Philip E Dennison

List of Publications by Year
in descending order

Version: 2024-02-01

113 papers	8,558 citations	50276 46 h-index	45317 90 g-index
115 all docs	115 docs citations	115 times ranked	8022 citing authors

#	Article	IF	Citations
1	Large wildfire trends in the western United States, 1984â€“2011. Geophysical Research Letters, 2014, 41, 2928-2933.	4.0	940
2	Adapt to more wildfire in western North American forests as climate changes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4582-4590.	7.1	536
3	State of the art satellite and airborne marine oil spill remote sensing: Application to the BP Deepwater Horizon oil spill. Remote Sensing of Environment, 2012, 124, 185-209.	11.0	412
4	Endmember selection for multiple endmember spectral mixture analysis using endmember average RMSE. Remote Sensing of Environment, 2003, 87, 123-135.	11.0	411
5	Sub-pixel mapping of urban land cover using multiple endmember spectral mixture analysis: Manaus, Brazil. Remote Sensing of Environment, 2007, 106, 253-267.	11.0	390
6	Spectrometry for urban area remote sensingâ€”Development and analysis of a spectral library from 350 to 2400 nm. Remote Sensing of Environment, 2004, 91, 304-319.	11.0	324
7	A comparison of error metrics and constraints for multiple endmember spectral mixture analysis and spectral angle mapper. Remote Sensing of Environment, 2004, 93, 359-367.	11.0	295
8	A global review of remote sensing of live fuel moisture content for fire danger assessment: Moving towards operational products. Remote Sensing of Environment, 2013, 136, 455-468.	11.0	251
9	Evaluation of the potential of hyperion for fire danger assessment by comparison to the airborne visible/infrared imaging spectrometer. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 1297-1310.	6.3	192
10	Atmospheric correction for global mapping spectroscopy: ATREM advances for the HyspIRI preparatory campaign. Remote Sensing of Environment, 2015, 167, 64-77.	11.0	161
11	The effects of vegetation phenology on endmember selection and species mapping in southern California chaparral. Remote Sensing of Environment, 2003, 87, 295-309.	11.0	159
12	A century of observations reveals increasing likelihood of continental-scale compound dry-hot extremes. Science Advances, 2020, 6, .	10.3	148
13	NASA's surface biology and geology designated observable: A perspective on surface imaging algorithms. Remote Sensing of Environment, 2021, 257, 112349.	11.0	148
14	Environmental controls of giant-kelp biomass in the Santa Barbara Channel, California. Marine Ecology - Progress Series, 2011, 429, 1-17.	1.9	141
15	Assessment of vegetation regeneration after fire through multitemporal analysis of AVIRIS images in the Santa Monica Mountains. Remote Sensing of Environment, 2002, 79, 60-71.	11.0	137
16	Wildfire temperature and land cover modeling using hyperspectral data. Remote Sensing of Environment, 2006, 100, 212-222.	11.0	119
17	Use of Normalized Difference Water Index for monitoring live fuel moisture. International Journal of Remote Sensing, 2005, 26, 1035-1042.	2.9	100
18	Hyperspectral remote sensing of fire: State-of-the-art and future perspectives. Remote Sensing of Environment, 2018, 216, 105-121.	11.0	100

