David P Roy

List of Publications by Year
in descending order

123 papers	15,794 citations	31976 53 h-index	19190 118 g-index
126 all docs	126 docs citations	126 times ranked	13280 citing authors

#	Article	IF	Citations
1	First operational BRDF, albedo nadir reflectance products from MODIS. Remote Sensing of Environment, 2002, 83, 135-148.	11.0	2,022
2	Characterization of Landsat-7 to Landsat-8 reflective wavelength and normalized difference vegetation index continuity. Remote Sensing of Environment, 2016, 185, 57-70.	11.0	694
3	The Collection 6 MODIS burned area mapping algorithm and product. Remote Sensing of Environment, 2018, 217, 72-85.	11.0	606
4	The collection 5 MODIS burned area product â€" Global evaluation by comparison with the MODIS active fire product. Remote Sensing of Environment, 2008, 112, 3690-3707.	11.0	600
5	What limits fire? An examination of drivers of burnt area in Southern Africa. Global Change Biology, 2009, 15, 613-630.	9.5	590
6	Current status of Landsat program, science, and applications. Remote Sensing of Environment, 2019, 225, 127-147.	11.0	586
7	An active-fire based burned area mapping algorithm for the MODIS sensor. Remote Sensing of Environment, 2009, 113, 408-420.	11.0	533
8	The global Landsat archive: Status, consolidation, and direction. Remote Sensing of Environment, 2016, 185, 271-283.	11.0	505
9	The availability of cloud-free Landsat ETM+ data over the conterminous United States and globally. Remote Sensing of Environment, 2008, 112, 1196-1211.	11.0	485
10	Achieving sub-pixel geolocation accuracy in support of MODIS land science. Remote Sensing of Environment, 2002, 83, 31-49.	11.0	477
11	Web-enabled Landsat Data (WELD): Landsat ETM+ composited mosaics of the conterminous United States. Remote Sensing of Environment, 2010, 114, 35-49.	11.0	439
12	Multi-temporal MODISâ€"Landsat data fusion for relative radiometric normalization, gap filling, and prediction of Landsat data. Remote Sensing of Environment, 2008, 112, 3112-3130.	11.0	430
13	A Global Analysis of Sentinel-2A, Sentinel-2B and Landsat-8 Data Revisit Intervals and Implications for Terrestrial Monitoring. Remote Sensing, 2017, 9, 902.	4.0	398
14	A method for integrating MODIS and Landsat data for systematic monitoring of forest cover and change in the Congo Basin. Remote Sensing of Environment, 2008, 112, 2495-2513.	11.0	393
15	Large seasonal swings in leaf area of Amazon rainforests. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 4820-4823.	7.1	376
16	Benefits of the free and open Landsat data policy. Remote Sensing of Environment, 2019, 224, 382-385.	11.0	291
17	Wetland mapping in the Congo Basin using optical and radar remotely sensed data and derived topographical indices. Remote Sensing of Environment, 2010, 114, 73-86.	11.0	278
18	Land cover 2.0. International Journal of Remote Sensing, 2018, 39, 4254-4284.	2.9	261

