

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

32410

55
h-index

35168

102
g-index

204
all docs

204
docs citations

204
times ranked

13638
citing authors

#	ARTICLE	IF	CITATIONS
1	Near-real-time global gridded daily CO2 emissions. <i>Innovation(China)</i> , 2022, 3, 100182.	5.2	24
2	Tropical tall forests are more sensitive and vulnerable to drought than short forests. <i>Global Change Biology</i> , 2022, 28, 1583-1595.	4.2	20
3	Estimating evapotranspiration using remotely sensed solar-induced fluorescence measurements. <i>Agricultural and Forest Meteorology</i> , 2022, 314, 108800.	1.9	10
4	Amplified warming induced by large-scale application of water-saving techniques. <i>Environmental Research Letters</i> , 2022, 17, 034018.	2.2	10
5	Diurnal and Seasonal Variations of Passive and Active Microwave Satellite Observations Over Tropical Forests. <i>Journal of Geophysical Research C: Biogeosciences</i> , 2022, 127, .	1.3	5
6	Recent increase in the observation-derived land evapotranspiration due to global warming. <i>Environmental Research Letters</i> , 2022, 17, 024020.	2.2	31
7	Observational evidence of regional increasing hot extreme accelerated by surface energy partitioning. <i>Journal of Hydrometeorology</i> , 2022, , .	0.7	3
8	Atmospheric dryness reduces photosynthesis along a large range of soil water deficits. <i>Nature Communications</i> , 2022, 13, 989.	5.8	100
9	Surface temperatures reveal the patterns of vegetation water stress and their environmental drivers across the tropical Americas. <i>Global Change Biology</i> , 2022, 28, 2940-2955.	4.2	9
10	Emissions rebound from the COVID-19 pandemic. <i>Nature Climate Change</i> , 2022, 12, 412-414.	8.1	41
11	Evaluating the Variability of Surface Soil Moisture Simulated Within CMIP5 Using SMAP Data. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	1.2	2
12	Observed strong atmospheric water constraints on forest photosynthesis using eddy covariance and satellite-based data across the Northern Hemisphere. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2022, 110, 102808.	0.9	0
13	Two for one: Partitioning CO2 fluxes and understanding the relationship between solar-induced chlorophyll fluorescence and gross primary productivity using machine learning. <i>Agricultural and Forest Meteorology</i> , 2022, 321, 108980.	1.9	11
14	Regional and seasonal partitioning of water and temperature controls on global land carbon uptake variability. <i>Nature Communications</i> , 2022, 13, .	5.8	18
15	Timing and Order of Extreme Drought and Wetness Determine Bioclimatic Sensitivity of Tree Growth. <i>Earth's Future</i> , 2022, 10, .	2.4	7
16	Global patterns of daily CO2 emissions reductions in the first year of COVID-19. <i>Nature Geoscience</i> , 2022, 15, 615-620.	5.4	46
17	Non-Linear Dimensionality Reduction With a Variational Encoder Decoder to Understand Convective Processes in Climate Models. <i>Journal of Advances in Modeling Earth Systems</i> , 2022, 14, .	1.3	4
18	Biophysical impacts of northern vegetation changes on seasonal warming patterns. <i>Nature Communications</i> , 2022, 13, .	5.8	26