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19	Effects of fire severity and post-fire climate on short-term vegetation recovery of mixed-conifer and red fir forests in the Sierra Nevada Mountains of California. Remote Sensing of Environment, 2015, 171, 311-325.	11.0	98
20	A multi-temporal spectral library approach for mapping vegetation species across spatial and temporal phenological gradients. Remote Sensing of Environment, 2015, 167, 121-134.	11.0	97
21	Critical live fuel moisture in chaparral ecosystems: a threshold for fire activity and its relationship to antecedent precipitation. International Journal of Wildland Fire, 2009, 18, 1021.	2.4	93
22	Sap flux-scaled transpiration by tamarisk (Tamarix spp.) before, during and after episodic defoliation by the saltcedar leaf beetle (Diorhabda carinulata). Agricultural and Forest Meteorology, 2010, 150, 1467-1475.	4.8	92
23	Using high spatial resolution satellite imagery to map forest burn severity across spatial scales in a Pine Barrens ecosystem. Remote Sensing of Environment, 2017, 191, 95-109.	11.0	92
24	Comparing endmember selection techniques for accurate mapping of plant species and land cover using imaging spectrometer data. Remote Sensing of Environment, 2012, 127, 139-152.	11.0	87
25	Intermittency of Large Methane Emitters in the Permian Basin. Environmental Science and Technology Letters, 2021, 8, 567-573.	8.7	83
26	Assessing canopy mortality during a mountain pine beetle outbreak using GeoEye-1 high spatial resolution satellite data. Remote Sensing of Environment, 2010, 114, 2431-2435.	11.0	82
27	Setting Wildfire Evacuation Trigger Points Using Fire Spread Modeling and GIS. Transactions in GIS, 2005, 9, 603-617.	2.3	81
28	Tamarisk biocontrol in the western United States: ecological and societal implications. Frontiers in Ecology and the Environment, 2010, 8, 467-474.	4.0	81
29	Quantifying understory vegetation density using small-footprint airborne lidar. Remote Sensing of Environment, 2018, 215, 330-342.	11.0	80
30	Evaluating predictive models of critical live fuel moisture in the Santa Monica Mountains, California. International Journal of Wildland Fire, 2008, 17, 18.	2.4	77
31	Modeling seasonal changes in live fuel moisture and equivalent water thickness using a cumulative water balance index. Remote Sensing of Environment, 2003, 88, 442-452.	11.0	74
32	Mapping live fuel moisture with MODIS data: A multiple regression approach. Remote Sensing of Environment, 2008, 112, 4272-4284.	11.0	74
33	Remote monitoring of tamarisk defoliation and evapotranspiration following saltcedar leaf beetle attack. Remote Sensing of Environment, 2009, 113, 1462-1472.	11.0	74
34	Airborne DOAS retrievals of methane, carbon dioxide, and water vapor concentrations at high spatial resolution: application to AVIRIS-NG. Atmospheric Measurement Techniques, 2017, 10, 3833-3850.	3.1	72
35	Differentiating plant species within and across diverse ecosystems with imaging spectroscopy. Remote Sensing of Environment, 2015, 167, 135-151.	11.0	71
36	The impact of spatial resolution on the classification of plant species and functional types within imaging spectrometer data. Remote Sensing of Environment, 2015, 171, 45-57.	11.0	67

