

Jeffrey B Basara

List of Publications by Year in descending order

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Version: 2024-02-01

101
papers

5,112
citations

81900

39
h-index

91884

69
g-index

106
all docs

106
docs citations

106
times ranked

4809
citing authors

#	ARTICLE	IF	CITATIONS
1	Flash drought identification from satellite-based land surface water index. <i>Remote Sensing Applications: Society and Environment</i> , 2022, 26, 100770.	1.5	2
2	Polarimetric Signatures in Landfalling Tropical Cyclones. <i>Monthly Weather Review</i> , 2021, 149, 131-154.	1.4	13
3	The Inland Maintenance and Re-intensification of Tropical Storm Bill (2015) Part 2: Precipitation Microphysics. <i>Journal of Hydrometeorology</i> , 2021, , .	1.9	4
4	From Standard Weather Stations to Virtual Micro-Meteorological Towers in Ungauged Sites: Modeling Tool for Surface Energy Fluxes, Evapotranspiration, Soil Temperature, and Soil Moisture Estimations. <i>Remote Sensing</i> , 2021, 13, 1271.	4.0	2
5	Land Surface Temperature from GOES-East and GOES-West. <i>Journal of Atmospheric and Oceanic Technology</i> , 2021, 38, 843-858.	1.3	4
6	Evidence of warm core structure maintenance over land: a case study analysis of cyclone Kelvin. <i>Environmental Research Communications</i> , 2021, 3, 045004.	2.3	3
7	Evaluation of a land-atmosphere coupling metric computed from a ground-based infrared interferometer. <i>Journal of Hydrometeorology</i> , 2021, , .	1.9	5
8	Development of a Flash Drought Intensity Index. <i>Atmosphere</i> , 2021, 12, 741.	2.3	25
9	Grassland productivity estimates informed by soil moisture measurements: Statistical and mechanistic approaches. <i>Agronomy Journal</i> , 2021, 113, 3498-3517.	1.8	10
10	The Inland Maintenance and Reintensification of Tropical Storm Bill (2015) Part 1: Contributions of the Brown Ocean Effect. <i>Journal of Hydrometeorology</i> , 2021, , .	1.9	1
11	Impacts of juniper woody plant encroachment into grasslands on local climate. <i>Agricultural and Forest Meteorology</i> , 2021, 307, 108508.	4.8	21
12	Agricultural and food security impacts from the 2010 Russia flash drought. <i>Weather and Climate Extremes</i> , 2021, 34, 100383.	4.1	29
13	Comparing Evapotranspiration Products of Different Temporal and Spatial Scales in Native and Managed Prairie Pastures. <i>Remote Sensing</i> , 2021, 13, 82.	4.0	3
14	Improving a Biogeochemical Model to Simulate Microbial-Mediated Carbon Dynamics in Agricultural ecosystems. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2021MS002752.	3.8	1
15	Global distribution, trends, and drivers of flash drought occurrence. <i>Nature Communications</i> , 2021, 12, 6330.	12.8	130
16	Understanding the effects of pasture type and stocking rate on the hydrology of the Southern Great Plains. <i>Science of the Total Environment</i> , 2020, 708, 134873.	8.0	5
17	Differential responses of native and managed prairie pastures to environmental variability and management practices. <i>Agricultural and Forest Meteorology</i> , 2020, 294, 108137.	4.8	4
18	Synoptic Characteristics of 14-Day Extreme Precipitation Events across the United States. <i>Journal of Climate</i> , 2020, 33, 6423-6440.	3.2	14