#	ARTICLE	IF	CITATIONS
19	Improving predictions of evapotranspiration by integrating multi-source observations and land surface model. <i>Agricultural Water Management</i> , 2022, 272, 107827.	2.4	12
20	Water Availability Impacts on Evapotranspiration Partitioning. <i>Agricultural and Forest Meteorology</i> , 2021, 297, 108251.	1.9	39
21	Soil moisture–atmosphere feedbacks mitigate declining water availability in drylands. <i>Nature Climate Change</i> , 2021, 11, 38-44.	8.1	138
22	Does the Hook Structure Constrain Future Flood Intensification Under Anthropogenic Climate Warming?. <i>Water Resources Research</i> , 2021, 57, e2020WR028491.	1.7	78
23	Shallow groundwater inhibits soil respiration and favors carbon uptake in a wet alpine meadow ecosystem. <i>Agricultural and Forest Meteorology</i> , 2021, 297, 108254.	1.9	13
24	Development of a Daily Multilayer Cropland Soil Moisture Dataset for China Using Machine Learning and Application to Cropping Patterns. <i>Journal of Hydrometeorology</i> , 2021, 22, 445-461.	0.7	3
25	Patterns of plant rehydration and growth following pulses of soil moisture availability. <i>Biogeosciences</i> , 2021, 18, 831-847.	1.3	21
26	Satellite Observations of the Tropical Terrestrial Carbon Balance and Interactions With the Water Cycle During the 21st Century. <i>Reviews of Geophysics</i> , 2021, 59, e2020RG000711.	9.0	13
27	Logarithmic profile of temperature in sheared and unstably stratified atmospheric boundary layers. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	14
28	PrecipGAN: Merging Microwave and Infrared Data for Satellite Precipitation Estimation Using Generative Adversarial Network. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL092032.	1.5	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. <i>Agricultural and Forest Meteorology</i> , 2021, 298-299, 108292.	1.9	12
30	Soil moisture–atmosphere feedback dominates land carbon uptake variability. <i>Nature</i> , 2021, 592, 65-69.	13.7	241
31	Advances in Land Surface Models and Indicators for Drought Monitoring and Prediction. <i>Bulletin of the American Meteorological Society</i> , 2021, 102, E1099-E1122.	1.7	15
32	Enforcing Analytic Constraints in Neural Networks Emulating Physical Systems. <i>Physical Review Letters</i> , 2021, 126, 098302.	2.9	124
33	Connection Between Mass Flux Transport and Eddy Diffusivity in Convective Atmospheric Boundary Layers. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL092073.	1.5	4
34	Assessing the Potential of Deep Learning for Emulating Cloud Superparameterization in Climate Models With Real–World Geography Boundary Conditions. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2020MS002385.	1.3	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. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD035004.	1.2	17
36	Vapor Pressure Deficit and Sunlight Explain Seasonality of Leaf Phenology and Photosynthesis Across Amazonian Evergreen Broadleaved Forest. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006893.	1.9	31

#	ARTICLE	IF	CITATIONS
37	Long-term relative decline in evapotranspiration with increasing runoff on fractional land surfaces. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 3805-3818.	1.9	22
38	Global Coordination in Plant Physiological and Rooting Strategies in Response to Water Stress. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006758.	1.9	16
39	Remote Sensing of Global Daily Evapotranspiration based on a Surface Energy Balance Method and Reanalysis Data. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD032873.	1.2	32
40	Accounting for canopy structure improves hyperspectral radiative transfer and sun-induced chlorophyll fluorescence representations in a new generation Earth System model. <i>Remote Sensing of Environment</i> , 2021, 261, 112497.	4.6	34
41	Detecting forest response to droughts with global observations of vegetation water content. <i>Global Change Biology</i> , 2021, 27, 6005-6024.	4.2	73
42	Comment on "Recent global decline of CO ₂ fertilization effects on vegetation photosynthesis". <i>Science</i> , 2021, 373, eabg2947.	6.0	18
43	A comprehensive framework for seasonal controls of leaf abscission and productivity in evergreen broadleaved tropical and subtropical forests. <i>Innovation(China)</i> , 2021, 2, 100154.	5.2	19
44	Vulnerability of European ecosystems to two compound dry and hot summers in 2018 and 2019. <i>Earth System Dynamics</i> , 2021, 12, 1015-1035.	2.7	49
45	Development of a Deep Learning Emulator for a Distributed Groundwater-Surface Water Model: ParFlow-ML. <i>Water (Switzerland)</i> , 2021, 13, 3393.	1.2	18
46	Site Characteristics Mediate the Relationship Between Forest Productivity and Satellite Measured Solar Induced Fluorescence. <i>Frontiers in Forests and Global Change</i> , 2021, 4, .	1.0	4
47	Estimation of Turbulent Heat Fluxes via Assimilation of Air Temperature and Specific Humidity into an Atmospheric Boundary Layer Model. <i>Journal of Hydrometeorology</i> , 2020, 21, 205-225.	0.7	11
48	Biophysical impacts of Earth greening largely controlled by aerodynamic resistance. <i>Science Advances</i> , 2020, 6, .	4.7	67
49	Amazon rainforest photosynthesis increases in response to atmospheric dryness. <i>Science Advances</i> , 2020, 6, .	4.7	98
50	Constraining Uncertainty in Projected Gross Primary Production With Machine Learning. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2019JG005619.	1.3	21
51	Connections between the hydrological cycle and crop yield in the rainfed U.S. Corn Belt. <i>Journal of Hydrology</i> , 2020, 590, 125398.	2.3	21
52	Power-Law Scaling of Turbulence Cospectra for the Stably Stratified Atmospheric Boundary Layer. <i>Boundary-Layer Meteorology</i> , 2020, 177, 1-18.	1.2	3
53	Sun-induced fluorescence closely linked to ecosystem transpiration as evidenced by satellite data and radiative transfer models. <i>Remote Sensing of Environment</i> , 2020, 249, 112030.	4.6	35
54	Vulnerability of Antarctica's ice shelves to meltwater-driven fracture. <i>Nature</i> , 2020, 584, 574-578.	13.7	98

