment, 2018, 204, 43-59.	11.0	85

#	Article	IF	Citations
109	Ideas and perspectives: Tree–atmosphere interaction responds to water-related stem variations. Biogeosciences, 2018, 15, 6439-6449.	3.3	9
110	Coupling between radiative flux divergence and turbulence near the surface. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 2491-2507.	2.7	8
111	Tree Sway Time Series of 7 Amazon Tree Species (July 2015–May 2016). Frontiers in Earth Science, 2018, 6,	1.8	1
112	Satellite and In Situ Observations for Advancing Global Earth Surface Modelling: A Review. Remote Sensing, 2018, 10, 2038.	4.0	95
113	A global spatially contiguous solar-induced fluorescence (CSIF) dataset using neural networks. Biogeosciences, 2018, 15, 5779-5800.	3.3	217
114	Global downscaling of remotely sensed soil moisture using neural networks. Hydrology and Earth System Sciences, 2018, 22, 5341-5356.	4.9	48
115	Large increase in global storm runoff extremes driven by climate and anthropogenic changes. Nature Communications, 2018, 9, 4389.	12.8	260
116	Soil Texture Effects on Surface Resistance to Bareâ€Soil Evaporation. Geophysical Research Letters, 2018, 45, 10,398.	4.0	59
117	Deep learning to represent subgrid processes in climate models. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9684-9689.	7.1	420
118	Effect of Reduced Summer Cloud Shading on Evaporative Demand and Wildfire in Coastal Southern California. Geophysical Research Letters, 2018, 45, 5653-5662.	4.0	23
119	Tall Amazonian forests are less sensitive to precipitation variability. Nature Geoscience, 2018, 11, 405-409.	12.9	126
120	Role of Surface Friction on Shallow Nonprecipitating Convection. Journals of the Atmospheric Sciences, 2018, 75, 163-178.	1.7	11
121	Could Machine Learning Break the Convection Parameterization Deadlock?. Geophysical Research Letters, 2018, 45, 5742-5751.	4.0	246
122	Implications of Nonlocal Transport and Conditionally Averaged Statistics on Monin–Obukhov Similarity Theory and Townsend's Attached Eddy Hypothesis. Journals of the Atmospheric Sciences, 2018, 75, 3403-3431.	1.7	37
123	Global variations in ecosystemâ€scale isohydricity. Global Change Biology, 2017, 23, 891-905.	9.5	226
124	Sensitivity of grassland productivity to aridity controlled by stomatal and xylem regulation. Nature Geoscience, 2017, 10, 284-288.	12.9	200
125	Role of convective mixing and evaporative cooling in shallow convection. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5351-5363.	3.3	17
126	Soil moisture retrieval from AMSR-E and ASCAT microwave observation synergy. Part 2: Product evaluation. Remote Sensing of Environment, 2017, 195, 202-217.	11.0	42