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19	Quantifying Precipitation Efficiency and Drivers of Excessive Precipitation in Post-Landfall Hurricane Harvey. <i>Journal of Hydrometeorology</i> , 2020, 21, 433-452.	1.9	23
20	Flash drought development and cascading impacts associated with the 2010 Russian heatwave. <i>Environmental Research Letters</i> , 2020, 15, 094078.	5.2	66
21	Towards a Unified and Coherent Land Surface Temperature Earth System Data Record from Geostationary Satellites. <i>Remote Sensing</i> , 2019, 11, 1399.	4.0	17
22	Diagnosing Moisture Sources for Flash Floods in the United States. Part I: Kinematic Trajectories. <i>Journal of Hydrometeorology</i> , 2019, 20, 1495-1509.	1.9	5
23	Diagnosing Moisture Sources for Flash Floods in the United States. Part II: Terrestrial and Oceanic Sources of Moisture. <i>Journal of Hydrometeorology</i> , 2019, 20, 1511-1531.	1.9	13
24	A Modified Framework for Quantifying Land–Atmosphere Covariability during Hydrometeorological and Soil Wetness Extremes in Oklahoma. <i>Journal of Applied Meteorology and Climatology</i> , 2019, 58, 1465-1483.	1.5	11
25	Regional characteristics of flash droughts across the United States. <i>Environmental Research Communications</i> , 2019, 1, 125004.	2.3	44
26	Role of Sea Surface Temperatures in Forcing Circulation Anomalies Driving U.S. Great Plains Pluvial Years. <i>Journal of Climate</i> , 2019, 32, 7081-7100.	3.2	4
27	An Analysis of the Processes Affecting Rapid Near-Surface Water Vapor Increases during the Afternoon to Evening Transition in Oklahoma. <i>Journal of Applied Meteorology and Climatology</i> , 2019, 58, 2217-2234.	1.5	4
28	The evolution, propagation, and spread of flash drought in the Central United States during 2012. <i>Environmental Research Letters</i> , 2019, 14, 084025.	5.2	74
29	A Methodology for Flash Drought Identification: Application of Flash Drought Frequency across the United States. <i>Journal of Hydrometeorology</i> , 2019, 20, 833-846.	1.9	120
30	Assessing the Evolution of Soil Moisture and Vegetation Conditions during a Flash Drought–Flash Recovery Sequence over the South-Central United States. <i>Journal of Hydrometeorology</i> , 2019, 20, 549-562.	1.9	50
31	Responses of gross primary production of grasslands and croplands under drought, pluvial, and irrigation conditions during 2010–2016, Oklahoma, USA. <i>Agricultural Water Management</i> , 2018, 204, 47-59.	5.6	38
32	Flash Droughts: A Review and Assessment of the Challenges Imposed by Rapid-Onset Droughts in the United States. <i>Bulletin of the American Meteorological Society</i> , 2018, 99, 911-919.	3.3	317
33	Seasonal and interannual variability of land–atmosphere coupling across the Southern Great Plains of North America using the North American regional reanalysis. <i>International Journal of Climatology</i> , 2018, 38, 964-978.	3.5	18
34	Primary Atmospheric Drivers of Pluvial Years in the United States Great Plains. <i>Journal of Hydrometeorology</i> , 2018, 19, 643-658.	1.9	13
35	Carbon dioxide and water vapor fluxes in winter wheat and tallgrass prairie in central Oklahoma. <i>Science of the Total Environment</i> , 2018, 644, 1511-1524.	8.0	29
36	Examining the short-term impacts of diverse management practices on plant phenology and carbon fluxes of Old World bluestems pasture. <i>Agricultural and Forest Meteorology</i> , 2017, 237-238, 60-70.	4.8	41

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37	Sensitivity of Predictions of the Urban Surface Energy Balance and Heat Island to Variations of Urban Canopy Parameters in Simulations with the WRF Model. <i>Journal of Applied Meteorology and Climatology</i> , 2017, 56, 573-595.	1.5	20
38	Usage of Existing Meteorological Data Networks for Parameterized Road Ice Formation Modeling. <i>Journal of Applied Meteorology and Climatology</i> , 2017, 56, 1959-1976.	1.5	12
39	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.	4.0	54
40	Quantifying agricultural drought in tallgrass prairie region in the U.S. Southern Great Plains through analysis of a water-related vegetation index from MODIS images. <i>Agricultural and Forest Meteorology</i> , 2017, 246, 111-122.	4.8	40
41	Long-term analysis of the asynchronicity between temperature and precipitation maxima in the United States Great Plains. <i>International Journal of Climatology</i> , 2017, 37, 3919-3933.	3.5	13
42	Assessing agricultural drought in summer over Oklahoma Mesonet sites using the water-related vegetation index from MODIS. <i>International Journal of Biometeorology</i> , 2017, 61, 377-390.	3.0	18
43	Analysis and estimation of tallgrass prairie evapotranspiration in the central United States. <i>Agricultural and Forest Meteorology</i> , 2017, 232, 35-47.	4.8	27
44	The Effect of the Dry Line and Convective Initiation on Drought Evolution over Oklahoma during the 2011 Drought. <i>Advances in Meteorology</i> , 2017, 2017, 1-16.	1.6	6
45	Atmospheric Contributors to Heavy Rainfall Events in the Arkansas-Red River Basin. <i>Advances in Meteorology</i> , 2016, 2016, 1-15.	1.6	10
46	The Soil Moisture Active Passive Marena, Oklahoma, In Situ Sensor Testbed (SMAP-MOISST): Testbed Design and Evaluation of In Situ Sensors. <i>Vadose Zone Journal</i> , 2016, 15, 1-11.	2.2	55
47	An overview of ice storms and their impact in the United States. <i>International Journal of Climatology</i> , 2016, 36, 2811-2822.	3.5	18
48	Insights into Atmospheric Contributors to Urban Flash Flooding across the United States Using an Analysis of Rawinsonde Data and Associated Calculated Parameters. <i>Journal of Applied Meteorology and Climatology</i> , 2016, 55, 313-323.	1.5	26
49	Facilitating the Use of Drought Early Warning Information through Interactions with Agricultural Stakeholders. <i>Bulletin of the American Meteorological Society</i> , 2015, 96, 1073-1078.	3.3	64
50	Solar Energy Prediction: An International Contest to Initiate Interdisciplinary Research on Compelling Meteorological Problems. <i>Bulletin of the American Meteorological Society</i> , 2015, 96, 1388-1395.	3.3	25
51	A Semiphysical Microwave Surface Emission Model for Soil Moisture Retrieval. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2015, 53, 4079-4090.	6.3	8
52	Sensitivity analysis of vegetation indices to drought over two tallgrass prairie sites. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2015, 108, 151-160.	11.1	68
53	Drought and Pluvial Dipole Events within the Great Plains of the United States. <i>Journal of Applied Meteorology and Climatology</i> , 2015, 54, 1886-1898.	1.5	46
54	Biophysical controls on carbon and water vapor fluxes across a grassland climatic gradient in the United States. <i>Agricultural and Forest Meteorology</i> , 2015, 214-215, 293-305.	4.8	51