#	ARTICLE	IF	CITATIONS
55	Uncertainties Caused by Resistances in Evapotranspiration Estimation Using High-Density Eddy Covariance Measurements. <i>Journal of Hydrometeorology</i> , 2020, 21, 1349-1365.	0.7	22
56	Value of sun-induced chlorophyll fluorescence for quantifying hydrological states and fluxes: Current status and challenges. <i>Agricultural and Forest Meteorology</i> , 2020, 291, 108088.	1.9	62
57	Changes in Tropical Precipitation Intensity With El Niño Warming. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087663.	1.5	7
58	An observation-driven optimization method for continuous estimation of evaporative fraction over large heterogeneous areas. <i>Remote Sensing of Environment</i> , 2020, 247, 111887.	4.6	7
59	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
60	Light limitation regulates the response of autumn terrestrial carbon uptake to warming. <i>Nature Climate Change</i> , 2020, 10, 739-743.	8.1	94
61	Dry Deposition of Ozone Over Land: Processes, Measurement, and Modeling. <i>Reviews of Geophysics</i> , 2020, 58, e2019RG000670.	9.0	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. <i>Agricultural and Forest Meteorology</i> , 2020, 287, 107930.	1.9	90
63	A Model for Turbulence Spectra in the Equilibrium Range of the Stable Atmospheric Boundary Layer. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD032191.	1.2	9
64	Distinct xylem responses to acute vs prolonged drought in pine trees. <i>Tree Physiology</i> , 2020, 40, 605-620.	1.4	20
65	Large and projected strengthening moisture limitation on end-of-season photosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 9216-9222.	3.3	69
66	Towards Physically-Consistent, Data-Driven Models of Convection. , 2020, , .		18
67	Environmental Controls on Tropical Mesoscale Convective System Precipitation Intensity. <i>Journals of the Atmospheric Sciences</i> , 2020, 77, 4233-4249.	0.6	12
68	Emergent constraints on equilibrium climate sensitivity in CMIP5: do they hold for CMIP6?. <i>Earth System Dynamics</i> , 2020, 11, 1233-1258.	2.7	63
69	Heat stored in the Earth system: where does the energy go?. <i>Earth System Science Data</i> , 2020, 12, 2013-2041.	3.7	181
70	Land-atmospheric feedbacks during droughts and heatwaves: state of the science and current challenges. <i>Annals of the New York Academy of Sciences</i> , 2019, 1436, 19-35.	1.8	407
71	The Response of Tropical Organized Convection to El Niño Warming. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 8481-8500.	1.2	12
72	Evaluation and mechanism exploration of the diurnal hysteresis of ecosystem fluxes. <i>Agricultural and Forest Meteorology</i> , 2019, 278, 107642.	1.9	31