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19	Southern Africa Validation of the MODIS, L3JRC, and GlobCarbon Burned-Area Products. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 1032-1044.	6.3	248
20	Analysis Ready Data: Enabling Analysis of the Landsat Archive. Remote Sensing, 2018, 10, 1363.	4.0	247
21	The MODIS Land product quality assessment approach. Remote Sensing of Environment, 2002, 83, 62-76.	11.0	236
22	Characterization of Sentinel-2A and Landsat-8 top of atmosphere, surface, and nadir BRDF adjusted reflectance and NDVI differences. Remote Sensing of Environment, 2018, 215, 482-494.	11.0	225
23	Using the 500 m MODIS land cover product to derive a consistent continental scale 30 m Landsat land cover classification. Remote Sensing of Environment, 2017, 197, 15-34.	11.0	191
24	Southern African fire regimes as revealed by remote sensing. International Journal of Wildland Fire, 2010, 19, 861.	2.4	188
25	Continental-scale validation of MODIS-based and LEDAPS Landsat ETM+ atmospheric correction methods. Remote Sensing of Environment, 2012, 122, 175-184.	11.0	161
26	Landsat-8 and Sentinel-2 burned area mapping - A combined sensor multi-temporal change detection approach. Remote Sensing of Environment, 2019, 231, 111254.	11.0	155
27	A note on the temporary misregistration of Landsat-8 Operational Land Imager (OLI) and Sentinel-2 Multi Spectral Instrument (MSI) imagery. Remote Sensing of Environment, 2016, 186, 121-122.	11.0	126
28	Global validation of the collection 6 MODIS burned area product. Remote Sensing of Environment, 2019, 235, 111490.	11.0	125
29	Multi-temporal active-fire based burn scar detection algorithm. International Journal of Remote Sensing, 1999, 20, 1031-1038.	2.9	121
30	MODISâ€"Landsat fusion for large area 30 m burned area mapping. Remote Sensing of Environment, 2015, 161, 27-42.	11.0	121
31	Separability Analysis of Sentinel-2A Multi-Spectral Instrument (MSI) Data for Burned Area Discrimination. Remote Sensing, 2016, 8, 873.	4.0	117
32	Examination of Sentinel-2A multi-spectral instrument (MSI) reflectance anisotropy and the suitability of a general method to normalize MSI reflectance to nadir BRDF adjusted reflectance. Remote Sensing of Environment, 2017, 199, 25-38.	11.0	113
33	Continuous fields of land cover for the conterminous United States using Landsat data: first results from the Web-Enabled Landsat Data (WELD) project. Remote Sensing Letters, 2011, 2, 279-288.	1.4	112
34	Generating a long-term land data record from the AVHRR and MODIS Instruments. , 2007, , .		95
35	An Automated Approach for Sub-Pixel Registration of Landsat-8 Operational Land Imager (OLI) and Sentinel-2 Multi Spectral Instrument (MSI) Imagery. Remote Sensing, 2016, 8, 520.	4.0	95
36	Quantification of MODIS fire radiative power (FRP) measurement uncertainty for use in satellite-based active fire characterization and biomass burning estimation. Geophysical Research Letters, 2014, 41, 1988-1994.	4.0	94

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37	Continuity of Landsat observations: Short term considerations. Remote Sensing of Environment, 2011, 115, 747-751.	11.0	93
38	The Southern Africa Fire Network (SAFNet) regional burnedâ€area productâ€validation protocol. International Journal of Remote Sensing, 2005, 26, 4265-4292.	2.9	92
39	Satellite remote sensing of active fires: History and current status, applications and future requirements. Remote Sensing of Environment, 2021, 267, 112694.	11.0	92
40	A global analysis of the temporal availability of PlanetScope high spatial resolution multi-spectral imagery. Remote Sensing of Environment, 2021, 264, 112586.	11.0	89
41	Examination of the Potential of Terrestrial Laser Scanning and Structure-from-Motion Photogrammetry for Rapid Nondestructive Field Measurement of Grass Biomass. Remote Sensing, 2017, 9, 531.	4.0	84
42	A stratified random sampling design in space and time for regional to global scale burned area product validation. Remote Sensing of Environment, 2016, 186, 465-478.	11.0	80
43	Development of an approach for generation of temporally complete daily nadir MODIS reflectance time series. Remote Sensing of Environment, 2010, 114, 1-20.	11.0	77
44	Characterizing the surface heterogeneity of fire effects using multiâ€temporal reflective wavelength data. International Journal of Remote Sensing, 2005, 26, 4197-4218.	2.9	72
45	Strategies for the fusion of satellite fire radiative power with burned area data for fire radiative energy derivation. Journal of Geophysical Research, 2009, 114, .	3.3	72
46	Robust Landsat-based crop time series modelling. Remote Sensing of Environment, 2020, 238, 110810.	11.0	72
47	Conterminous United States demonstration and characterization of MODIS-based Landsat ETM+ atmospheric correction. Remote Sensing of Environment, 2014, 140, 433-449.	11.0	71
48	Rapid Land Cover Map Updates Using Change Detection and Robust Random Forest Classifiers. Remote Sensing, 2016, 8, 888.	4.0	69
49	Fire-induced albedo change and its radiative forcing at the surface in northern Australia. Geophysical Research Letters, 2005, 32, .	4.0	66
50	Estimation of biomass-burning emissions by fusing the fire radiative power retrievals from polar-orbiting and geostationary satellites across the conterminous United States. Atmospheric Environment, 2019, 211, 274-287.	4.1	64
51	Spatially and temporally complete Landsat reflectance time series modelling: The fill-and-fit approach. Remote Sensing of Environment, 2020, 241, 111718.	11.0	60
52	Global assessment of the temporal reporting accuracy and precision of the MODIS burned area product. International Journal of Wildland Fire, 2010, 19, 705.	2.4	58
53	A MODIS assessment of the summer 2007 extent burned in Greece. International Journal of Remote Sensing, 2008, 29, 2433-2436.	2.9	57
54	Is burn severity related to fire intensity? Observations from landscape scale remote sensing. International Journal of Wildland Fire, 2013, 22, 910.	2.4	55

