Bruce K Wylie

List of Publications by Year
in descending order

102 papers	6,025 citations	145106 33 h-index	84171 75 g-index
108 all docs	108 docs citations	108 times ranked	7869 citing authors

#	Article	IF	Citations
1	Monitoring Climate Impacts on Annual Forage Production across U.S. Semi-Arid Grasslands. Remote Sensing, 2022, 14, 4.	1.8	10
2	Tools and Technologies for Quantifying Spread and Impacts of Invasive Species. , 2021, , 243-265.		1
3	Rapid Monitoring of the Abundance and Spread of Exotic Annual Grasses in the Western United States Using Remote Sensing and Machine Learning. AGU Advances, 2021, 2, e2020AV000298.	2.3	16
4	Departures of Rangeland Fractional Component Cover and Land Cover from Landsat-Based Ecological Potential in Wyoming, USA. Rangeland Ecology and Management, 2020, 73, 856-870.	1.1	8
5	Characterizing Land Surface Phenology and Exotic Annual Grasses in Dryland Ecosystems Using Landsat and Sentinel-2 Data in Harmony. Remote Sensing, 2020, 12, 725.	1.8	32
6	Estimating Abiotic Thresholds for Sagebrush Condition Class in the Western United States. Rangeland Ecology and Management, 2020, 73, 297-308.	1.1	3
7	Spatiotemporal remote sensing of ecosystem change and causation across Alaska. Global Change Biology, 2019, 25, 1171-1189.	4.2	91
8	Monitoring Drought Impact on Annual Forage Production in Semi-arid Grasslands: A Case Study of Nebraska Sandhills. Remote Sensing, 2019, 11, 2106.	1.8	10
9	Validating a Time Series of Annual Grass Percent Cover in the Sagebrush Ecosystem. Rangeland Ecology and Management, 2019, 72, 347-359.	1.1	20
10	Using remote sensing to quantify ecosystem site potential community structure and deviation in the Great Basin, United States. Ecological Indicators, 2019, 96, 516-531.	2.6	16
11	Mapping cropland waterway buffers for switchgrass development in the eastern Great Plains, USA. GCB Bioenergy, 2018, 10, 415-424.	2.5	3
12	The role of driving factors in historical and projected carbon dynamics of upland ecosystems in Alaska. Ecological Applications, 2018, 28, 5-27.	1.8	25
13	Fusing MODIS with Landsat 8 data to downscale weekly normalized difference vegetation index estimates for central Great Basin rangelands, USA. GIScience and Remote Sensing, 2018, 55, 376-399.	2.4	32
14	Estimating carbon and showing impacts of drought using satellite data in regression-tree models. International Journal of Remote Sensing, 2018, 39, 374-398.	1.3	8
15	Integrating future scenario‐based crop expansion and crop conditions to map switchgrass biofuel potential in eastern Nebraska, <scp>USA</scp>. GCB Bioenergy, 2018, 10, 76-83.	2.5	2
16	The role of environmental driving factors in historical and projected carbon dynamics of wetland ecosystems in Alaska. Ecological Applications, 2018, 28, 1377-1395.	1.8	11
17	Assessing historical and projected carbon balance of Alaska: A synthesis of results and policy/management implications. Ecological Applications, 2018, 28, 1396-1412.	1.8	22
18	Rapid Crop Cover Mapping for the Conterminous United States. Scientific Reports, 2018, 8, 8631.	1.6	13

