Michael J Hill

List of Publications by Year
in descending order

89 papers	3,020 citations	201674 27 h-index	175258 52 g-index
92 all docs	92 docs citations	92 times ranked	3541 citing authors

#	Article	IF	Citations
1	Estimating fractional cover of photosynthetic vegetation, non-photosynthetic vegetation and bare soil in the Australian tropical savanna region upscaling the EO-1 Hyperion and MODIS sensors. Remote Sensing of Environment, 2009, 113, 928-945.	11.0	309
2	Precision agriculture on grassland: Applications, perspectives and constraints. European Journal of Agronomy, 2008, 29, 59-71.	4.1	160
3	Estimating spatio-temporal patterns of agricultural productivity in fragmented landscapes using AVHRR NDVI time series. Remote Sensing of Environment, 2003, 84, 367-384.	11.0	139
4	Using data from Landsat, MODIS, VIIRS and PhenoCams to monitor the phenology of California oak/grass savanna and open grassland across spatial scales. Agricultural and Forest Meteorology, 2017, 237-238, 311-325.	4.8	131
5	An Anisotropic Flat Index (AFX) to derive BRDF archetypes from MODIS. Remote Sensing of Environment, 2014, 141, 168-187.	11.0	117
6	Vegetation index suites as indicators of vegetation state in grassland and savanna: An analysis with simulated SENTINEL 2 data for a North American transect. Remote Sensing of Environment, 2013, 137, 94-111.	11.0	112
7	Multi-criteria decision analysis in spatial decision support: the ASSESS analytic hierarchy process and the role of quantitative methods and spatially explicit analysis. Environmental Modelling and Software, 2005, 20, 955-976.	4.5	105
8	Assessment of the MODIS LAI product for Australian ecosystems. Remote Sensing of Environment, 2006, 101, 495-518.	11.0	98
9	Estimation of pasture growth rate in the south west of Western Australia from AVHRR NDVI and climate data. Remote Sensing of Environment, 2004, 93, 528-545.	11.0	86
10	A method for improving hotspot directional signatures in BRDF models used for MODIS. Remote Sensing of Environment, 2016, 186, 135-151.	11.0	85
11	An algorithm for the retrieval of the clumping index (CI) from the MODIS BRDF product using an adjusted version of the kernel-driven BRDF model. Remote Sensing of Environment, 2018, 209, 594-611.	11.0	82
12	Understanding the variability in ground-based methods for retrieving canopy openness, gap fraction, and leaf area index in diverse forest systems. Agricultural and Forest Meteorology, 2015, 205, 83-95.	4.8	68
13	Integration of optical and radar classifications for mapping pasture type in Western Australia. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 1665-1681.	6.3	63
14	Quantitative mapping of pasture biomass using satellite imagery. International Journal of Remote Sensing, 2011, 32, 2699-2724.	2.9	61
15	Frost in a future climate: modelling interactive effects of warmer temperatures and rising atmospheric [CO₂] on the incidence and severity of frost damage in a temperate evergreen (Eucalyptus pauciflora). Global Change Biology, 2008, 14, 294-308.	9.5	56
16	Multi-sensor model-data fusion for estimation of hydrologic and energy flux parameters. Remote Sensing of Environment, 2008, 112, 1306-1319.	11.0	48
17	Germination and seedling growth of prairie grass, tall fescue and Italian ryegrass at different temperatures. Australian Journal of Agricultural Research, 1985, 36, 13.	1.5	46
18	Assessment of Regional Vegetation Response to Climate Anomalies: A Case Study for Australia Using GIMMS NDVI Time Series between 1982 and 2006. Remote Sensing, 2017, 9, 34.	4.0	45