#	Article	IF	Citations
127	Failure of Taylor's hypothesis in the atmospheric surface layer and its correction for eddyâ€covariance measurements. Geophysical Research Letters, 2017, 44, 4287-4295.	4.0	54
128	Regionally strong feedbacks between the atmosphere and terrestrial biosphere. Nature Geoscience, 2017, 10, 410-414.	12.9	197
129	Potential for natural evaporation as a reliable renewable energy resource. Nature Communications, 2017, 8, 617.	12.8	141
130	The impact of anthropogenic land use and land cover change on regional climate extremes. Nature Communications, 2017, 8, 989.	12.8	207
131	Coherent Structures in Large-Eddy Simulations of a Nonprecipitating Stratocumulus-Topped Boundary Layer. Journals of the Atmospheric Sciences, 2017, 74, 4117-4137.	1.7	16
132	Role of large eddies in the breakdown of the Reynolds analogy in an idealized mildly unstable atmospheric surface layer. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 2182-2197.	2.7	10
133	Climate Classification is an Important Factor in Assessing Quality-of-Care Across Hospitals. Scientific Reports, 2017, 7, 4948.	3.3	11
134	Estimating Global Ecosystem Isohydry/Anisohydry Using Active and Passive Microwave Satellite Data. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 3306-3321.	3.0	34
135	Linking plant functional trait plasticity and the large increase in forest water use efficiency. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 2393-2408.	3.0	54
136	Statistical retrieval of surface and root zone soil moisture using synergy of multi-frequency remotely-sensed observations. , 2017, , .		1
137	Measuring Tree Properties and Responses Using Low-Cost Accelerometers. Sensors, 2017, 17, 1098.	3.8	38
138	Water, Energy, and Carbon with Artificial Neural Networks (WECANN): a statistically based estimate of global surface turbulent fluxes and gross primary productivity using solar-induced fluorescence. Biogeosciences, 2017, 14, 4101-4124.	3.3	97
139	Statistical downscaling of remotely-sensed soil moisture. , 2017, , .		0
140	Effects of 3-D thermal radiation on the development of a shallow cumulus cloud field. Atmospheric Chemistry and Physics, 2017, 17, 5477-5500.	4.9	29
141	An allometryâ€based model of the survival strategies of hydraulic failure and carbon starvation. Ecohydrology, 2016, 9, 529-546.	2.4	33
142	Role of surface heat fluxes underneath cold pools. Geophysical Research Letters, 2016, 43, 874-883.	4.0	61
143	Modeling soil evaporation efficiency in a range of soil and atmospheric conditions using a metaâ€analysis approach. Water Resources Research, 2016, 52, 3663-3684.	4.2	56
144	Modification of landâ€atmosphere interactions by CO ₂ effects: Implications for summer dryness and heat wave amplitude. Geophysical Research Letters, 2016, 43, 10,240.	4.0	36

#	Article	IF	Citations
145	Mean-velocity profile of smooth channel flow explained by a cospectral budget model with wall-blockage. Physics of Fluids, 2016, 28, .	4.0	18
146	Evaporation estimates using weather station data and boundary layer theory. Geophysical Research Letters, 2016, 43, 11,661.	4.0	53
147	The $\langle i \rangle k \langle i \rangle \langle sup \rangle$ scaling of air temperature spectra in atmospheric surface layer flows. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 496-505.	2.7	19
148	Coherent Structures in the Boundary and Cloud Layers: Role of Updrafts, Subsiding Shells, and Environmental Subsidence. Journals of the Atmospheric Sciences, 2016, 73, 1789-1814.	1.7	30
149	Soil moisture retrieval from AMSR-E and ASCAT microwave observation synergy. Part 1: Satellite data analysis. Remote Sensing of Environment, 2016, 173, 1-14.	11.0	53
150	Resolving Contrasting Regional Rainfall Responses to El Ni $\tilde{A}\pm 0$ over Tropical Africa. Journal of Climate, 2016, 29, 1461-1476.	3.2	46
151	Ocean–atmosphere interactions modulate irrigation's climate impacts. Earth System Dynamics, 2016, 7, 863-876.	7.1	15
152	Representation of daytime moist convection over the semiâ€arid Tropics by parametrizations used in climate and meteorological models. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2220-2236.	2.7	23
153	Fog and rain in the Amazon. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11473-11477.	7.1	44
154	The effect of moist convection on thermally induced mesoscale circulations. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2418-2428.	2.7	16
155	The Budyko and complementary relationships in an idealized model of large-scale land–atmosphere coupling. Hydrology and Earth System Sciences, 2015, 19, 2119-2131.	4.9	25
156	A Closer Look at Boundary Layer Inversion in Large-Eddy Simulations and Bulk Models: Buoyancy-Driven Case. Journals of the Atmospheric Sciences, 2015, 72, 728-749.	1.7	21
157	Data Length Requirements for Observational Estimates of Land–Atmosphere Coupling Strength. Journal of Hydrometeorology, 2015, 16, 1615-1635.	1.9	32
158	Interannual Coupling between Summertime Surface Temperature and Precipitation over Land: Processes and Implications for Climate Change*. Journal of Climate, 2015, 28, 1308-1328.	3.2	135
159	Impact of Soil Moisture–Atmosphere Interactions on Surface Temperature Distribution. Journal of Climate, 2014, 27, 7976-7993.	3.2	129
160	Radiative–Convective Equilibrium over a Land Surface. Journal of Climate, 2014, 27, 8611-8629.	3.2	14
161	Neural Network–Based Sensitivity Analysis of Summertime Convection over the Continental United States. Journal of Climate, 2014, 27, 1958-1979.	3.2	17
162	Triggering Deep Convection with a Probabilistic Plume Model. Journals of the Atmospheric Sciences, 2014, 71, 3881-3901.	1.7	29