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19	Modeling Wildfire-Induced Permafrost Deformation in an Alaskan Boreal Forest Using InSAR Observations. Remote Sensing, 2018, 10, 405.	1.8	19
20	Spatiotemporal Analysis of Landsat-8 and Sentinel-2 Data to Support Monitoring of Dryland Ecosystems. Remote Sensing, 2018, 10, 791.	1.8	39
21	Mapping marginal croplands suitable for cellulosic feedstock crops in the Great Plains, United States. GCB Bioenergy, 2017, 9, 836-844.	2.5	8
22	Temporal expansion of annual crop classification layers for the CONUS using the C5 decision tree classifier. Remote Sensing Letters, 2017, 8, 389-398.	0.6	4
23	Historical and projected trends in landscape drivers affecting carbon dynamics in Alaska. Ecological Applications, 2017, 27, 1383-1402.	1.8	33
24	Productivity and CO 2 Exchange of Great Plains Ecoregions. I. Shortgrass Steppe: Flux Tower Estimates. Rangeland Ecology and Management, 2017, 70, 700-717.	1.1	7
25	In situ nuclear magnetic resonance response of permafrost and active layer soil in boreal and tundra ecosystems. Cryosphere, 2017, 11, 2943-2955.	1.5	21
26	An Optimal Sample Data Usage Strategy to Minimize Overfitting and Underfitting Effects in Regression Tree Models Based on Remotely-Sensed Data. Remote Sensing, 2016, 8, 943.	1.8	40
27	Grassland and Cropland Net Ecosystem Production of the U.S. Great Plains: Regression Tree Model Development and Comparative Analysis. Remote Sensing, 2016, 8, 944.	1.8	11
28	Near-Real-Time Cheatgrass Percent Cover in the Northern Great Basin, USA, 2015. Rangelands, 2016, 38, 278-284.	0.9	24
29	Evidence for nonuniform permafrost degradation after fire in boreal landscapes. Journal of Geophysical Research F: Earth Surface, 2016, 121, 320-335.	1.0	51
30	Cheatgrass Percent Cover Change: Comparing Recent Estimates to Climate Changeâˆ'Driven Predictions in the Northern Great Basin. Rangeland Ecology and Management, 2016, 69, 265-279.	1.1	63
31	Using satellite vegetation and compound topographic indices to map highly erodible cropland buffers for cellulosic biofuel crop developments in eastern Nebraska, USA. Ecological Indicators, 2016, 60, 64-70.	2.6	11
32	Application-Ready Expedited MODIS Data for Operational Land Surface Monitoring of Vegetation Condition. Remote Sensing, 2015, 7, 16226-16240.	1.8	40
33	Downscaling 250-m MODIS Growing Season NDVI Based on Multiple-Date Landsat Images and Data Mining Approaches. Remote Sensing, 2015, 7, 3489-3506.	1.8	20
34	Developing a 30-m grassland productivity estimation map for central Nebraska using 250-m MODIS and 30-m Landsat-8 observations. Remote Sensing of Environment, 2015, 171, 291-298.	4.6	26
35	Estimating switchgrass productivity in the Great Plains using satellite vegetation index and site environmental variables. Ecological Indicators, 2015, 48, 472-476.	2.6	9
36	Distribution of near-surface permafrost in Alaska: Estimates of present and future conditions. Remote Sensing of Environment, 2015, 168, 301-315.	4.6	145

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37	The integration of geophysical and enhanced Moderate Resolution Imaging Spectroradiometer Normalized Difference Vegetation Index data into a rule-based, piecewise regression-tree model to estimate cheatgrass beginning of spring growth. International Journal of Digital Earth, 2015, 8, 118-132.	1.6	17
38	Spatially explicit estimation of aboveground boreal forest biomass in the Yukon River Basin, Alaska. International Journal of Remote Sensing, 2015, 36, 939-953.	1.3	8
39	Mapping and Monitoring Cheatgrass Dieoff in Rangelands of the Northern Great Basin, USA. Rangeland Ecology and Management, 2015, 68, 18-28.	1.1	29
40	Effects of Disturbance and Climate Change on Ecosystem Performance in the Yukon River Basin Boreal Forest. Remote Sensing, 2014, 6, 9145-9169.	1.8	9
41	Productivity and Carbon Dioxide Exchange of Leguminous Crops: Estimates from Flux Tower Measurements. Agronomy Journal, 2014, 106, 545-559.	0.9	40
42	Spatial variability and landscape controls of near-surface permafrost within the Alaskan Yukon River Basin. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1244-1265.	1.3	26
43	Detecting the Influence of Best Management Practices on Vegetation Near Ephemeral Streams With Landsat Data. Rangeland Ecology and Management, 2014, 67, 1-8.	1.1	6
44	Projecting future grassland productivity to assess the sustainability of potential biofuel feedstock areas in the Greater Platte River Basin. GCB Bioenergy, 2014, 6, 35-43.	2.5	2
45	Geostatistical estimation of signal-to-noise ratios for spectral vegetation indices. ISPRS Journal of Photogrammetry and Remote Sensing, 2014, 96, 20-27.	4.9	10
46	Net ecosystem productivity of temperate grasslands in northern China: An upscaling study. Agricultural and Forest Meteorology, 2014, 184, 71-81.	1.9	42
47	Distribution and landscape controls of organic layer thickness and carbon within the Alaskan Yukon River Basin. Geoderma, 2014, 230-231, 79-94.	2.3	34
48	Annual Crop Type Classification of the US Great Plains for 2000 to 2011. Photogrammetric Engineering and Remote Sensing, 2014, 80, 537-549.	0.3	30
49	Monitoring the status of forests and rangelands in the Western United States using ecosystem performance anomalies. International Journal of Remote Sensing, 2013, 34, 4049-4068.	1.3	20
50	Influence of management and precipitation on carbon fluxes in great plains grasslands. Ecological Indicators, 2013, 34, 590-599.	2.6	14
51	Detecting Channel Riparian Vegetation Response to Best-Management-Practices Implementation in Ephemeral Streams With the Use of Spot High-Resolution Visible Imagery. Rangeland Ecology and Management, 2013, 66, 63-70.	1.1	21
52	CO2 uptake and ecophysiological parameters of the grain crops of midcontinent North America: Estimates from flux tower measurements. Agriculture, Ecosystems and Environment, 2013, 164, 162-175.	2.5	42
53	NDVI saturation adjustment: A new approach for improving cropland performance estimates in the Greater Platte River Basin, USA. Ecological Indicators, 2013, 30, 1-6.	2.6	139
54	Extending Airborne Electromagnetic Surveys for Regional Active Layer and Permafrost Mapping with Remote Sensing and Ancillary Data, Yukon Flats Ecoregion, Central Alaska. Permafrost and Periglacial Processes, 2013, 24, 184-199.	1.5	31