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55	Knowledge and tools to enhance resilience of beef grazing systems for sustainable animal protein production. <i>Annals of the New York Academy of Sciences</i> , 2014, 1328, 10-17.	3.8	9
56	Enhancing understanding and improving prediction of severe weather through spatiotemporal relational learning. <i>Machine Learning</i> , 2014, 95, 27-50.	5.4	39
57	Climate change affecting temperature and aridity zones: a case study in Eastern Inner Mongolia, China from 1960â€”2008. <i>Theoretical and Applied Climatology</i> , 2013, 113, 561-572.	2.8	18
58	Examining Rapid Onset Drought Development Using the Thermal Infraredâ€”Based Evaporative Stress Index. <i>Journal of Hydrometeorology</i> , 2013, 14, 1057-1074.	1.9	205
59	Enhancing modelâ€”based land surface temperature estimates using multiplatform microwave observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 577-591.	3.3	22
60	The WxChallenge: Forecasting Competition, Educational Tool, and Agent of Cultural Change. <i>Bulletin of the American Meteorological Society</i> , 2013, 94, 1501-1506.	3.3	3
61	New Soil Property Database Improves Oklahoma Mesonet Soil Moisture Estimates*. <i>Journal of Atmospheric and Oceanic Technology</i> , 2013, 30, 2585-2595.	1.3	54
62	Passive Microwave Soil Moisture Downscaling Using Vegetation Index and Skin Surface Temperature. <i>Vadose Zone Journal</i> , 2013, 12, 1-19.	2.2	79
63	Evaluation of a Heat Dissipation Sensor for In Situ Measurement of Soil Temperature. <i>Soil Science Society of America Journal</i> , 2013, 77, 741-747.	2.2	2
64	Drought and Associated Impacts in the Great Plains of the United Statesâ€”A Review. <i>International Journal of Geosciences</i> , 2013, 04, 72-81.	0.6	62
65	Tornadic Supercell Environments Analyzed Using Surface and Reanalysis Data: A Spatiotemporal Relational Data-Mining Approach. <i>Journal of Applied Meteorology and Climatology</i> , 2012, 51, 2203-2217.	1.5	11
66	Significant Winter Weather Events and Associated Socioeconomic Impacts (Federal Aid Expenditures) across Oklahoma: 2000â€”10. <i>Weather, Climate, and Society</i> , 2012, 4, 48-58.	1.1	13
67	Evaluation of SMOS retrievals of soil moisture over the central United States with currently available in situ observations. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	71
68	An assessment of surface soil temperature products from numerical weather prediction models using groundâ€”based measurements. <i>Water Resources Research</i> , 2012, 48, .	4.2	45
69	On the discrepancy between eddy covariance and lysimetry-based surface flux measurements under strongly advective conditions. <i>Advances in Water Resources</i> , 2012, 50, 62-78.	3.8	81
70	Mesoscale observations of an extended heat burst and associated wind storm in Central Oklahoma. <i>Meteorological Applications</i> , 2012, 19, 91-110.	2.1	0
71	The Oklahoma City Micronet. <i>Meteorological Applications</i> , 2011, 18, 252-261.	2.1	33
72	Using spatiotemporal relational random forests to improve our understanding of severe weather processes. <i>Statistical Analysis and Data Mining</i> , 2011, 4, 407-429.	2.8	21