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19	Characterizing vegetation cover in global savannas with an annual foliage clumping index derived from the MODIS BRDF product. Remote Sensing of Environment, 2011, 115, 2008-2024.	11.0	44
20	Quantifying the impact of woody material on leaf area index estimation from hemispherical photography using 3D canopy simulations. Agricultural and Forest Meteorology, 2016, 226-227, 1-12.	4.8	42
21	Wind erosion and soil carbon dynamics in south-western Australia. Aeolian Research, 2010, 1, 129-141.	2.7	40
22	Relating Radar Backscatter to Biophysical Properties of Temperate Perennial Grassland. Remote Sensing of Environment, 1999, 67, 15-31.	11.0	39
23	Pasture Land Cover in Eastern Australia from NOAA-AVHRR NDVI and Classified Landsat TM. Remote Sensing of Environment, 1999, 67, 32-50.	11.0	37
24	Relationship of MISR RPV parameters and MODIS BRDF shape indicators to surface vegetation patterns in an Australian tropical savanna. Canadian Journal of Remote Sensing, 2008, 34, S247-S267.	2.4	37
25	An improved theoretical model of canopy gap probability for Leaf Area Index estimation in woody ecosystems. Forest Ecology and Management, 2015, 358, 303-320.	3.2	37
26	Use of pulverised fuel ash from Victorian brown coal as a source of nutrients for a pasture species. Australian Journal of Experimental Agriculture, 1980, 20, 377.	1.0	36
27	The MODIS Global Vegetation Fractional Cover Product 2001â€“2018: Characteristics of Vegetation Fractional Cover in Grasslands and Savanna Woodlands. Remote Sensing, 2020, 12, 406.	4.0	30
28	MODIS spectral signals at a flux tower site: Relationships with high-resolution data, and CO2 flux and light use efficiency measurements. Remote Sensing of Environment, 2006, 103, 351-368.	11.0	29
29	Relationships between vegetation indices, fractional cover retrievals and the structure and composition of Brazilian Cerrado natural vegetation. International Journal of Remote Sensing, 2017, 38, 874-905.	2.9	29
30	Prospects for improving savanna biophysical models by using multiple-constraints model-data assimilation methods. Australian Journal of Botany, 2005, 53, 689.	0.6	28
31	Evaluation of land-use planning in greenbelts based on intrinsic characteristics and stakeholder values. Landscape and Urban Planning, 2012, 106, 23-34.	7.5	28
32	Use of 3-PG and 3-PGS to simulate forest growth dynamics of Australian tropical rainforests. Forest Ecology and Management, 2008, 254, 107-121.	3.2	27
33	The effect of temperature on germination and seedling growth of temperate perennial pasture legumes.. Australian Journal of Agricultural Research, 1991, 42, 175.	1.5	26
34	A scenario calculator for effects of grazing land management on carbon stocks in Australian rangelands. Environmental Modelling and Software, 2003, 18, 627-644.	4.5	26
35	Hyperspectral determination of feed quality constituents in temperate pastures: Effect of processing methods on predictive relationships from partial least squares regression. International Journal of Applied Earth Observation and Geoinformation, 2012, 19, 322-334.	2.8	26
36	Calibration and validation of the Australian fractional cover product for MODIS collection 6. Remote Sensing Letters, 2018, 9, 696-705.	1.4	26