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55	Mapping grassland productivity with 250-m eMODIS NDVI and SSURGO database over the Greater Platte River Basin, USA. Ecological Indicators, 2013, 24, 31-36.	2.6	47
56	Linking Phenology and Biomass Productivity in South Dakota Mixed-Grass Prairie. Rangeland Ecology and Management, 2013, 66, 579-587.	1.1	27
57	Optimal Placement of Off-Stream Water Sources for Ephemeral Stream Recovery. Rangeland Ecology and Management, 2013, 66, 479-486.	1.1	7
58	MODIS-informed greenness responses to daytime land surface temperature fluctuations and wildfire disturbances in the Alaskan Yukon River Basin. International Journal of Remote Sensing, 2013, 34, 2187-2199.	1.3	9
59	Towards Integration of GLAS into a National Fuel Mapping Program. Photogrammetric Engineering and Remote Sensing, 2013, 79, 175-183.	0.3	15
60	Establishing water body areal extent trends in interior Alaska from multi-temporal Landsat data. Remote Sensing Letters, 2012, 3, 595-604.	0.6	67
61	Ecosystem Performance Monitoring of Rangelands by Integrating Modeling and Remote Sensing. Rangeland Ecology and Management, 2012, 65, 241-252.	1.1	30
62	Identifying grasslands suitable for cellulosic feedstock crops in the Greater Platte River Basin: dynamic modeling of ecosystem performance with 250Âm eMODIS. GCB Bioenergy, 2012, 4, 96-106.	2.5	17
63	Estimating aboveground biomass in interior Alaska with Landsat data and field measurements. International Journal of Applied Earth Observation and Geoinformation, 2012, 18, 451-461.	1.4	75
64	Evaluation of carbon fluxes and trends (2000â€"2008) in the Greater Platte River Basin: A sustainability study for potential biofuel feedstock development. Biomass and Bioenergy, 2012, 47, 145-152.	2.9	2
65	A multi-sensor lidar, multi-spectral and multi-angular approach for mapping canopy height in boreal forest regions. Remote Sensing of Environment, 2012, 121, 458-471.	4.6	45
66	Airborne electromagnetic imaging of discontinuous permafrost. Geophysical Research Letters, 2012, 39, .	1.5	129
67	Crop classification modelling using remote sensing and environmental data in the Greater Platte River Basin, USA. International Journal of Remote Sensing, 2012, 33, 6094-6108.	1.3	30
68	Mapping carbon flux uncertainty and selecting optimal locations for future flux towers in the Great Plains. Landscape Ecology, 2012, 27, 319-326.	1.9	15
69	Response of spectral vegetation indices to soil moisture in grasslands and shrublands. International Journal of Remote Sensing, 2011, 32, 5267-5286.	1.3	13
70	On the terminology of the spectral vegetation index (NIRâ€‰â€'â€‰SWIR)/(NIRâ€‰+â€‰SWIR). International Journal of Remote Sensing, 2011, 32, 6901-6909.	1.3	70
71	Upscaling carbon fluxes over the Great Plains grasslands: Sinks and sources. Journal of Geophysical Research, 2011, 116, .	3.3	31
72	Correction to â€œUpscaling carbon fluxes over the Great Plains grasslands: Sinks and sourcesâ€• Journal of Geophysical Research, 2011, 116, .	3.3	36