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55	Best practices for the reprojection and resampling of Sentinel-2 Multi Spectral Instrument Level 1C data. Remote Sensing Letters, 2016, 7, 1023-1032.	1.4	55
56	Accessing free Landsat data via the Internet: Africa's challenge. Remote Sensing Letters, 2010, 1, 111-117.	1.4	54
57	Global operational land imager Landsat-8 reflectance-based active fire detection algorithm. International Journal of Digital Earth, 2018, 11, 154-178.	3.9	53
58	Observations and Recommendations for the Calibration of Landsat 8 OLI and Sentinel 2 MSI for Improved Data Interoperability. Remote Sensing, 2018, 10, 1340.	4.0	53
59	Large-Area Gap Filling of Landsat Reflectance Time Series by Spectral-Angle-Mapper Based Spatio-Temporal Similarity (SAMSTS). Remote Sensing, 2018, 10, 609.	4.0	51
60	Investigation of the maximum Normalized Difference Vegetation Index (NDVI) and the maximum surface temperature (Ts) AVHRR compositing procedures for the extraction of NDVI and Ts over forest. International Journal of Remote Sensing, 1997, 18, 2383-2401.	2.9	50
61	Exploiting the power law distribution properties of satellite fire radiative power retrievals: A method to estimate fire radiative energy and biomass burned from sparse satellite observations. Journal of Geophysical Research, 2011, 116, .	3.3	50
62	Modeling and sensitivity analysis of fire emissions in southern Africa during SAFARI 2000. Remote Sensing of Environment, 2004, 92, 255-275.	11.0	47
63	The suitability of multi-temporal web-enabled Landsat data NDVI for phenological monitoring â€“ a comparison with flux tower and MODIS NDVI. Remote Sensing Letters, 2012, 3, 325-334.	1.4	47
64	Radiative forcing over the conterminous United States due to contemporary land cover land use albedo change. Geophysical Research Letters, 2008, 35, .	4.0	44
65	Quantification of fuel moisture effects on biomass consumed derived from fire radiative energy retrievals. Geophysical Research Letters, 2013, 40, 6298-6302.	4.0	44
66	Daily MODIS 500 m reflectance anisotropy direct broadcast (DB) products for monitoring vegetation phenology dynamics. International Journal of Remote Sensing, 2013, 34, 5997-6016.	2.9	42
67	Adjustment of Sentinel-2 Multi-Spectral Instrument (MSI) Red-Edge Band Reflectance to Nadir BRDF Adjusted Reflectance (NBAR) and Quantification of Red-Edge Band BRDF Effects. Remote Sensing, 2017, 9, 1325.	4.0	42
68	MODIS-Derived Global Fire Products. Remote Sensing and Digital Image Processing, 2010, , 661-679.	0.7	41
69	A contemporary decennial examination of changing agricultural field sizes using Landsat time series data. Geo: Geography and Environment, 2015, 2, 33-54.	0.8	40
70	The suitability of decadal image data sets for mapping tropical forest cover change in the Democratic Republic of Congo: implications for the global land survey. International Journal of Remote Sensing, 2008, 29, 7269-7275.	2.9	38
71	Interannual variation in biomass burning and fire seasonality derived from geostationary satellite data across the contiguous United States from 1995 to 2011. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1147-1162.	3.0	38
72	The impact of geolocation uncertainty on GEDI tropical forest canopy height estimation and change monitoring. Science of Remote Sensing, 2021, 4, 100024.	4.8	38