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73	The Impact of the Urban Heat Island during an Intense Heat Wave in Oklahoma City. <i>Advances in Meteorology</i> , 2010, 2010, 1-10.	1.6	133
74	The SMAP in situ soil moisture sensor testbed: Comparing in situ sensors for satellite validation. , 2010, , .		7
75	Challenges Associated with Classifying Urban Meteorological Stations: The Oklahoma City Micronet Example. <i>The Open Atmospheric Science Journal</i> , 2010, 4, 88-100.	0.5	8
76	Evaluation of Satellite Estimates of Land Surface Temperature from GOES over the United States. <i>Journal of Applied Meteorology and Climatology</i> , 2009, 48, 167-180.	1.5	48
77	Using ENVISAT ASAR Global Mode Data for Surface Soil Moisture Retrieval Over Oklahoma, USA. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2009, 47, 468-480.	6.3	165
78	Observations of the Overland Reintensification of Tropical Storm Erin (2007). <i>Bulletin of the American Meteorological Society</i> , 2009, 90, 1079-1094.	3.3	58
79	Evaluation of Rainfall Measurements from the WXT510 Sensor for Use in the Oklahoma City Micronet. <i>The Open Atmospheric Science Journal</i> , 2009, 3, 39-47.	0.5	11
80	A 10-year spatial climatology of squall line storms across Oklahoma. <i>International Journal of Climatology</i> , 2008, 28, 765-775.	3.5	18
81	Estimating profile soil moisture and groundwater variations using GRACE and Oklahoma Mesonet soil moisture data. <i>Water Resources Research</i> , 2008, 44, .	4.2	120
82	Evaluation of MODIS NDVI and NDWI for vegetation drought monitoring using Oklahoma Mesonet soil moisture data. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	206
83	Diurnal cycle of the Oklahoma City urban heat island. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	64
84	A Geographic Information Systemsâ€œBased Analysis of Supercells across Oklahoma from 1994 to 2003. <i>Journal of Applied Meteorology and Climatology</i> , 2008, 47, 1518-1538.	1.5	21
85	Mesoscale Monitoring of Soil Moisture across a Statewide Network. <i>Journal of Atmospheric and Oceanic Technology</i> , 2008, 25, 167-182.	1.3	127
86	Description and Evaluation of the Characteristics of the NCAR High-Resolution Land Data Assimilation System. <i>Journal of Applied Meteorology and Climatology</i> , 2007, 46, 694-713.	1.5	243
87	Significant Inversions and Rapid In Situ Cooling at a Well-Sited Oklahoma Mesonet Station. <i>Journal of Applied Meteorology and Climatology</i> , 2007, 46, 353-367.	1.5	13
88	Statewide Monitoring of the Mesoscale Environment: A Technical Update on the Oklahoma Mesonet. <i>Journal of Atmospheric and Oceanic Technology</i> , 2007, 24, 301-321.	1.3	416
89	An Analysis of Severe Hail Swaths in the Southern Plains of the United States. <i>Transactions in GIS</i> , 2007, 11, 531-554.	2.3	16
90	Urban and land surface effects on the 30 July 2003 mesoscale convective system event observed in the southern Great Plains. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	118

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91	Verification of a Mesoscale Data-Assimilation and Forecasting System for the Oklahoma City Area during the Joint Urban 2003 Field Project. <i>Journal of Applied Meteorology and Climatology</i> , 2006, 45, 912-929.	1.5	197
92	The Impact of Land-Atmosphere Interactions on the Benson, Minnesota, Tornado of 11 June 2001. <i>Bulletin of the American Meteorological Society</i> , 2005, 86, 637-642.	3.3	6
93	A Multiscale Remote Sensing Model for Disaggregating Regional Fluxes to Micrometeorological Scales. <i>Journal of Hydrometeorology</i> , 2004, 5, 343-363.	1.9	189
94	Seasonal to interannual variations of soil moisture measured in Oklahoma. <i>International Journal of Climatology</i> , 2004, 24, 1883-1896.	3.5	72
95	Land Surface Temperature Estimation from the Next Generation of Geostationary Operational Environmental Satellites: GOES-Q. <i>Journal of Applied Meteorology and Climatology</i> , 2004, 43, 363-372.	1.7	48
96	Evaluation of the North American Land Data Assimilation System over the southern Great Plains during the warm season. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	157
97	Analysis of short-term droughts in Oklahoma. <i>Eos</i> , 2003, 84, 157-161.	0.1	9
98	The Oklahoma Mesonet's Skin Temperature Network. <i>Journal of Atmospheric and Oceanic Technology</i> , 2003, 20, 1496-1504.	1.3	25
99	Linear relationships between root-zone soil moisture and atmospheric processes in the planetary boundary layer. <i>Journal of Geophysical Research</i> , 2002, 107, ACL 10-1.	3.3	54
100	Soil Moisture Observations for Flash Flood Research and Prediction. , 2001, , 231-241.		5
101	Improved Installation Procedures for Deep-Layer Soil Moisture Measurements. <i>Journal of Atmospheric and Oceanic Technology</i> , 2000, 17, 879-884.	1.3	41