#	Article	IF	CITATIONS
163	Land-surface controls on afternoon precipitation diagnosed from observational data: uncertainties and confounding factors. Atmospheric Chemistry and Physics, 2014, 14, 8343-8367.	4.9	63
164	A Probabilistic Bulk Model of Coupled Mixed Layer and Convection. Part II: Shallow Convection Case. Journals of the Atmospheric Sciences, 2013, 70, 1557-1576.	1.7	30
165	A Probabilistic Bulk Model of Coupled Mixed Layer and Convection. Part I: Clear-Sky Case. Journals of the Atmospheric Sciences, 2013, 70, 1543-1556.	1.7	22
166	Emergent relation between surface vapor conductance and relative humidity profiles yields evaporation rates from weather data. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6287-6291.	7.1	60
167	Evaluation of a simple approach for crop evapotranspiration partitioning and analysis of the water budget distribution for several crop species. Agricultural and Forest Meteorology, 2013, 177, 46-56.	4.8	25
168	Surface and Atmospheric Controls on the Onset of Moist Convection over Land. Journal of Hydrometeorology, 2013, 14, 1443-1462.	1.9	144
169	Precipitation Sensitivity to Surface Heat Fluxes over North America in Reanalysis and Model Data. Journal of Hydrometeorology, 2013, 14, 722-743.	1.9	40
170	An Idealized Prototype for Large-Scale Land–Atmosphere Coupling. Journal of Climate, 2013, 26, 2379-2389.	3.2	26
171	Diagnosing evaporative fraction over land from boundaryâ€layer clouds. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8185-8196.	3.3	24
172	Reduction of tropical land region precipitation variability via transpiration. Geophysical Research Letters, 2012, 39, .	4.0	35
173	Interdependence of climate, soil, and vegetation as constrained by the Budyko curve. Geophysical Research Letters, 2012, 39, .	4.0	210
174	Systematic errors in ground heat flux estimation and their correction. Water Resources Research, 2012, 48, .	4.2	41
175	Scaling in Surface Hydrology: Progress and Challenges. Journal of Contemporary Water Research and Education, 2012, 147, 28-40.	0.7	41
176	Harmonic propagation of variability in surface energy balance within a coupled soilâ€vegetationâ€atmosphere system. Water Resources Research, 2011, 47, .	4.2	38
177	Probability of afternoon precipitation in easternÂUnited States and Mexico enhanced byÂhigh evaporation. Nature Geoscience, 2011, 4, 434-439.	12.9	213
178	The Diurnal Behavior of Evaporative Fraction in the Soil–Vegetation–Atmospheric Boundary Layer Continuum. Journal of Hydrometeorology, 2011, 12, 1530-1546.	1.9	111
179	Spectral Behaviour of a Coupled Land-Surface and Boundary-Layer System. Boundary-Layer Meteorology, 2010, 134, 157-180.	2.3	29
180	Analysis of evaporative fraction diurnal behaviour. Agricultural and Forest Meteorology, 2007, 143, 13-29.	4.8	233

PIERRE GENTINE

#	Article	IF	CITATIONS
181	Monitoring water stress using time series of observed to unstressed surface temperature difference. Agricultural and Forest Meteorology, 2007, 146, 159-172.	4.8	54
182	Estimating cereal evapotranspiration using a simple model driven by satellite data. , 0, , .		3
183	Aggregation of land surface heat fluxes using stochastic state variables. , 0, , .		0
184	Large divergence in tropical hydrological projections caused by model spread in vegetation responses to elevated CO ₂ . Earth's Future, 0, , .	6.3	5
185	Deep learning for subgridâ€scale turbulence modeling in largeâ€eddy simulations of the convective atmospheric boundary layer. Journal of Advances in Modeling Earth Systems, 0, , .	3.8	6