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73	Landsat 4, 5 and 7 (1982 to 2017) Analysis Ready Data (ARD) Observation Coverage over the Conterminous United States and Implications for Terrestrial Monitoring. Remote Sensing, 2019, 11, 447.	4.0	37
74	A One Year Landsat 8 Conterminous United States Study of Cirrus and Non-Cirrus Clouds. Remote Sensing, 2015, 7, 564-578.	4.0	36
75	Radiative forcing over the conterminous United States due to contemporary land cover land use change and sensitivity to snow and interannual albedo variability. Journal of Geophysical Research, 2010, 115, .	3.3	35
76	Optimal Solar Geometry Definition for Global Long-Term Landsat Time-Series Bidirectional Reflectance Normalization. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 1410-1418.	6.3	35
77	Evaluation of Landsat-8 and Sentinel-2A Aerosol Optical Depth Retrievals across Chinese Cities and Implications for Medium Spatial Resolution Urban Aerosol Monitoring. Remote Sensing, 2019, 11, 122.	4.0	35
78	Demonstration of Percent Tree Cover Mapping Using Landsat Analysis Ready Data (ARD) and Sensitivity with Respect to Landsat ARD Processing Level. Remote Sensing, 2018, 10, 209.	4.0	34
79	A focus group study of factors that promote and constrain the use of satellite-derived fire products by resource managers in southern Africa. Journal of Environmental Management, 2007, 82, 95-110.	7.8	31
80	Computationally Inexpensive Landsat 8 Operational Land Imager (OLI) Pansharpening. Remote Sensing, 2016, 8, 180.	4.0	31
81	Defining a fire year for reporting and analysis of global interannual fire variability. Journal of Geophysical Research, 2008, 113, .	3.3	30
82	Multi-year MODIS active fire type classification over the Brazilian Tropical Moist Forest Biome. International Journal of Digital Earth, 2017, 10, 54-84.	3.9	30
83	Modeling and sensitivity analysis of fire emissions in southern Africa during SAFARI 2000. Remote Sensing of Environment, 2004, 92, 376-396.	11.0	29
84	Investigation of the Fire Radiative Energy Biomass Combustion Coefficient: A Comparison of Polar and Geostationary Satellite Retrievals Over the Conterminous United States. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 722-739.	3.0	28
85	Influence of landscape features on urban land surface temperature: Scale and neighborhood effects. Science of the Total Environment, 2021, 771, 145381.	8.0	28
86	Landsat 15-m Panchromatic-Assisted Downscaling (LPAD) of the 30-m Reflective Wavelength Bands to Sentinel-2 20-m Resolution. Remote Sensing, 2017, 9, 755.	4.0	27
87	Parametric geometric correction of airborne thematic mapper imagery. International Journal of Remote Sensing, 1997, 18, 1865-1887.	2.9	25
88	Field estimation of ash and char colour-lightness using a standard grey scale. International Journal of Wildland Fire, 2010, 19, 698.	2.4	24
89	Using NASA's World Wind virtual globe for interactive internet visualization of the global MODIS burned area product. International Journal of Remote Sensing, 2008, 29, 3067-3072.	2.9	23
90	Identifying individual fires from satellite-derived burned area data. , 2009, , .		23

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91	A conterminous United States analysis of the impact of Landsat 5 orbit drift on the temporal consistency of Landsat 5 Thematic Mapper data. Remote Sensing of Environment, 2020, 240, 111701.	11.0	21
92	An in situ study of the effects of surface anisotropy on the remote sensing of burned savannah. International Journal of Remote Sensing, 2005, 26, 4869-4876.	2.9	19
93	Spatial and temporal heterogeneity of agricultural fires in the central United States in relation to land cover and land use. Landscape Ecology, 2011, 26, 211-224.	4.2	19
94	Conterminous United States Landsat-8 top of atmosphere and surface reflectance tasseled cap transformation coefficients. Remote Sensing of Environment, 2022, 274, 112992.	11.0	19
95	Sensitivity analysis of the GEMS soil organic carbon model to land cover land use classification uncertainties under different climate scenarios in senegal. Biogeosciences, 2012, 9, 631-648.	3.3	17
96	Combination of the Normalized Difference Vegetation Index and surface temperature for regional scale European Forest cover mapping using AVHRR data. International Journal of Remote Sensing, 1997, 18, 1189-1195.	2.9	16
97	A quantitative study of the proximity of satellite detected active fires to roads and rivers in the Brazilian tropical moist forest biome. International Journal of Wildland Fire, 2014, 23, 532.	2.4	16
98	Investigation of Image Resampling Effects upon The Textural Information Content of a High Spatial Resolution Remotely Sensed Image. International Journal of Remote Sensing, 1994, 15, 1123-1130.	2.9	15
99	Land surface hot-spot observed by MODIS over Central Africa. International Journal of Remote Sensing, 2002, 23, 2141-2143.	2.9	15
100	A Study of Rural Senegalese Attitudes and Perceptions of Their Behavior to Changes in the Climate. Environmental Management, 2012, 50, 929-941.	2.7	13
101	Sharpening the Sentinel-2 10 and 20 m Bands to Planetscope-0 3 m Resolution. Remote Sensing, 2020, 12, 2406.	4.0	13
102	Linear downscaling from MODIS to landsat: connecting landscape composition with ecosystem functions. Landscape Ecology, 2019, 34, 2917-2934.	4.2	12
103	MODIS Land Data Products: Generation, Quality Assurance and Validation. Remote Sensing and Digital Image Processing, 2010, , 509-531.	0.7	12
104	The importance of instrument pointing accuracy for surface bidirectional reflectance distribution function mapping. International Journal of Remote Sensing, 1994, 15, 1091-1099.	2.9	9
105	Southern Africa as a remote sensing test bed: the SAFARI 2000 Special Issue overview. International Journal of Remote Sensing, 2005, 26, 4141-4158.	2.9	9
106	The incidence and magnitude of the hot-spot bidirectional reflectance distribution function (BRDF) signature in GOES-16 Advanced Baseline Imager (ABI) 10 and 15 minute reflectance over north America. Remote Sensing of Environment, 2021, 265, 112638.	11.0	9
107	Anomaly detection in MODIS land products via time series analysis. Geo-Spatial Information Science, 2007, 10, 44-50.	5.3	8
108	Projected surface radiative forcing due to 2000â€“2050 land-cover land-use albedo change over the eastern United States. Journal of Land Use Science, 2013, 8, 369-382.	2.2	8