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37	Mapping two Eucalyptus subgenera using multiple endmember spectral mixture analysis and continuum-removed imaging spectrometry data. Remote Sensing of Environment, 2011, 115, 1115-1128.	11.0	66
38	Mapping methane emissions from a marine geological seep source using imaging spectrometry. Remote Sensing of Environment, 2010, 114, 592-606.	11.0	62
39	Mapping Plant Functional Types at Multiple Spatial Resolutions Using Imaging Spectrometer Data. GIScience and Remote Sensing, 2011, 48, 324-344.	5.9	62
40	Monitoring Live Fuel Moisture Using Soil Moisture and Remote Sensing Proxies. Fire Ecology, 2012, 8, 71-87.	3.0	61
41	High resolution mapping of methane emissions from marine and terrestrial sources using a Cluster-Tuned Matched Filter technique and imaging spectrometry. Remote Sensing of Environment, 2013, 134, 305-318.	11.0	61
42	Relationships between dominant plant species, fractional cover and Land Surface Temperature in a Mediterranean ecosystem. Remote Sensing of Environment, 2015, 167, 152-167.	11.0	60
43	Mapping canopy defoliation by herbivorous insects at the individual tree level using bi-temporal airborne imaging spectroscopy and LiDAR measurements. Remote Sensing of Environment, 2018, 215, 170-183.	11.0	58
44	High spatial resolution mapping of elevated atmospheric carbon dioxide using airborne imaging spectroscopy: Radiative transfer modeling and power plant plume detection. Remote Sensing of Environment, 2013, 139, 116-129.	11.0	54
45	Modeling Evacuate versus Shelter-in-Place Decisions in Wildfires. Sustainability, 2011, 3, 1662-1687.	3.2	51
46	WUIVAC: a wildland-urban interface evacuation trigger model applied in strategic wildfire scenarios. Natural Hazards, 2007, 41, 181-199.	3.4	49
47	Special issue on the Hyperspectral Infrared Imager (HyspIRI): Emerging science in terrestrial and aquatic ecology, radiation balance and hazards. Remote Sensing of Environment, 2015, 167, 1-5.	11.0	48
48	Setting Wildfire Evacuation Triggers by Coupling Fire and Traffic Simulation Models: A Spatiotemporal GIS Approach. Fire Technology, 2019, 55, 617-642.	3.0	47
49	A multi-sensor, multi-scale approach to mapping tree mortality in woodland ecosystems. Remote Sensing of Environment, 2020, 245, 111853.	11.0	45
50	Remote Sensing Analysis of Vegetation Recovery following Short-Interval Fires in Southern California Shrublands. PLoS ONE, 2014, 9, e110637.	2.5	45
51	Warning Triggers in Environmental Hazards: Who Should Be Warned to Do What and When?. Risk Analysis, 2017, 37, 601-611.	2.7	43
52	Globe-LFMC, a global plant water status database for vegetation ecophysiology and wildfire applications. Scientific Data, 2019, 6, 155.	5.3	41
53	Fast and Accurate Retrieval of Methane Concentration From Imaging Spectrometer Data Using Sparsity Prior. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 6480-6492.	6.3	41
54	Daytime fire detection using airborne hyperspectral data. Remote Sensing of Environment, 2009, 113, 1646-1657.	11.0	40

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55	Detection of marine methane emissions with AVIRIS band ratios. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	40
56	Using crowdsourced fitness tracker data to model the relationship between slope and travel rates. Applied Geography, 2019, 106, 93-107.	3.7	40
57	Increasing concurrence of wildfire drivers tripled megafire critical danger days in Southern California between1982 and 2018. Environmental Research Letters, 2020, 15, 104002.	5.2	40
58	Multisatellite Imaging of a Gas Well Blowout Enables Quantification of Total Methane Emissions. Geophysical Research Letters, 2021, 48, e2020GL090864.	4.0	39
59	Monitoring the Impacts of Severe Drought on Southern California Chaparral Species using Hyperspectral and Thermal Infrared Imagery. Remote Sensing, 2015, 7, 14276-14291.	4.0	38
60	Spatiotemporal Variability of Lake Water Quality in the Context of Remote Sensing Models. Remote Sensing, 2017, 9, 409.	4.0	38
61	Inductively mapping expert-derived soil-landscape units within dambo wetland catenae using multispectral and topographic data. Geoderma, 2009, 150, 72-84.	5.1	37
62	Regional scale impacts of Tamarix leaf beetles (Diorhabda carinulata) on the water availability of western U.S. rivers as determined by multi-scale remote sensing methods. Remote Sensing of Environment, 2012, 118, 227-240.	11.0	37
63	Linking seasonal foliar traits to VSWIR-TIR spectroscopy across California ecosystems. Remote Sensing of Environment, 2016, 186, 322-338.	11.0	37
64	Comparison of Methods for Modeling Fractional Cover Using Simulated Satellite Hyperspectral Imager Spectra. Remote Sensing, 2019, 11, 2072.	4.0	36
65	Spectroscopic analysis of seasonal changes in live fuel moisture content and leaf dry mass. Remote Sensing of Environment, 2014, 150, 198-206.	11.0	35
66	A household-level approach to staging wildfire evacuation warnings using trigger modeling. Computers, Environment and Urban Systems, 2015, 54, 56-67.	7.1	35
67	Scaled biomass estimation in woodland ecosystems: Testing the individual and combined capacities of satellite multispectral and lidar data. Remote Sensing of Environment, 2021, 262, 112511.	11.0	33
68	Evaluating the effects of surface properties on methane retrievals using a synthetic airborne visible/infrared imaging spectrometer next generation (AVIRIS-NG) image. Remote Sensing of Environment, 2018, 215, 386-397.	11.0	32
69	Quantifying Global Power Plant Carbon Dioxide Emissions With Imaging Spectroscopy. AGU Advances, 2021, 2, e2020AV000350.	5.4	32
70	Modelling long-term fire regimes of southern California shrublands. International Journal of Wildland Fire, 2011, 20, 1.	2.4	32
71	Spectral shape-based temporal compositing algorithms for MODIS surface reflectance data. Remote Sensing of Environment, 2007, 109, 510-522.	11.0	30
72	Methane Mapping with Future Satellite Imaging Spectrometers. Remote Sensing, 2019, 11, 3054.	4.0	30