#	ARTICLE	IF	CITATIONS
73	The Community Land Model Version 5: Description of New Features, Benchmarking, and Impact of Forcing Uncertainty. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 4245-4287.	1.3	692
74	Evaluation and machine learning improvement of global hydrological model-based flood simulations. <i>Environmental Research Letters</i> , 2019, 14, 114027.	2.2	88
75	Land-atmosphere interactions in the tropics – a review. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 4171-4197.	1.9	43
76	Can vegetation optical depth reflect changes in leaf water potential during soil moisture dry-down events?. <i>Remote Sensing of Environment</i> , 2019, 234, 111451.	4.6	36
77	Probing the Response of Tropical Deep Convection to Aerosol Perturbations Using Idealized Cloud-Resolving Simulations with Parameterized Large-Scale Dynamics. <i>Journals of the Atmospheric Sciences</i> , 2019, 76, 2885-2897.	0.6	5
78	When Does Vapor Pressure Deficit Drive or Reduce Evapotranspiration?. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 3305-3320.	1.3	134
79	Beyond soil water potential: An expanded view on isohydricity including land-atmosphere interactions and phenology. <i>Plant, Cell and Environment</i> , 2019, 42, 1802-1815.	2.8	57
80	Land-atmosphere feedbacks exacerbate concurrent soil drought and atmospheric aridity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 18848-18853.	3.3	283
81	Reviews and syntheses: Turning the challenges of partitioning ecosystem evaporation and transpiration into opportunities. <i>Biogeosciences</i> , 2019, 16, 3747-3775.	1.3	150
82	Large influence of soil moisture on long-term terrestrial carbon uptake. <i>Nature</i> , 2019, 565, 476-479.	13.7	409
83	Projected increases in intensity, frequency, and terrestrial carbon costs of compound drought and aridity events. <i>Science Advances</i> , 2019, 5, eaau5740.	4.7	211
84	Mapping daily evapotranspiration over a large irrigation district from MODIS data using a novel hybrid dual-source coupling model. <i>Agricultural and Forest Meteorology</i> , 2019, 276-277, 107612.	1.9	9
85	Potential evaporation at eddy-covariance sites across the globe. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 925-948.	1.9	54
86	Surface Flux Equilibrium Theory Explains an Empirical Estimate of Water-Limited Daily Evapotranspiration. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 2036-2049.	1.3	25
87	Coupling between the terrestrial carbon and water cycles – a review. <i>Environmental Research Letters</i> , 2019, 14, 083003.	2.2	118
88	Hydraulic traits explain differential responses of Amazonian forests to the 2015 El Niño-induced drought. <i>New Phytologist</i> , 2019, 223, 1253-1266.	3.5	58
89	Masi Entropy for Satellite Color Image Segmentation Using Tournament-Based Levy Multiverse Optimization Algorithm. <i>Remote Sensing</i> , 2019, 11, 942.	1.8	23
90	Exploring the Potential of Satellite Solar-Induced Fluorescence to Constrain Global Transpiration Estimates. <i>Remote Sensing</i> , 2019, 11, 413.	1.8	34

#	ARTICLE	IF	CITATIONS
91	Cover Image, Volume 1436, Issue 1. Annals of the New York Academy of Sciences, 2019, 1436, i-i.	1.8	0
92	Implementing Plant Hydraulics in the Community Land Model, Version 5. Journal of Advances in Modeling Earth Systems, 2019, 11, 485-513.	1.3	213
93	Reply to "Increases in temperature do not translate to increased flooding". Nature Communications, 2019, 10, 5675.	5.8	10
94	Physics-constrained Machine Learning of Evapotranspiration. Geophysical Research Letters, 2019, 46, 14496-14507.	1.5	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.	1.9	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.	1.5	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.	0.8	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.	1.9	21
100	Spatio-temporal Convergence of Maximum Daily Light Use Efficiency Based on Radiation Absorption by Canopy Chlorophyll. Geophysical Research Letters, 2018, 45, 3508-3519.	1.5	48
101	Reduced solar-induced chlorophyll fluorescence from GOME-2 during Amazon drought caused by dataset artifacts. Global Change Biology, 2018, 24, 2229-2230.	4.2	71
102	Enhanced canopy growth precedes senescence in 2005 and 2010 Amazonian droughts. Remote Sensing of Environment, 2018, 211, 26-37.	4.6	33
103	Land-Atmosphere Interactions: The LoCo Perspective. Bulletin of the American Meteorological Society, 2018, 99, 1253-1272.	1.7	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.	1.9	61
105	Reconstructed Solar-induced Fluorescence: A Machine Learning Vegetation Product Based on MODIS Surface Reflectance to Reproduce GOME-2 Solar-induced Fluorescence. Geophysical Research Letters, 2018, 45, 3136-3146.	1.5	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.	3.3	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.	2.2	33
108	Estimating surface soil moisture from SMAP observations using a Neural Network technique. Remote Sensing of Environment, 2018, 204, 43-59.	4.6	85