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109	The Effect of Surface Fire in Savannah Systems in the Kruger National Park (KNP), South Africa, on the Backscatter of C-Band Sentinel-1 Images. Fire, 2019, 2, 37.	2.8	8
110	A SeaWiFS global monthly coarse-resolution reflectance dataset. International Journal of Remote Sensing, 2001, 22, 1151-1158.	2.9	7
111	Assessment of satellite orbit-drift artifacts in the long-term AVHRR FireCCILT11 global burned area data set. Science of Remote Sensing, 2022, 5, 100044.	4.8	7
112	Evaluation of a coupled eventâ€driven phenology and evapotranspiration model for croplands in the United States northern Great Plains. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5065-5081.	3.3	6
113	Investigation of Sentinel-2 Bidirectional Reflectance Hot-Spot Sensing Conditions. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 3591-3598.	6.3	6
114	Democratic Republic of the Congo Tropical Forest Canopy Height and Aboveground Biomass Estimation with Landsat-8 Operational Land Imager (OLI) and Airborne LiDAR Data: The Effect of Seasonal Landsat Image Selection. Remote Sensing, 2020, 12, 1360.	4.0	6
115	Integrating Disparate Lidar Data at the National Scale to Assess the Relationships between Height Above Ground, Land Cover and Ecoregions. Photogrammetric Engineering and Remote Sensing, 2014, 80, 59-70.	0.6	5
116	Global Evaluation of the Suitability of MODIS-Terra Detected Cloud Cover as a Proxy for Landsat 7 Cloud Conditions. Remote Sensing, 2020, 12, 202.	4.0	5
117	Comment on OtÃ³n et al. Analysis of Trends in the FireCCI Global Long Term Burned Area Product (1982â€“2018). Fire 2021, 4, 74. Fire, 2022, 5, 52.	2.8	5
118	Towards a Single Integrative Metric on the Dynamics of Social-Environmental Systems. Sustainability, 2021, 13, 11246.	3.2	4
119	The Utility of Landsat Data for Global Long Term Terrestrial Monitoring. Remote Sensing and Digital Image Processing, 2015, , 289-305.	0.7	3
120	The GOFC-GOLD Fire Mapping and Monitoring Theme: Assessment and Strategic Plans. , 2013, , 341-372.		3
121	Detection of Burned Areas in Southern African Savannahs Using Time Series of C-Band Sentinel-1 Data. , 2018, , .		2
122	Correction to â€œOptimal Solar Geometry Definition for Global Long-Term Landsat Time-Series Bidirectional Reflectance Normalizationâ€•[Mar 16 1410-1418]. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 3624-3624.	6.3	1
123	Evidence and implications of solar eclipses in short wavelength global remotely sensed data. International Journal of Remote Sensing, 2000, 21, 1961-1967.	2.9	0