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73	Using Normalized Difference Vegetation Index to Estimate Carbon Fluxes from Small Rotationally Grazed Pastures. Agronomy Journal, 2011, 103, 972-979.	0.9	3
74	Classifying the Hydrologic Function of Prairie Potholes with Remote Sensing and GIS. Wetlands, 2011, 31, 319-327.	0.7	27
75	Detecting Ecosystem Performance Anomalies for Land Management in the Upper Colorado River Basin Using Satellite Observations, Climate Data, and Ecosystem Models. Remote Sensing, 2010, 2, 1880-1891.	1.8	25
76	A self-trained classification technique for producing 30Âm percent-water maps from Landsat data. International Journal of Remote Sensing, 2010, 31, 2197-2203.	1.3	34
77	A comparative analysis of three different MODIS NDVI datasets for Alaska and adjacent Canada. Canadian Journal of Remote Sensing, 2010, 36, S149-S167.	1.1	18
78	Climate-Driven Interannual Variability in Net Ecosystem Exchange in the Northern Great Plains Grasslands. Rangeland Ecology and Management, 2010, 63, 40-50.	1.1	81
79	Analysis of Dynamic Thresholds for the Normalized Difference Water Index. Photogrammetric Engineering and Remote Sensing, 2009, 75, 1307-1317.	0.3	549
80	Integrating modelling and remote sensing to identify ecosystem performance anomalies in the boreal forest, Yukon River Basin, Alaska. International Journal of Digital Earth, 2008, 1, 196-220.	1.6	49
81	Evaluation and comparison of gross primary production estimates for the Northern Great Plains grasslands. Remote Sensing of Environment, 2007, 106, 173-189.	4.6	58
82	Adaptive data-driven models for estimating carbon fluxes in the Northern Great Plains. Remote Sensing of Environment, 2007, 106, 399-413.	4.6	74
83	Long-Term Dynamics of Production, Respiration, and Net CO_2 Exchange in Two Sagebrush-Steppe Ecosystems. Rangeland Ecology and Management, 2006, 59, 585-599.	1.1	41
84	Integration of CO_2 flux and remotely-sensed data for primary production and ecosystem respiration analyses in the Northern Great Plains: potential for quantitative spatial extrapolation. Global Ecology and Biogeography, 2005, 14, 271-292.	2.7	139
85	Development of a 2001 National Land-Cover Database for the United States. Photogrammetric Engineering and Remote Sensing, 2004, 70, 829-840.	0.3	1,226
86	Intra-Seasonal Mapping of CO_2 Flux in Rangelands of Northern Kazakhstan at One-Kilometer Resolution. Environmental Management, 2004, 33, S482.	1.2	11
87	Gross Primary Productivity of the True Steppe in Central Asia in Relation to NDVI: Scaling up CO_2 Fluxes. Environmental Management, 2004, 33, S492.	1.2	16
88	Calibration of remotely sensed, coarse resolution NDVI to CO_2 fluxes in a sagebrushâ€"steppe ecosystem. Remote Sensing of Environment, 2003, 85, 243-255.	4.6	110
89	An approach for mapping large-area impervious surfaces: synergistic use of Landsat-7 ETM+ and high spatial resolution imagery. Canadian Journal of Remote Sensing, 2003, 29, 230-240.	1.1	391
90	Derivation of a tasselled cap transformation based on Landsat 7 at-satellite reflectance. International Journal of Remote Sensing, 2002, 23, 1741-1748.	1.3	488

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91	Satellite mapping of surface biophysical parameters at the biome scale over the North American grasslands. Remote Sensing of Environment, 2002, 79, 266-278.	4.6	132
92	Sky type discrimination using a ground-based sun photometer. Atmospheric Research, 2001, 59-60, 313-329.	1.8	5
93	An Analysis of Relationships among Climate Forcing and Time-Integrated NDVI of Grasslands over the U.S. Northern and Central Great Plains. Remote Sensing of Environment, 1998, 65, 25-37.	4.6	214
94	NDVI, C 3 and C 4 Production, and Distributions in Great Plains Grassland Land Cover Classes. , 1997, 7, 59.		5
95	NDVI, C3AND C4PRODUCTION, AND DISTRIBUTIONS IN GREAT PLAINS GRASSLAND LAND COVER CLASSES. , 1997, 7, 59-78.		88
96	Grassland canopy parameters and their relationships to remotely sensed vegetation indices in the Nebraska Sand Hills. Geocarto International, 1996, 11, 39-52.	1.7	11
97	Identification and mitigation of nitrate leaching hot spots using NLEAP-GIS technology. Journal of Contaminant Hydrology, 1995, 20, 253-263.	1.6	34
98	Satellite-Based Herbaceous Biomass Estimates in the Pastoral Zone of Niger. Journal of Range Management, 1995, 48, 159.	0.3	29
99	Using climate/weather data with the NLEAP model to manage soil nitrogen. Agricultural and Forest Meteorology, 1994, 69, 111-123.	1.9	18
100	Estimating Herbage Standing Crop from Rainfall Data in Niger. Journal of Range Management, 1992, 45, 277.	0.3	6
101	Satellite and ground-based pasture production assessment in Niger: 1986-1988. International Journal of Remote Sensing, 1991, 12, 1281-1300.	1.3	59
102	Integrated NDVI images for Niger 1986â€"1987. Geocarto International, 1988, 3, 37-53.	1.7	2