#	ARTICLE	IF	CITATIONS
109	Ideas and perspectives: Tree-atmosphere interaction responds to water-related stem variations. <i>Biogeosciences</i> , 2018, 15, 6439-6449.	1.3	9
110	Coupling between radiative flux divergence and turbulence near the surface. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2018, 144, 2491-2507.	1.0	8
111	Tree Sway Time Series of 7 Amazon Tree Species (July 2015-May 2016). <i>Frontiers in Earth Science</i> , 2018, 6, .	0.8	1
112	Satellite and In Situ Observations for Advancing Global Earth Surface Modelling: A Review. <i>Remote Sensing</i> , 2018, 10, 2038.	1.8	95
113	A global spatially contiguous solar-induced fluorescence (CSIF) dataset using neural networks. <i>Biogeosciences</i> , 2018, 15, 5779-5800.	1.3	217
114	Global downscaling of remotely sensed soil moisture using neural networks. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 5341-5356.	1.9	48
115	Large increase in global storm runoff extremes driven by climate and anthropogenic changes. <i>Nature Communications</i> , 2018, 9, 4389.	5.8	260
116	Soil Texture Effects on Surface Resistance to Bare-Soil Evaporation. <i>Geophysical Research Letters</i> , 2018, 45, 10,398.	1.5	59
117	Deep learning to represent subgrid processes in climate models. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 9684-9689.	3.3	420
118	Effect of Reduced Summer Cloud Shading on Evaporative Demand and Wildfire in Coastal Southern California. <i>Geophysical Research Letters</i> , 2018, 45, 5653-5662.	1.5	23
119	Tall Amazonian forests are less sensitive to precipitation variability. <i>Nature Geoscience</i> , 2018, 11, 405-409.	5.4	126
120	Role of Surface Friction on Shallow Nonprecipitating Convection. <i>Journals of the Atmospheric Sciences</i> , 2018, 75, 163-178.	0.6	11
121	Could Machine Learning Break the Convection Parameterization Deadlock?. <i>Geophysical Research Letters</i> , 2018, 45, 5742-5751.	1.5	246
122	Implications of Nonlocal Transport and Conditionally Averaged Statistics on Monin-Obukhov Similarity Theory and Townsend's Attached Eddy Hypothesis. <i>Journals of the Atmospheric Sciences</i> , 2018, 75, 3403-3431.	0.6	37
123	Global variations in ecosystem-scale isohydricity. <i>Global Change Biology</i> , 2017, 23, 891-905.	4.2	226
124	Sensitivity of grassland productivity to aridity controlled by stomatal and xylem regulation. <i>Nature Geoscience</i> , 2017, 10, 284-288.	5.4	200
125	Role of convective mixing and evaporative cooling in shallow convection. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 5351-5363.	1.2	17
126	Soil moisture retrieval from AMSR-E and ASCAT microwave observation synergy. Part 2: Product evaluation. <i>Remote Sensing of Environment</i> , 2017, 195, 202-217.	4.6	42