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37	Vegetation cover dependence on accumulated antecedent precipitation in Australia: Relationships with photosynthetic and non-photosynthetic vegetation fractions. Remote Sensing of Environment, 2020, 240, 111670.	11.0	26
38	The effect of differences in intensity and frequency of defoliation on the growth of Phalaris aquatica L. and Dactylis glomerata L. Australian Journal of Agricultural Research, 1989, 40, 333.	1.5	24
39	Vegetation state change and consequent carbon dynamics in savanna woodlands of Australia in response to grazing, drought and fire: a scenario approach using 113 years of synthetic annual fire and grassland growth. Australian Journal of Botany, 2005, 53, 715.	0.6	24
40	Estimating Ground Cover in the Mixed Prairie Grassland of Southern Alberta Using Vegetation Indices Related to Physiological Function. Canadian Journal of Remote Sensing, 2015, 41, 51-66.	2.4	23
41	Changes in vegetation persistence across global savanna landscapes, 1982â€“2010. Journal of Land Use Science, 2016, 11, 7-32.	2.2	23
42	Combining satellite data with a simulation model to describe spatial variability in pasture growth at a farm scale. Australian Journal of Experimental Agriculture, 1999, 39, 285.	1.0	22
43	Satellite derived maps of pasture growth status: association of classification with botanical composition. Australian Journal of Experimental Agriculture, 1997, 37, 547.	1.0	21
44	The response to moisture and defoliation stresses, and traits for resilience of perennial grasses on the Northern Tablelands of New South Wales, Australia. Australian Journal of Agricultural Research, 2003, 54, 903.	1.5	18
45	Analysis of soil carbon outcomes from interaction between climate and grazing pressure in Australian rangelands using Range-ASSESS. Environmental Modelling and Software, 2006, 21, 779-801.	4.5	18
46	Dynamics of the relationship between NDVI and SWIR32 vegetation indices in southern Africa: implications for retrieval of fractional cover from MODIS data. International Journal of Remote Sensing, 2016, 37, 1476-1503.	2.9	18
47	Dynamics of vegetation indices in tropical and subtropical savannas defined by ecoregions and Moderate Resolution Imaging Spectroradiometer (MODIS) land cover. Geocarto International, 2012, 27, 153-191.	3.5	17
48	Retrieving understorey dynamics in the Australian tropical savannah from time series decomposition and linear unmixing of MODIS data. International Journal of Remote Sensing, 2016, 37, 1445-1475.	2.9	17
49	Improving the tolerance of Phalaris aquatica L. to soil acidity by introgression of genes from P. arundinacea L. Australian Journal of Agricultural Research, 1990, 41, 657.	1.5	16
50	Seedling vigour and rhizome development in Trifolium ambiguum M. Bieb. (Caucasian clover) as affected by density of companion grasses, fertility, drought and defoliation in the first year. Australian Journal of Agricultural Research, 1995, 46, 807.	1.5	16
51	Validating canopy clumping retrieval methods using hemispherical photography in a simulated Eucalypt forest. Agricultural and Forest Meteorology, 2017, 247, 181-193.	4.8	16
52	Primary growth and regrowth responses of temperate grasses to different temperatures and cutting frequencies. Australian Journal of Agricultural Research, 1985, 36, 25.	1.5	15
53	Competition among seedlings of phalaris, subterranean clover and white clover in diallel replacement series mixtures. Grass and Forage Science, 1988, 43, 411-420.	2.9	15
54	Generating generic response signals for scenario calculation of management effects on carbon sequestration in agriculture: approximation of main effects using CENTURY. Environmental Modelling and Software, 2003, 18, 899-913.	4.5	15

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55	Plant reserves of perennial grasses subjected to drought and defoliation stresses on the Northern Tablelands of New South Wales, Australia. Australian Journal of Agricultural Research, 2003, 54, 819.	1.5	15
56	The Application of a Simple Spatial Multi-Criteria Analysis Shell to Natural Resource Management Decision Making. , 2008, , 73-95.		15
57	Airborne Synthetic Aperture Radar Analysis of Rangeland Revegetation of a Mixed Prairie. Journal of Range Management, 1994, 47, 385.	0.3	14
58	Multi-Criteria Assessment of Tensions in Resource Use at Continental Scale: A Proof of Concept with Australian Rangelands. Environmental Management, 2006, 37, 712-731.	2.7	14
59	Defining the white clover zone in eastern mainland Australia using a model and a geographic information system. Ecological Modelling, 1996, 86, 245-252.	2.5	13
60	A Habitat Suitability Index (HSI) for the Western Prairie Fringed Orchid (Platanthera praeclara) on the Sheyenne National Grassland, North Dakota, USA. Ecological Indicators, 2015, 57, 536-545.	6.3	13
61	Predicting Levels of Crude Protein, Digestibility, Lignin and Cellulose in Temperate Pastures Using Hyperspectral Image Data. American Journal of Plant Sciences, 2014, 05, 997-1019.	0.8	13
62	Global trends in vegetation fractional cover: Hotspots for change in bare soil and non-photosynthetic vegetation. Agriculture, Ecosystems and Environment, 2022, 324, 107719.	5.3	13
63	Growth response ofFestuca altaica,Festuca hallii, andFestuca campestristo temperature. Canadian Journal of Botany, 1995, 73, 1074-1080.	1.1	12
64	The effect of differences in intensity and frequency of defoliation on the growth of Sirolan phalaris in the field. Australian Journal of Agricultural Research, 1989, 40, 345.	1.5	12
65	Updating the Grassland Vegetation Inventory Using Change Vector Analysis and Functionally-Based Vegetation Indices. Canadian Journal of Remote Sensing, 2017, 43, 62-78.	2.4	11
66	Knowledge-based and inductive modelling of rough fescue (Festuca altaica, F. campestris and F. hallii) distribution in Alberta, Canada. Ecological Modelling, 1997, 103, 135-150.	2.5	10
67	Use of Vegetation Index â€œFingerprintsâ€•From Hyperion Data to Characterize Vegetation States Within Land Cover/Land Use Types in an Australian Tropical Savanna. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 309-319.	4.9	10
68	Distribution of range and cultivated grassland plants in southern Alberta. Plant Ecology, 2000, 147, 59-76.	1.6	9
69	Use of 3-PG and 3-PGS to simulate forest growth dynamics of Australian tropical rainforests. Forest Ecology and Management, 2008, 254, 122-133.	3.2	9
70	Competition between Clare and Seaton Park, and Clare and Daliak subterranean clovers in replacement series mixtures in the field.. Australian Journal of Agricultural Research, 1991, 42, 161.	1.5	9
71	Possible future trade-offs between agriculture, energy production, and biodiversity conservation in North Dakota. Regional Environmental Change, 2013, 13, 311-328.	2.9	8
72	The bioâ€geophysical approach to remote sensing of vegetation in coupled humanâ€environment systems â€“ societal benefits and global context. Journal of Spatial Science, 2006, 51, 49-66.	1.5	7