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73	Wildland firefighter entrapment avoidance: modelling evacuation triggers. International Journal of Wildland Fire, 2013, 22, 883.	2.4	29
74	A LiDAR-based analysis of the effects of slope, vegetation density, and ground surface roughness on travel rates for wildland firefighter escape route mapping. International Journal of Wildland Fire, 2017, 26, 884.	2.4	27
75	Comparison of fire temperature and fractional area modeled from SWIR, MIR, and TIR multispectral and SWIR hyperspectral airborne data. Remote Sensing of Environment, 2011, 115, 876-886.	11.0	26
76	Detection of Tamarisk Defoliation by the Northern Tamarisk Beetle Based on Multitemporal Landsat 5 Thematic Mapper Imagery. GIScience and Remote Sensing, 2012, 49, 510-537.	5.9	26
77	Evaluating dynamic wildfire evacuation trigger buffers using the 2003 Cedar Fire. Applied Geography, 2011, 31, 12-19.	3.7	25
78	Safe separation distance score: a new metric for evaluating wildland firefighter safety zones using lidar. International Journal of Geographical Information Science, 2017, 31, 1448-1466.	4.8	25
79	Fire detection in imaging spectrometer data using atmospheric carbon dioxide absorption. International Journal of Remote Sensing, 2006, 27, 3049-3055.	2.9	24
80	Google Earth and Google Fusion Tables in support of time-critical collaboration: Mapping the deepwater horizon oil spill with the AVIRIS airborne spectrometer. Earth Science Informatics, 2011, 4, 169-179.	3.2	24
81	Escape Route Index: A Spatially-Explicit Measure of Wildland Firefighter Egress Capacity. Fire, 2019, 2, 40.	2.8	23
82	Modeling Climate-Fire Connections within the Great Basin and Upper Colorado River Basin, Western United States. Fire Ecology, 2014, 10, 64-75.	3.0	22
83	Soil carbon and nitrogen accumulation in residential lawns of the Salt Lake Valley, Utah. Oecologia, 2018, 187, 1107-1118.	2.0	22
84	Evaluating the effects of spatial resolution on hyperspectral fire detection and temperature retrieval. Remote Sensing of Environment, 2012, 124, 780-792.	11.0	21
85	Integrating Fire Behavior and Pedestrian Mobility Models to Assess Potential Risk to Humans from Wildfires Within the U.S.â€“Mexico Border Zoneâ^—. Professional Geographer, 2010, 62, 230-247.	1.8	20
86	Identification of firefighter safety zones using lidar. Environmental Modelling and Software, 2014, 59, 91-97.	4.5	20
87	Fire detection and temperature retrieval using EO-1 Hyperion data over selected Alaskan boreal forest fires. International Journal of Applied Earth Observation and Geoinformation, 2019, 81, 72-84.	2.8	19
88	Regionalization of fire regimes in the Central Rocky Mountains, USA. Quaternary Research, 2013, 80, 406-416.	1.7	16
89	Delineation of Phenoregions in Geographically Diverse Regions Usingk-means++ Clustering: A Case Study in the Upper Colorado River Basin. GIScience and Remote Sensing, 2012, 49, 163-181.	5.9	15
90	Evaluation of SWIR Crop Residue Bands for the Landsat Next Mission. Remote Sensing, 2021, 13, 3718.	4.0	15