#	ARTICLE	IF	CITATIONS
127	Failure of Taylor's hypothesis in the atmospheric surface layer and its correction for eddy-covariance measurements. <i>Geophysical Research Letters</i> , 2017, 44, 4287-4295.	1.5	54
128	Regionally strong feedbacks between the atmosphere and terrestrial biosphere. <i>Nature Geoscience</i> , 2017, 10, 410-414.	5.4	197
129	Potential for natural evaporation as a reliable renewable energy resource. <i>Nature Communications</i> , 2017, 8, 617.	5.8	141
130	The impact of anthropogenic land use and land cover change on regional climate extremes. <i>Nature Communications</i> , 2017, 8, 989.	5.8	207
131	Coherent Structures in Large-Eddy Simulations of a Nonprecipitating Stratocumulus-Topped Boundary Layer. <i>Journals of the Atmospheric Sciences</i> , 2017, 74, 4117-4137.	0.6	16
132	Role of large eddies in the breakdown of the Reynolds analogy in an idealized mildly unstable atmospheric surface layer. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2017, 143, 2182-2197.	1.0	10
133	Climate Classification is an Important Factor in Assessing Quality-of-Care Across Hospitals. <i>Scientific Reports</i> , 2017, 7, 4948.	1.6	11
134	Estimating Global Ecosystem Isohydry/Anisohydry Using Active and Passive Microwave Satellite Data. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 3306-3321.	1.3	34
135	Linking plant functional trait plasticity and the large increase in forest water use efficiency. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 2393-2408.	1.3	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. <i>Sensors</i> , 2017, 17, 1098.	2.1	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. <i>Biogeosciences</i> , 2017, 14, 4101-4124.	1.3	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. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 5477-5500.	1.9	29
141	An allometry-based model of the survival strategies of hydraulic failure and carbon starvation. <i>Ecohydrology</i> , 2016, 9, 529-546.	1.1	33
142	Role of surface heat fluxes underneath cold pools. <i>Geophysical Research Letters</i> , 2016, 43, 874-883.	1.5	61
143	Modeling soil evaporation efficiency in a range of soil and atmospheric conditions using a meta-analysis approach. <i>Water Resources Research</i> , 2016, 52, 3663-3684.	1.7	56
144	Modification of land-atmosphere interactions by CO ₂ effects: Implications for summer dryness and heat wave amplitude. <i>Geophysical Research Letters</i> , 2016, 43, 10,240.	1.5	36

#	ARTICLE	IF	CITATIONS
145	Mean-velocity profile of smooth channel flow explained by a cospectral budget model with wall-blockage. <i>Physics of Fluids</i> , 2016, 28, .	1.6	18
146	Evaporation estimates using weather station data and boundary layer theory. <i>Geophysical Research Letters</i> , 2016, 43, 11,661.	1.5	53
147	The k^{-1} scaling of air temperature spectra in atmospheric surface layer flows. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 496-505.	1.0	19
148	Coherent Structures in the Boundary and Cloud Layers: Role of Updrafts, Subsiding Shells, and Environmental Subsidence. <i>Journals of the Atmospheric Sciences</i> , 2016, 73, 1789-1814.	0.6	30
149	Soil moisture retrieval from AMSR-E and ASCAT microwave observation synergy. Part 1: Satellite data analysis. <i>Remote Sensing of Environment</i> , 2016, 173, 1-14.	4.6	53
150	Resolving Contrasting Regional Rainfall Responses to El Niño over Tropical Africa. <i>Journal of Climate</i> , 2016, 29, 1461-1476.	1.2	46
151	Ocean-atmosphere interactions modulate irrigation's climate impacts. <i>Earth System Dynamics</i> , 2016, 7, 863-876.	2.7	15
152	Representation of daytime moist convection over the semi-arid Tropics by parametrizations used in climate and meteorological models. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015, 141, 2220-2236.	1.0	23
153	Fog and rain in the Amazon. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 11473-11477.	3.3	44
154	The effect of moist convection on thermally induced mesoscale circulations. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015, 141, 2418-2428.	1.0	16
155	The Budyko and complementary relationships in an idealized model of large-scale land-atmosphere coupling. <i>Hydrology and Earth System Sciences</i> , 2015, 19, 2119-2131.	1.9	25
156	A Closer Look at Boundary Layer Inversion in Large-Eddy Simulations and Bulk Models: Buoyancy-Driven Case. <i>Journals of the Atmospheric Sciences</i> , 2015, 72, 728-749.	0.6	21
157	Data Length Requirements for Observational Estimates of Land-Atmosphere Coupling Strength. <i>Journal of Hydrometeorology</i> , 2015, 16, 1615-1635.	0.7	32
158	Interannual Coupling between Summertime Surface Temperature and Precipitation over Land: Processes and Implications for Climate Change*. <i>Journal of Climate</i> , 2015, 28, 1308-1328.	1.2	135
159	Impact of Soil Moisture-Atmosphere Interactions on Surface Temperature Distribution. <i>Journal of Climate</i> , 2014, 27, 7976-7993.	1.2	129
160	Radiative-Convective Equilibrium over a Land Surface. <i>Journal of Climate</i> , 2014, 27, 8611-8629.	1.2	14
161	Neural Network-Based Sensitivity Analysis of Summertime Convection over the Continental United States. <i>Journal of Climate</i> , 2014, 27, 1958-1979.	1.2	17
162	Triggering Deep Convection with a Probabilistic Plume Model. <i>Journals of the Atmospheric Sciences</i> , 2014, 71, 3881-3901.	0.6	29