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73	Applying the learning community model to graduate education: linking research and teaching between core courses. Teaching in Higher Education, 2012, 17, 722-734.	2.6	7
74	A comparison of the growth of seedlings of Mediterranean and temperate tall fescues, phalaris and annual ryegrass. Australian Journal of Experimental Agriculture, 1985, 25, 818.	1.0	6
75	Creating Land use Scenarios for City Greenbelts Using A Spatial Multi-Criteria Analysis Shell: Two Case Studies. Physical Geography, 2009, 30, 353-382.	1.4	6
76	Anthropogenic change in savannas and associated forest biomes. Journal of Land Use Science, 2016, 11, 1-6.	2.2	6
77	Modeling the potential natural vegetation of Minnesota, USA. Ecological Informatics, 2017, 41, 116-132.	5.2	6
78	Direct drilling tall fescue (Festuca arundinacea Schreb.) prairie grass (Bromus catharticus Vahl) and Italian ryegrass (Lolium multiflorum Lam.) into kikuyu and paspalum pastures. Australian Journal of Experimental Agriculture, 1985, 25, 806.	1.0	6
79	Grassland conservation in North Dakota and Saskatchewan: contrasts and similarities in protected areas and their management. Journal of Land Use Science, 2015, 10, 298-322.	2.2	5
80	Functional Phenology of a Texas Post Oak Savanna from a CHRIS PROBA Time Series. Remote Sensing, 2019, 11, 2388.	4.0	5
81	Growth of Trifolium repens L. and Trifolium semipilosum Fres. Var. glabrescens Gillet at different temperatures in controlled environments and in the field. Grass and Forage Science, 1989, 44, 125-137.	2.9	4
82	Competition between white clover (Trifolium repens L.) and subterranean clover (Trifolium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Tc	2.9	3
83	Comparison of satellite-derived estimates of gross primary production for Australian old-growth tropical rainforest. Canadian Journal of Remote Sensing, 2007, 33, 278-288.	2.4	3
84	A Novel Method for Separating Woody and Herbaceous Time Series. Photogrammetric Engineering and Remote Sensing, 2019, 85, 509-520.	0.6	3
85	Remote Sensing of Savannas and Woodlands: Editorial. Remote Sensing, 2021, 13, 1490.	4.0	3
86	Development of a synthetic record of fire probability and proportion of late fires from simulated growth of ground stratum and annual rainfall in the Australian tropical savanna zone. Environmental Modelling and Software, 2006, 21, 1214-1229.	4.5	2
87	Using remote sensing to monitor the spring phenology of Acadia National Park across elevational gradients. Ecosphere, 2021, 12, .	2.2	2
88	Growth of seedlings of prairie grass and tall fescue in small swards of kikuyu at different temperatures. Australian Journal of Agricultural Research, 1985, 36, 213.	1.5	1
89	Improved ALMANAC simulations of upland switchgrass ecotypes in the northern United States. Agronomy Journal, 2022, 114, 508-523.	1.8	1