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91	Using reverse geocoding to identify prominent wildfire evacuation trigger points. Applied Geography, 2017, 87, 14-27.	3.7	13
92	Spectroscopic Analysis of Green, Desiccated and Dead Tamarisk Canopies. Photogrammetric Engineering and Remote Sensing, 2015, 81, 199-207.	0.6	11
93	Seasonal relationships between foliar moisture content, heat content and biochemistry of lodgepole line and big sagebrush foliage. International Journal of Wildland Fire, 2016, 25, 574.	2.4	11
94	Why do we need a national address point database to improve wildfire public safety in the U.S.?. International Journal of Disaster Risk Reduction, 2019, 39, 101237.	3.9	11
95	Impact of scene-specific enhancement spectra on matched filter greenhouse gas retrievals from imaging spectroscopy. Remote Sensing of Environment, 2021, 264, 112574.	11.0	11
96	Using MODIS satellite imagery to predict hantavirus risk. Global Ecology and Biogeography, 2011, 20, 620-629.	5.8	10
97	Modeling annual grassland phenology along the central coast of California. Ecosphere, 2017, 8, e01875.	2.2	9
98	Evaluating historical trends and influences of meteorological and seasonal climate conditions on lake chlorophyll a using remote sensing. Lake and Reservoir Management, 2020, 36, 45-63.	1.3	9
99	Point source emissions mapping using the Airborne Visible/Infrared Imaging Spectrometer (AVIRIS). Proceedings of SPIE, 2012, , .	0.8	8
100	A dataset on human perception of and response to wildfire smoke. Scientific Data, 2019, 6, 229.	5.3	8
101	Spectral-radiometric differentiation of non-photosynthetic vegetation and soil within Landsat and Sentinel 2 wavebands. Remote Sensing Letters, 2018, 9, 733-742.	1.4	7
102	Modeling Wildland Firefighter Travel Rates by Terrain Slope: Results from GPS-Tracking of Type 1 Crew Movement. Fire, 2020, 3, 52.	2.8	7
103	Assessing Potential Safety Zone Suitability Using a New Online Mapping Tool. Fire, 2022, 5, 5.	2.8	7
104	Tradeoffs between UAS Spatial Resolution and Accuracy for Deep Learning Semantic Segmentation Applied to Wetland Vegetation Species Mapping. Remote Sensing, 2022, 14, 2703.	4.0	5
105	Comparing the utility of LiDAR data vs. multi-spectral imagery for parcel scale water demand modeling. Urban Water Journal, 2017, 14, 331-335.	2.1	4
106	Evaluating the response of conventional and water harvesting farms to environmental variables using remote sensing. Agriculture, Ecosystems and Environment, 2018, 262, 11-17.	5.3	4
107	Mapping Fire Risk in Mediterranean Ecosystems of California: Vegetation type, Density, Invasive Species, and Fire Frequency. , 2009, , 41-53.		4
108	Modeling sensitivity of imaging spectrometer data to carbon dioxide and methane plumes. , 2013, , .		3

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109	An open-source software system for setting wildfire evacuation triggers. , 2015, , .		3
110	Relationships between species composition, fractional cover and land surface temperature in a mediterranean ecosystem. , 2013, , .		0
111	Delineating dambo catenary soil-landscape units using aerial gamma-ray and terrain data: a comparison of classification approaches. International Journal of Remote Sensing, 2014, 35, 8272-8294.	2.9	0
112	Image Processing and Analysis Methods. , 2019, , 631-868.		0
113	Regional Surveys of CH4 Point Sources Across North America: Campaigns, Algorithms, and Results. , 2020, , .		0