#	ARTICLE	IF	CITATIONS
163	Land-surface controls on afternoon precipitation diagnosed from observational data: uncertainties and confounding factors. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 8343-8367.	1.9	63
164	A Probabilistic Bulk Model of Coupled Mixed Layer and Convection. Part II: Shallow Convection Case. <i>Journals of the Atmospheric Sciences</i> , 2013, 70, 1557-1576.	0.6	30
165	A Probabilistic Bulk Model of Coupled Mixed Layer and Convection. Part I: Clear-Sky Case. <i>Journals of the Atmospheric Sciences</i> , 2013, 70, 1543-1556.	0.6	22
166	Emergent relation between surface vapor conductance and relative humidity profiles yields evaporation rates from weather data. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 6287-6291.	3.3	60
167	Evaluation of a simple approach for crop evapotranspiration partitioning and analysis of the water budget distribution for several crop species. <i>Agricultural and Forest Meteorology</i> , 2013, 177, 46-56.	1.9	25
168	Surface and Atmospheric Controls on the Onset of Moist Convection over Land. <i>Journal of Hydrometeorology</i> , 2013, 14, 1443-1462.	0.7	144
169	Precipitation Sensitivity to Surface Heat Fluxes over North America in Reanalysis and Model Data. <i>Journal of Hydrometeorology</i> , 2013, 14, 722-743.	0.7	40
170	An Idealized Prototype for Large-Scale Land-Atmosphere Coupling. <i>Journal of Climate</i> , 2013, 26, 2379-2389.	1.2	26
171	Diagnosing evaporative fraction over land from boundary-layer clouds. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 8185-8196.	1.2	24
172	Reduction of tropical land region precipitation variability via transpiration. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	35
173	Interdependence of climate, soil, and vegetation as constrained by the Budyko curve. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	210
174	Systematic errors in ground heat flux estimation and their correction. <i>Water Resources Research</i> , 2012, 48, .	1.7	41
175	Scaling in Surface Hydrology: Progress and Challenges. <i>Journal of Contemporary Water Research and Education</i> , 2012, 147, 28-40.	0.7	41
176	Harmonic propagation of variability in surface energy balance within a coupled soil-vegetation-atmosphere system. <i>Water Resources Research</i> , 2011, 47, .	1.7	38
177	Probability of afternoon precipitation in eastern United States and Mexico enhanced by high evaporation. <i>Nature Geoscience</i> , 2011, 4, 434-439.	5.4	213
178	The Diurnal Behavior of Evaporative Fraction in the Soil-Vegetation-Atmospheric Boundary Layer Continuum. <i>Journal of Hydrometeorology</i> , 2011, 12, 1530-1546.	0.7	111
179	Spectral Behaviour of a Coupled Land-Surface and Boundary-Layer System. <i>Boundary-Layer Meteorology</i> , 2010, 134, 157-180.	1.2	29
180	Analysis of evaporative fraction diurnal behaviour. <i>Agricultural and Forest Meteorology</i> , 2007, 143, 13-29.	1.9	233

#	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.	1.9	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, , .	2.4	5
185	Deep learning for subgrid-scale turbulence modeling in large-eddy simulations of the convective atmospheric boundary layer. Journal of Advances in Modeling Earth Systems, 0, , .	1.3	6